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THE

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ORIGINAL LECTURES.

LECTURES ON THE

BLOOD OF VERTEBRATA.

DELIVERED AT THE

Royal College of Surgeons of England,

DURING THE SESSION 1861-62.

By GEORGE GULLIVER, F.R.S.

Professor of Comparative Anatomy and Physiology to the College.

LECTURE VIII.—*Colour of the Blood—Discordant Observations on the Colour of Arterial and Venous Blood reconciled by Effects of Temperature—Causes of the Bright and Dark Colour of Blood—Uses of the Red Corpuscles.*

Colour of the Blood.—We now proceed to consider the effects of the red corpuscles on the colour of the blood, as introductory to the interesting inquiry as to their agency in vivifying it and the parts through which they circulate, as well as their use in connexion with respiration and the production of animal heat. When the corpuscles are seen singly as transparent objects under the microscope, they are of a pale straw colour, of a redder hue when a few of them are so aggregated as to allow of less light passing through them, and of a darker colour when still more clumped together. Newton observed that blood is one of those fluids which is yellow when viewed in very thin slices. To the naked eye the colour is so well known, that "as red as blood" is a popular phrase; and no physiologist can be ignorant that this colour is owing, in vertebrates, to the red corpuscles, and is of a bright scarlet in arterial blood, and of a dark-red or Modena hue in venous blood. But the precise causes of this difference of colour, and the circumstances under which it increases, diminishes, or even ceases in the healthy animal, are by no means so well known.

Discordant Observations on the Colour of Arterial and Venous Blood reconciled by Effects of Temperature.—In the first place, as to the effect of temperature. The difference of colour is most marked in very cold weather, and least so in very hot weather; but having been always taught the striking floridness of arterial blood, and the darkness of venous blood, and having commonly witnessed this difference of colour in our own temperate climate, we seldom or never think of the possibility of any doubt or question as to this subject. Yet there have been very discordant observations, and by some of our best physiologists, as to the difference of colour between arterial and venous blood; and as the question is an important one, and even connected with the practice of our Profession, a few historical notices will be well calculated to fix this interesting point on our attention. Harvey believed that the colour of the two kinds of blood is essentially the same, though he admitted that there might be an accidental difference in the colour of the blood as it flows from the artery or vein of a living animal. But the question was a subject of controversy fifty years afterwards. Lower specially proved the difference of colour, and correctly inferred, from experimental inquiry, that the change of colour is produced in the lungs; and further supported this inference by observing that air produces just the same florid hue on the surface of the blood-clot out of the body—an observation which had also been made, two or three years before, by Fracassati, in a paper published in the *Philosophical Transactions*. Mayow fully admitted Lower's conclusions, and attributed the change of colour in the blood, during its course through the lungs, to its abstracting from the atmosphere a "nitro-aërial spirit," many of the properties of which, as he describes them, belong to oxygen. Dr. William Hunter, in his Lectures, as early as 1759, taught the true difference of colour between arterial and venous blood. Yet we find Haller, in 1756 and 1780, opposing the correct conclusions of Lower, and even asserting, that a hundred observations in dogs had convinced him that there is no difference of colour between the blood of the pulmonary artery and the blood of the pulmonary vein. But Priestly, who discovered his dephlogisticated air—our oxygen—in August, 1774, ascertained the correctness of Lower's results, and that air will act on the blood through a moist membrane; and he also proved that the brightened colour of the blood is produced only by the oxygen, and that carbonic acid, hydrogen, and azote have a contrary effect. Mr. Hunter removed the sternum from a dog, kept up the breathing of the animal by a bellows, and saw the blood acquire the scarlet colour in passing through the lungs. Then, at last, we have Dr. Davy making observations on sheep, at Malta, in the summer of 1829, when he carefully compared the blood of the jugular vein and of the carotid artery, and could see no difference whatever in their colour; in each it was less florid than the arterial blood of the same animal in an English winter, and less dark than the venous blood, being of a hue between the two. And this observation was so carefully conducted, that there could have been no mistake. In explanation, he supposes, that the higher the atmospheric temperature, and, consequently, the less need for the production of heat within the animal, the less difference there will be between arterial and venous blood, and the less power the venous blood will have of combining with oxygen, and of forming or evolving carbonic acid. Now, it it is remarkable that Dr. Crawford's experiments, upwards of fifty years before, lead to the same opinion. He put a dog for more than half-an-hour into warm water, and then found it difficult to distinguish the arterial from venous blood.

Here, then, is a series of facts not without value either in a physiological or in a practical point of view. The former has just been mentioned; and as to the latter, we must be very cautious in judging from the colour alone during hot weather, when the temperature of the atmosphere is upwards of 80°, of whether blood flowing from a wound be arterial or venous. Very likely Harvey's experiments were made at the hot season in Italy, and that Haller's took place during a warm summer at Lausanne.

Causes of the Bright and Dark Colour of Blood.—And now, having discussed the effect of temperature on the colour of the blood in the living body, we come to consider by what agent and how this effect is produced in the blood both in and out of the body. It is well known that blood is darkened even by a very brief stagnation both in living arteries and veins; and I have often been amused at the trick by which scheming farriers show "the blood as black as pitch," in order to prove their sagacity in having let out "that bad blood." No doubt, the general opinion, that the florid colour of arterial blood is due to the action of oxygen, according to the old views of Mayow, confirmed a hundred years afterwards by Priestly, is the correct one; but, in 1835, this was controverted very ingeniously by Dr. Stephens. It had been long known that earthy and alkaline neutral salts will render dark venous blood florid; and he was led to the conclusion, that the florid colour of arterial blood is produced by the agency of the salts of the serum on the hematozine, and that oxygen changes the colour of blood from venous to arterial merely by removing the carbonic acid, which, we have already remarked, Dr. Priestly had long before proved to darken the colour of the blood, and Dr. Stephens considers as the cause of this dark hue in venous blood. These views were adopted by Dr. Turner in his work on Chemistry, and Mr. Hoffman was also favourable to them. Dr. Christison agitated atmospheric air with a mixture of serum and red corpuscles of blood, and always found that oxygen disappeared, while carbonic acid was produced, but, owing to the strong solvent power of serum on this acid, he believed that more of it was formed than appeared in the residual air. In all these experiments venous blood acquired a bright vermillion hue, and the florid colour of arterial blood was heightened. Dr. Davy obtained the same results as to the absorption of oxygen by the blood, and the consequent brightening of its colour; but in the residual air he could detect only a trace of carbonic acid, and none at all when, instead of atmospheric air, pure oxygen was agitated with the blood. He further observed that venous blood, when subjected to the air-pump, did not acquire the arterial hue, even when carbonic acid was extracted; and yet that the florid colour was imparted to venous blood by agitating it with a mixture of oxygen and carbonic acid gases, although the blood certainly absorbed a much larger portion of the carbonic acid than of the oxygen.

These results are quite irreconcilable with the doctrine of Dr. Stephens, but agree well with the older views which he disputes. Dr. C. J. B. Williams gave some experiments to prove that the florid effect produced by oxygen and the salts is by their causing more light to be reflected through the colouring matter. Dr. Davy concludes that neutral salts brighten the blood by so separating the corpuscles that they reflect more light; that water, acids, and other agents

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darken the blood by altering the form of the corpuscles, and partially dissolving the colouring matter; and that hematozine is black only in mass, and red when powdered, or when viewed in a small portion by transmitted light. My own observations are to the same effect generally. I found, after Nasse, Scherer, and Mulder, that agents, as pure water and carbonic acid, which darken the blood, make the corpuscles tumid or globular, and that florid arterial blood soon became dark coloured when kept in a jar, and remarkably so when putrefaction began; and the form of the red corpuscles was more or less altered, when the true bright vermillion hue of arterial blood could no longer be restored in it either by oxygen or neutral salts. The effect, too, of these salts in fresh blood is always to separate the corpuscles, and render them slightly thinner, smaller, or more compact, which oxygen produces also in a less degree; nor could I find that either neutral salts, sugar, or oxygen, would strike a scarlet colour with pure and nearly black hematozine.

But the valuable observations of Dr. Wells, published in the *Philosophical Transactions* of 1797, and strangely neglected, notwithstanding Dr. Davy's notice of them in 1838, are so conclusive on this subject, that much discussion might have been spared had Wells' paper not been forgotten. He obtained the same results, as those just mentioned, as to the action of air and neutral salts not brightening the colour of pure hematozine—that nitre does not change the colour of a solution of hematozine, and proved by an ingenious experiment that the opacity of blood, and the reflection of light from it, are increased by neutral salts; and observed that these salts and air—of course the oxygen—affect the blood, just as bright vermillion is produced from dark cinnabar by subjecting it to minute mechanical division. Thus, then, the result is, that it is not simply to chemical agency, but either to changes in the form of the corpuscles, or to their more or less state of aggregation, so as to dispose them either to reflect or to absorb more or less light, that the effect of many substances on the colour of the blood is owing; and we have already specially stated how neutral salts and oxygen act in this respect. Nor can we dismiss the observations of this eminent man, made upwards of sixty years since, without remarking the grievous injustice to him and to English science, by our translators and commentators adopting the sorry claim of very recent German genius to "the discovery that everything relating to the colour of the blood does not pertain to chemistry!"

If you look again at the diagrams you will see that the red corpuscles, when highly magnified and viewed by transmitted light, appear of a pale straw colour, and that they are of a deep red hue only when seen in mass, and are, consequently, more or less opaque. The extensive diffusion of their surfaces, and of the light through them, under the microscope, are just what might be expected from a consideration of chromatic laws. Hematozine only appears black in mass; in small transparent portions and in powder it is red. Now, it is well known that the more concentrated the colouring matter the darker it is, and the more diffused or diluted, *ceteris paribus* the lighter it becomes. The more, also, the colour is mixed with white or reflected light, and the purer the white ground on which the colour is spread, so much the brighter is the effect. Indeed, the great masters of colouring of the Venetian school practised their consummate art on these beautifully simple principles. The colours they used were transparent, not black; and darkness or blackness were produced rather by a concentration of colour than by a direct use of any black pigment.

Uses of the Red Corpuscles.—And now, having shown the difference of colour, and the cause of modifications or even cessation of that difference, between arterial and venous blood—to what agent the effect is owing, and how it is produced, we are prepared to enter on a further consideration of the functions of the red corpuscles. In a former lecture it was mentioned, incidentally, that the red corpuscles vivify the blood, and through it the animal frame; and this mainly by means of their function as carriers of oxygen. We now propose to adduce such evidence as may be sufficient to support this proposition, which will lead us, among other interesting questions, to a consideration of that of the source of animal heat; into which difficult subject, however, it is only intended at present to enter as far as may concern the immediate agency of the red corpuscles in this important process, and by way of illustrating their use in the animal economy, reserving some details for the next lecture.

In the course of this inquiry we cannot fail to be impressed with a strong sense of the vast importance of these corpuscles, small and insignificant as they might appear to the uninquiring mind; and that, so far from being only microscopic curiosities, as they were too often regarded about the time when my researches concerning them were commenced, they are, in the vertebrate sub-kingdom, endowed with special functions, absolutely essential to the existence of the animal, from man downwards, throughout the whole classes, orders, and species, to one or more of the lowest fishes, as *Amphioxus*, where the necessity for the red corpuscles would appear to cease among Vertebrata. So that, without the red corpuscles we could neither live nor breathe, nor move, nor have our being; and even a slight change in their texture, or an alteration in their proportion relatively to the other proximate constituents of the blood, may be the cause of disease or death. And this consideration might suggest an inquiry as to what variation in this proportion may be consistent with health in the two sexes of the human species, and in the inferior animals; but our present purpose is not to treat of pathology.

The red corpuscles would appear to be connected with nutrition, and with the maintenance of the action or excitability of parts. The muscles lose their power of motion when the current of arterial blood is cut off from them, as was long since observed by Stenson, and confirmed by subsequent experimenters. After tying the aorta or the iliac artery in dogs, I have frequently seen, as no doubt Sir Astley Cooper and others had done before, more or less paralysis of the hind limbs, which diminished as the collateral circulation became established; and this in cases where there was no sufficient injury of the nerves to account for the diminished power of motion. But until recently we had no demonstration of the manner in which the influence of the arterial blood is exerted. That the red corpuscles vivify the blood and the parts to which they are carried by virtue of the oxygen which they convey, has often been supposed, believed, or stated; but the proof, and that proof so legitimately carried out as to command the merit of discovery, is due to the researches of Dr. Brown-Séquard. Now, suppose either man or brute animal, dead and stiff, cold, the post-mortem rigidity so fully established that the muscles are no longer capable of being affected by any kind of stimulus previously known to affect them until they had become stiffened after death, such as mechanical, chemical, or galvanic action; in short, having lost all remains of vital endowment and returned to mere dead matter. Suppose, then, the discovery of an agent capable of so far reanimating this dead and stiff body—this stark cadaver—as to revive the muscles, restoring their flexibility and their susceptibility to stimuli, and it might seem that we were asking for the supposition of a modern miracle! Yet the red corpuscles, charged with oxygen, really constitute this marvellous agent; and we well know how in the living body they are incessantly supplied with oxygen from the atmospheric air during their circulation through the lungs, and how intimately this process is connected with the breathing function. Here is one of the experiments, to which these remarks are the prelude:—A mixture of red corpuscles and serum, charged with oxygen, was injected into the radial artery of a man, after cadaveric rigidity, when the injected blood, which, of course, had been made scarlet by the oxygen, returned blackened through the veins, while the irritability and flexibility of the muscles were restored! And that this wonderful effect was produced by the red corpuscles is fairly inferred from the facts, that no fibrin was injected, and that trials with serum alone produced only negative results. Nay, it was further found that the integrity of the red corpuscles is necessary to the success of the experiment, since corpuscles altered by incipient putrefaction or otherwise, will not carry the oxygen like the regular fresh corpuscles, as already described when treating of the colour of the blood.

And I may add, that the oxygen was carried alone by the red corpuscles may be as surely concluded from Dr. Davy's experiments, published many years since, from which it results that healthy serum, though capable of absorbing more than its own bulk of carbonic acid gas, is nearly, or quite, incapable of absorbing oxygen gas; and that venous blood will absorb more oxygen than arterial blood, as might be expected from the corpuscles of the arterial blood already containing oxygen, to be given out or enter into combinations according to the wants of the economy, before the conversion of the florid arterial blood into the dark venous blood. In his experiments, Dr. Davy used the same kind of apparatus as had before been employed by Dr.

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Christison, the eminent chemist of Edinburgh, in a similar inquiry. Dr. Davy experimented on blood deprived of its fibrin, and he always found that, when the remaining mixture of red corpuscles and serum was agitated, either with atmospheric air or with pure oxygen gas, there was a marked diminution of the volume of air, most in venous, and least in arterial blood. The air which disappeared from absorption by the blood was oxygen only; and that this is absorbed simply by the red corpuscles is to be inferred from the very curious and important fact already mentioned, that serum is scarcely capable of absorbing this gas. When ten cubic inches of the venous blood of the sheep were agitated with common air, there was an absorption of one cubic inch of the air; and arterial blood, similarly treated, absorbed from ·3 to ·4 of a cubic inch. The venous blood, agitated with pure oxygen, absorbed 1·25 cubic inch. It is remarkable that there was no evolution of carbonic acid; but it might have been formed and held by the serum. We shall have to recur to these experiments in connexion with respiration. For the present they are merely cited as proofs that the red corpuscles, and not the serum or liquor sanguinous, are the absorbers and carriers of oxygen. It is no part of our purpose now to enter at length into an inquiry as to the potent agency of this element. We have simply to represent the great importance of the red corpuscles as the distributors of it throughout the animal frame, confining our attention to some of the most obvious effects of the oxygen thus dealt out wherever the red corpuscles of the arterial blood may penetrate. Nor can we, even thus limited, avoid being reminded of the mistake of our illustrious Hunter, in attaching such comparatively little importance to the red corpuscles. He seems, indeed, almost to have taken a dislike to them, a feeling in which he was followed by some other eminent physiologists.

Now, while the experiments already alluded to lead to the conclusion, that certain secretions are increased under the influence of blood charged with carbonic acid, and that the superoxygenation of the blood may diminish or suspend the secretions, the inference results that there can be no nutrition in vertebrates without a sufficiency of oxygen. It appears, also, that the properties which the blood possesses of nourishing or maintaining the vital properties of the tissues, of the nervous and contractile organs, and the special action of the brain, depend on the oxygen which the blood contains, in accordance with the old observations of Bichat. We have already seen that the red corpuscles are the agents by which this oxygen is taken up and distributed throughout the frame in vertebrate animals, and may well be lost in admiration of the immense import of these beautiful little organisms even in this point of view; while we can now understand the great value and interest of all well-directed research as to everything connected with their nature, and that these inquiries are, indeed, the reverse of mere curiosities. Why, to revert to the results of the experiments just cited, it would appear that the contractile tissues, the nervous tissues, and the brain, after having completely lost their vital properties or functions, recover them under the influence of the red corpuscles charged with oxygen. And, finally, that carbonic acid, so far from being all a mere useless or excrementitious substance, has a favourable influence on the formation of certain secretions; with the further conclusion, that certain contractile tissues of Vertebrata may be stimulated or excited by blood charged with this acid.

ORIGINAL COMMUNICATIONS.

A CASE OF CANCER OF THE THROAT,

INVOLVING BOTH WIND-PIPE AND ŒSOPHAGUS—TRACHEOTOMY —DEATH AFTER FIVE MONTHS.

By CHRISTOPHER HEATH, F.R.C.S.,
Assistant-Surgeon to, and Lecturer on Anatomy at, the Westminster Hospital.

The following case is, I think, worthy of record as an example of complicated disease, in which the patient was rescued from immediately impending death by the operation of tracheotomy accomplished under great difficulties, and survived the operation in comparative comfort for five months:—

In December, 1861, Mrs. S., aged 60, the widow of a Medical man, came under the care of Dr. George Johnson and myself, suffering from what appeared to be chronic laryngitis, with occasional attacks of dyspnœa. Some enlargement of the thyroid gland had existed for some months, and it was exceedingly hard, but did not seem large enough to induce pressure on the wind-pipe. The patient was a thin, delicate woman, suffering much from indigestion and occasional slight attacks of jaundice, the result of long residence in India.

On December 10, 1861, I was summoned, as the dyspnœa had become urgent, and met Mr. Musgrave, of the Finchley-road, who had been called in. I found her breathing ten per minute with great difficulty, with feeble pulse, and cold skin. We agreed that an operation would be necessary in all probability, but determined to try the effect of administering stimulants for an hour. No improvement taking place, and Dr. Johnson concurring, I proceeded, at nine p.m., to perform laryngotomy, so as to avoid interference with the enlarged thyroid. Having made an incision over the cricothyroid space, I found a portion of the enlarged thyroid overlying the larynx, and just at the spot was a portion with several large veins distinctly visible, and I was, therefore, obliged to resort to tracheotomy. I prolonged the incision to the sternum, and found an immense dense mass of tissue, apparently altered gland (*qy.* scirrhus), overlying the trachea. Having dissected through this, I thought I felt the rings of the trachea (in which Dr. Johnson agreed), and cut into it, but found it still to be the same dense tissue. I then cut deeper with the same deceptive sensation, but without discovering the wind-pipe. Having cut to the depth of nearly two inches without any sign of trachea, and, under the peculiar circumstances of the patient being particularly anxious as to the result, I suggested that Mr. Fergusson should be consulted before proceeding further. The hæmorrhage was only slight, and was arrested by pressure. Mr. Fergusson arrived in an hour; and, upon putting his finger into the wound, thought, as I had done, that he felt the trachea, and attempted to introduce a tube, but failed. He then cut very freely for some time without result, but, at last, some air escaped, showing that the trachea was reached. Mr. Fergusson had great difficulty in again finding this orifice, but, at last, got the handle the scalpel into it, and enlarged the orifice downwards with a bistoury, and was then able to introduce a very long tracheotomy tube, which he had fortunately brought with him. The incision was about three inches deep. The patient could not bear the introduction of the inner tube, but breathed pretty comfortably through the divided external one. She coughed up a quantity of viscid, bloody sputum, but got some sleep after the operation. The patient was pretty comfortable next morning. She was only able to take small quantities of food at a time, owing, apparently, to the presence of the tracheotomy tube.

12th.—Much better altogether. I changed the tube, introducing one of a different angle, which permitted the introduction of the inner tube, and did not prevent her swallowing. The wound is beginning to suppurate.

14th.—The patient is able to take solid food. No medicine given, but wine at short intervals. There is but little expectoration, and that quite clear. Dr. Johnson examined the chest, and found the lungs quite clear.

From this time to March 16, 1862, Mrs. S.'s condition was very satisfactory. The enlargement in the neck diminished slightly, but continued to be of stony hardness, and the glands under the sterno-mastoid became enlarged and very hard. Some difficulty was caused by the contraction of the wound, and, on one occasion, I enlarged the internal orifice slightly with a curved bistoury. To obviate the difficulty caused by the granulations finding their way into the outer tube, I had an old-fashioned double tube made with no split in the external portion, and this proved quite satisfactory. The patient's general health was pretty good, and she was up every day, and went out once for a drive. A slight difficulty of swallowing had occurred on two or three occasions; and she found, during February, that she was obliged to be careful, in swallowing, to take as much fluid as possible, and to take plenty of time. No air whatever passes through the larynx.

From March 10 to 16 there was a good deal of difficulty of respiration, due apparently to some pressure against the tube, for by tilting the lower end slightly backwards it was immediately relieved. This difficulty I attempted to remedy by altering the curve of the tube, without much effect; and the attendant found that most relief was given by passing a piece

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of whalebone down the tube, so as to alter slightly its direction.

On March 16 it was noticed that some of the breakfast passed through the tracheotomy tube, giving rise to severe cough, which was also excited by swallowing the saliva. I was out of town, but saw the patient the next morning, and tried to pass a tube down the œsophagus, but failed. I succeeded, however, with a No. 10 elastic catheter, through which she was fed by means of an India-rubber bottle. She was ordered to spit out the saliva, as it invariably gave rise to cough when swallowed. The attendant to feed with the tube four times a-day.

March 23.—Mrs. S. has decidedly lost ground during the week, and has lost heart too. The nurse manages the feeding with the catheter very well.

April 1.—A decided improvement in the general appearance. Was able to drive out for an hour yesterday. Feeding continued as before.

12th.—The difficulty in passing the tube down the œsophagus has increased, and a larger quantity comes through the tracheotomy tube at each feeding. Each feeding produces a violent paroxysm of coughing, which distresses her much. I ordered a tube to be made of the size of No. 10 catheter, but as long as the stomach tube in ordinary use, in hope that, by passing the fluid further on, it might not be vomited again.

17th.—I had a note to say that the patient was suffering so much at each time of feeding, that on the previous day Mr. Musgrave recommended that it should be abandoned, and that food should be administered *per rectum*. I went to see her, taking with me a small rectum tube, as the long catheter was not ready. I passed the rectum tube for a short distance down the œsophagus without difficulty, but then found an obstruction, through which the tube passed with difficulty, giving rise immediately to violent coughing, air being drawn freely in and out of the tube. I ventured to push the tube a little further on, in hopes that, if it were in the œsophagus, it might go beyond the opening in the trachea, but was obliged to withdraw it, as it nearly suffocated the patient, having, I believe, passed into the trachea. I believe, therefore, that the œsophagus is nearly or entirely obstructed by the cancerous growth, and that a large opening exists between it and the trachea, through which the food has for the last few days either found its way directly, or perhaps a very small quantity having passed into the stomach, has afterwards been vomited, and has thus got into the trachea.

19th.—Having procured the long catheter I made another attempt with precisely the same results, and, therefore, gave them up for the future. Mrs. S. has nourishment administered *per rectum* every four hours, and is relieved at not having to undergo the painful operation of feeding.

26th.—Has decidedly lost ground since the last report. Is troubled with occasional efforts at vomiting, though, of course, nothing comes up. Within the last two days the left arm has become somewhat swollen and œdematous, and, I find, that there a few large glands in the left axilla.

May 3.—Condition much the same; but the patient is weaker, and has constant sickness, and brings up bile through the tracheotomy tube. Face slightly puffed.

12th.—Lying in an unconscious condition.

13th.—Mrs. S. died quietly at 6 a.m.

Post-mortem Examination.—I removed the tongue, larynx, œsophagus, and enlarged glands in the neck, *en masse*. On laying open the œsophagus from behind I found that it was completely obstructed by the thick edges of an ulcer, of malignant appearance, in the centre of which was a large aperture, opening directly into the trachea, opposite the wound made in the operation. Several rings of the trachea were gone at this point; and, in fact, there was one large *cloaca* at this spot. In the larynx on the left side was a growth of soft cancer, completely blocking the passage, and, no doubt, this was the original cause of the dyspnœa. The cricoid and thyroid cartilages were necrosed, a large portion of the former being wanting, and the latter being broken in half. The thickened tissue in front of the trachea seemed to have almost entirely disappeared; but there was a mass of cancer on the left side of the neck, through which the vessels and nerves ran, and with which the muscles were inseparably involved, but this did not seem to have exercised pressure in the trachea. The thyroid gland was a little enlarged on the right side, but could not be defined on the left.

There can be no question, I think, that the primary disease and cause of the dyspnœa was the growth in the larynx; and had the laryngoscope been as much in vogue then as it is now, it is probable that this might have been discovered. Even then, however, I do not see that any other treatment than that adopted could have been pursued, since it would have been impossible to have interfered with the growth from the mouth. The difficulties encountered in the operation of tracheotomy were such as will be seldom met with, for even Mr. Fergusson, with his immense experience, had never met with a parallel case. It may be questioned whether the opening into the œsophagus was not the result of the irritation and pressure of the tracheotomy tube, since several cases have been recorded of this nature; but I am inclined to believe that in this case the disease commenced in the œsophagus and eat through into the trachea, on account of the difficulty of swallowing, noticed prior to the formation of the opening, and also on account of the disease found in that viscus. What the tissue was which caused the extreme difficulty in the operation of tracheotomy must remain undecided, as the growth had almost entirely disappeared (no doubt partly by suppuration) at the time of death, five months after the operation, at the date of which it presented every appearance of scirrhus. Mr. Bryant, of Guy's Hospital, has recorded a case (Clinical Surgery, Part II.) in which a tumour in a similar position, and necessitating tracheotomy, entirely disappeared after the operation.

31, Sackville-street, W.

CLINICAL MIDWIFERY.

By FRANCIS H. RAMSBOTHAM, M.D.
Physician-Accoucheur to the London Hospital, etc.

(Continued from page 598.)

THE following seven cases of transverse presentation occurred in my practice during the years 1843 and 1844:—

Left Shoulder Presentation.

Case 166.—On February 24, 1843, at 2·30 p.m. I was sent for by one of the midwives of the Royal Maternity Charity, to Mrs. J, Spitalfields, in labour of her fourth child. With her first child the head presented; the second and third had been transverse cases. I found that the membranes broke at 12 noon, and that just before I was sent for the hand appeared externally. The left shoulder was occupying the pelvic brim, the arm down, the palm of the hand was looking forwards, and the head was resting on the left ilium. There had been scarcely any uterine action since the liquor amnii was discharged. I introduced my left hand without difficulty into the uterus, hooked my finger in the left ham, turned, and extracted the child easily. It was living. The placenta was expelled speedily, and she recovered well.

Transverse Presentation.

Case 167.—On September 2, 1843, at 9 30 a.m., I was sent for by a Medical friend to Mrs. T., Limehouse, in labour of her second child; the first was born nine years ago. The membranes broke at 7 o'clock the evening before, previously to which my friend "could not feel any presentation." After that the uterus remained passive for three or four hours, and then began to act vigorously, when the right hand came down into the pelvis. Being foiled in his attempts to turn, he sent for a neighbouring Practitioner, who also failed; and then a third was summoned, who was as unsuccessful as the other two. Throughout the night I understood that many abortive efforts at delivery were made. When I arrived, the patient, her husband, and two sisters all declared that nothing more should be done, but that she should be allowed to die in peace; however, after reasoning a little with them, I was permitted to make an examination. I found the right hand external, much swollen, and livid, the palm looking forwards, the head resting above the right ilium, and the edge of the right scapula presenting very high at the pelvic brim. The left hand and forearm were also in the pelvis at the posterior part; and the left foot, with the noose of a tape around it, and the ankle joint severed, was at the brim towards the left ilium. The uterus was very strongly contracted round the child's body, and the vagina and external parts were acutely tender. The conjugate diameter of the pelvis at the brim measured but little over three inches. I was told the first labour had been easy; but it is quite

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probable, that during the intervening nine years the pelvis might have deteriorated in size. As passing the hand into the uterus to turn the child was out of the question, I proposed to exviscerate the chest and abdomen. I, therefore, made an aperture with Smellie's scissors below the axilla; but the part lay so high that I could not get away any of the viscera. I then, with some difficulty, passed the tape which was round the ankle up above the knee, and thus got a firm purchase downwards; then, by pulling at the tape, and at the same time pressing against the upper part of the child's trunk, I made the body revolve, and brought the breech into the cavity. The shoulders cleared the brim comparatively easily; but I was compelled to perforate the skull behind the ear, and evacuate a considerable portion of the brain before the head would pass. The uterus acted well during extraction; but some hæmorrhage coming on induced me to introduce my hand for the purpose of removing the placenta; it was firmly adherent throughout about half of its extent, and that part was much firmer and more solid than natural, with a quantity of coagulable lymph thrown out into its structure, as well as on its maternal surface, so as to give it a leathery feel, and white appearance. The woman did well.

The fortieth case, which I have reported in the Number of this Journal for February 15 of this year, will be found to be a case of transverse presentation, complicated with unavoidable hæmorrhage.

Transverse Presentation at Seven Months—Exviscera tion.

Case 168.—On January 25, 1844, at ten p.m., I was requested by a Professional friend to see Mrs. J., behind the London Hospital, between seven and eight months advanced in her first pregnancy. Pains came on early in the morning of the previous day, the 24th, but no presentation could be discovered by her Medical attendant. The membranes broke at noon, still the child lay too high for any part of its person to be felt by the finger. Directly the membranes had ruptured, the uterus ceased to act, and did not resume its contractions till seven o'clock on the evening of the 25th. Her Medical friend was summoned at 8; he then found an arm doubled in the vagina, and, having made an unsuccessful attempt to "turn," he sent for me. The left hand was then external, with the palm looking forwards, the head above the left ilium, and the brim of the pelvis completely filled by the child's chest, which was wedged into it strongly; the cuticle was peeling, and a fold of the funis quite flaccid prolapsed. The uterus was acting very forcibly. As "turning," if practicable, would have been both difficult and dangerous, I at once perforated the chest, by means of Smellie's scissors, took away the viscera of the chest and abdomen, so that the trunk doubled upon itself; and by fixing a crotchet on the fœtal pelvis within its body I brought the breech down, caused it to sweep along the sacrum and perineum, and thus extracted the trunk, breech foremost. During this time the perineum was placed greatly on the stretch, but it sustained no injury. The operation did not occupy half an hour. The placenta passed quickly, and the patient recovered exceedingly well.

Transverse Presentation.

Case 169.—On March 27, 1844, at 7·30 a.m., I was requested by one of the Surgeons to the Royal Maternity Charity to visit Mrs. R., Waterloo-town, in labour of her third child. The membranes broke twenty-four hours before; but, as is usual in these cases, the midwife had not discovered the presentation, and the uterus ceased to act after the water was discharged. It resumed its contractions at 5 a.m. The midwife was summoned at six; she found a hand external, and sent for the District Surgeon, who, having tried ineffectually to turn, dispatched a messenger for me. I found the right hand external, the palm looking forwards, and the head resting above the right ilium. The funis was also prolapsed, not pulsating. With some difficulty I passed my hand into the uterus, but could not introduce it high enough to reach a foot. I therefore hooked my finger in the right ham, and turned comparatively easily. The placenta followed soon, and I left her comfortable. She went on very well for nine days, and then began to complain of pain in the right hypochondrium. This was relieved by leeches; it was not, indeed, severe. But on April 7, after eating an orange, she was attacked with violent vomiting, which continued all night most distressing. She said she was convinced something had given way within her. She gradually sank, and died at eight o'clock the next morning. On a post-mortem examination we found a fleshy tubercle, the size of an ordinary apple, on the right side of the uterus externally, in a state of suppuration and gangrene.

Transverse Presentation.

Case 170.—On May 14, 1844, at 11 p.m., a Medical friend sent for me to Mrs. H., Mile-end-road, in labour of her third child. The first was a natural labour; the second a transverse presentation. The membranes had broken one hour; the right shoulder was at the pelvic brim, the head on the left ilium, the face looking towards the mother's spine. The uterus was acting very feebly. I passed my left hand without difficulty into the uterine cavity, and turned the child easily, having seized both feet. In consequence, however, of the pelvis being narrow at the brim, the head gave me some trouble. Nevertheless, the child was born alive; the placenta passed soon, and the woman did well.

Right Shoulder Presentation—Spontaneous Evolution.

Case 171.—On November 21, 1844, at 9·30 p.m., I was summoned by a Medical friend to Mrs. S., Ratcliffe, in labour of her sixth child, at full time. The membranes broke at 4 p.m., and the right arm came down; the palm was looking backward, and the head was above the right ilium. At 8, the pains became very forcing, and the side of the child was wedged in the pelvic cavity. The whole of the shoulder was expelled, the sternal end of the clavicle thrust forcibly under the symphysis pubis; the breech was squeezed into the pelvis along the left ilium, was then propelled along the sacrum, and expelled, distending the perineum to an enormous extent; while the body of the child turned on the under surface of the symphysis pubis as on an axle, the angle formed by the neck and the clavicle being the point on which it revolved. The left arm and the head immediately followed. I arrived in time to observe the latter part of this process. The child was, of course, dead; it was larger than the average size, and the right arm, shoulder, and right side of the chest and back, almost as far down as the pelvis, were much swollen and quite livid, indicating the strong pressure to which its body had been exposed. My friend said that at 6 o'clock he felt the shoulder and the neck, and at 8 o'clock the ribs, distinctly. The placenta was speedily expelled, and the woman recovered very well. She must have had a much larger pelvis than usual to admit of the child passing in this doubled state.

N. B.—Douglas and Denman thought the shoulder receded into the uterus, as the breech was expelled downwards, and they, therefore, called it a "spontaneous evolution;" but I am quite convinced, from this, and three or four other cases of the same kind that I have watched, that the shoulder does not recede, but, on the contrary, with the chest, is thrust further and further external in proportion as the breech descends into the pelvis.

CASE OF POISONING BY VERATRUM VIRIDE.

By G. N. EDWARDS, M.D. Cantab.,
Assistant-Physician to St. Bartholomew's Hospital.

On Thursday evening, December 18, I was summoned to see a gentleman, a scientific chemist, who had taken, experimentally, one drachm of tincture of green hellebore (equal to about twelve grains of the powder). On my arrival, I found him sitting in the water-closet vomiting into the pan. His features were sunken; skin cold, and covered with a profuse, clammy sweat; his pulse quite imperceptible. He complained of intense pain about the epigastrium. The vomited matter appeared to consist at first of the food and contents of the stomach, afterwards of glairy mucus. I gave him immediately about an ounce and a half of pure brandy, which at once checked the vomiting. At this time I was joined by Mr. Buxton Shillitoe, the patient's usual Medical attendant. As he had slightly rallied, we had him moved into a room a few yards from the water-closet, and laid on the couch in front of the fire. The surface of the body was still very cold, especially the extremities. The clammy sweat continued, but the pulse could be felt indistinctly, beating, very feebly and irregularly, forty-four in the minute. A dose, containing Sp. æther. sulph. co. ʒss., and sp. ammon. arom. ℥j., was given, but immediately rejected by the stomach; but some brandy, given directly afterwards, was retained. A large mustard poultice was applied to the epigastrium, and a hot-water

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bottle to the feet. Two or three efforts at retching afterwards took place, and he once or twice vomited food, mucus, and a small quantity of blood. Warmth gradually returned to the surface, and the pulse became somewhat better in volume and power. Brandy was given at short intervals, and after about an hour a second dose of æther and ammonia, which was retained. The patient then fell asleep, slept for about a quarter of an hour, and awoke with the expression, "I am all right now," and appeared comparatively well. There was no diarrhœa throughout. He had two or three times a slight return of the symptoms; did not sleep during the night, but was quite easy; and the next morning only felt the discomfort arising from the mustard poultice and the soreness of the muscles caused by the retching. He then gave us the following account of his feelings during the attack:—

"Before taking the dose of the tincture, I had consulted Pereira, and, finding Dr. Mead's dose of the Tinct. helleb. nig. to be two teaspoonfuls twice a-day, and knowing the green hellebore to be of the same tribe, I considered, in taking one teaspoonful, I was rather under than overdoing it. The drachm of the tincture was taken about half past four or a quarter to five o'clock p.m., and my stomach soon afterwards whispered that I had admitted a troublesome guest. I went upstairs and sat down, thinking a cup of tea would set all right; but the uneasy constriction of the stomach continuing, with a tendency to sickness, made me retire to the water-closet. The sickness, once commencing, soon became alarmingly violent, with the most excruciating pain in the lower part of the stomach, the pain extending to about the size of my hand; the feeling of the seat of the pain was, that all the warm tea, water, etc., that I took to provoke the vomiting, went under the pain, making the constriction more and more violent. Finding the case getting desperate, I sent off for Medical aid; the pain continued to increase, and the ejection from the stomach was now glairy mucus with blood, with running from the nose and eyes. The most painful and profuse cold sweating now came on, and the difficulty of breathing became more and more laboured. I could not help wondering at the presence of anything like heat or constriction of the throat; my mind was perfectly calm; and, although I thought it more than probable that I should die, I did not feel alarmed. Hearing and recognising the voice of one of my Medical friends is all I recollected for some time afterwards. Immense circles of green colour appeared round the candle, which, as vertigo came on, and I closed my eyes, turned to red. The pain continued excruciatingly at the pit of the stomach, and a slight tendency to cramp existed when my legs were touched. It was some hour or more afterwards when I awoke, and found myself comparatively well. The sting of the mustard I can well recollect, and the horror of being forced to swallow brandy is even now with me. My bowels were not at all acted on. The next morning I took a dose of citrate of magnesia, and, in the evening, a blue pill, with colocynth, which relieved my bowels this morning."

Veratrum viride does not appear to have been much used in this country; but, in America, a pamphlet has been published, on its employment, by Dr. Ephraim Cutter, of Woburn, Mass.; and several articles have appeared in the Medical jouals respecting it. It is also described in the last edition of "Pereira's Materia Medica," where the symptoms from an overdose are stated to be precisely those observed in our patient. No authenticated case of poisoning by it has been recorded. The full dose of the tincture is eight minims.

WHALE STEAKS.—In passing along the street we saw strips of whale-flesh, black and reddish-coloured, hanging outside the gable of almost every house to dry, just as we have seen herrings in fishing-villages on our own coasts. When a shoal of whales is driven ashore by the boatmen, there are great rejoicings among the islanders, whose faces, we were told, actually shine for weeks after this, their season of feasting. What cannot be eaten at the time is dried for future use. Boiled or roasted it is nutritious, and not very unpalatable. The dried flesh which I tasted resembled tough beef, with a flavour of venison. Being "blood-meat," I would not have known it to be from the sea; and have been told that, when fresh and properly cooked, tender steaks from a young whale can scarcely be distinguished from beef-steak. —*Pen and Pencil Sketches of Faroe and Iceland. By A. J. Symington.* Longmans, 1862.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CONDUCTED BY

JONATHAN HUTCHINSON,

Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital,

AND BY

J. HUGHLINGS JACKSON, M.D.,

Physician to the Metropolitan Free Hospital.

ST. BARTHOLOMEW'S HOSPITAL.

CLINICAL REMARKS ON A CASE IN WHICH PART OF THE SCAPULA WAS REMOVED FOR MALIGNANT DISEASE.

(Case under the care of Mr. PAGET.)

In this journal for November 15 we gave a brief note of Mr. Paget's operation for removal of a malignant tumour of the scapula, and also a report of the remarks he then made. In his next clinical lecture, Mr. Paget spoke more at length on the case. The following is a brief report of the lecture:

He began by saying that, in a case like this, the whole interest before the operation lay in the diagnosis as to the nature and position of the tumour. In this case the situation of the tumour would help also to show its nature.

First, as regards the situation. It was clear that it covered nearly the whole of the infra-spinous region of the scapula. The first point to decide was, as to whether it affected the under surface of the bone as well as the upper. As the scapula was not projected from the chest wall, it seemed that the under surface was free. In cancer of bone, both sides are generally affected, and hence the fact, that in this case one side only was affected, was evidence against malignancy. It was not very important, but still it was some evidence, and might help to lead astray in diagnosis. Having thus decided that the tumour was on the upper side, the next question was, does the tumour grow from the bone? On this point there were differences of opinion. The scapula is naturally so movable that it is difficult to tell when a tumour is fixed to it or not. Mr. Paget believed that it grew from the bone. Another question was, as to the position of the tumour as regards the muscles. There was a means (Mr. Paget said) of ascertaining generally whether tumours were above or under muscles. It was this: to fix the parts which the muscles in question act on, and then direct the patient to endeavour to perform the resisted movement. The muscular action, if the muscles were under the tumour, would elevate it; on the contrary, if above, they would depress it. A peculiar sensation also was given to the hand, which was to be learned in practice, and was difficult to explain. This was only felt when the muscle was superficial, not when under the tumour. The same method would guide us in diagnosing the position, in reference to muscles, of fluid as well as solid tumours.

In this case, then, Mr. Paget came to the conclusion that the tumour was seated under the muscles, that it was fixed to the scapula, and that it did not affect both sides of the bone.

As to the nature of the tumour, it might be either fibrous, recurrent fibroid, cartilaginous, myeloid, or medullary. It might also be a deep-seated abscess, or hydatid. First, was it fluid or solid? The feeling of indistinct fluctuation was no sign at all that it was fluid. In the case of a small abscess the fluctuation might be indistinct, but in one so large as this, if fluid were present, the fluctuation would be distinct.

Another kind of fluid swelling was often taken for a solid one, viz., hydatid. We ought always to be on the alert for this, especially in tumours of bone. Hydatids may distend bone, so that their covering becomes so thin that the feeling may be quite that of a medullary tumour. Indeed, in such cases, it is wise to proceed in the operation on the supposition that it may be hydatid. As to the list of solid tumours, Mr. Paget said that he did not know from touch any characters by which medullary tumours could be certainly distinguished from the others, as even the cartilaginous tumours were sometimes soft.

The chief points in diagnosis of its nature are—1st, the position. A considerable proportion of tumours of the scapula are medullary. 2nd, the age of the patient. A majority of large tumours in persons so young are medullary.

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3rd, the rapid growth—in twelve months. This is not decided evidence, but adds greatly to the probability. It was, therefore, most probable, but yet not actually certain, that the tumour was medullary. We ought to act on probabilities, and proceed cautiously. The puncture of the tumour, at the time of the operation, would not always decide the question as to its nature. The matter in the trocar, in this instance, might have been taken for myeloid.

Mr. Paget next spoke on the grounds on which we ought to operate in such cases. He said that it was impossible to be actually certain that the disease was cancer, until the operation was half over. Also, he would not say, that it was not justifiable to remove cancer of bone, as, although the disease is sure to recur, there is generally a period of immunity from it. In many cases, we must operate almost against hope, with a very small probability of recovery. This is so when we are certain that the disease will ultimately recur. When uncertain, the grounds for operation are all the stronger. He had two cases in mind which showed clearly that life was lost from not giving the patient the chance of operation in what was supposed to have been malignant disease. In one, a tumour grew rapidly in the upper part of the thigh. It was thought to be malignant, and was, therefore, left alone. The patient died a miserable death. Then it was found that the tumour was simply cartilaginous. This patient might have lived to old age if his leg had been amputated. Mr. Paget related another case somewhat similar. In this instance, the tumour, also of the thigh, was cystic. It is very rare (he said) that we can arrive at such absolute certainty as to decline to operate. Another question as regards operation in case of cancer of bone is,—Is it sufficient to remove the part affected, or should we take away the whole bone? The answer is,—That if the removal of the whole bone does not increase the risk to life, do it; but otherwise remove only the part affected. As regards disease of the scapula, the question is not often raised; a disease of this bone is rare. But in cancer of the lower end of the femur, we ought not to remove the whole femur, as amputation at the hip-joint is an operation involving great risk to life. If, however, we have cancer of the middle of the tibia, we ought to amputate above the knee.

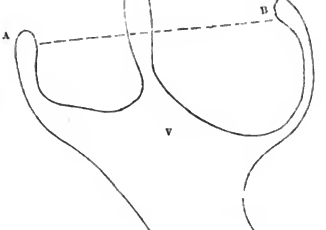
THE LONDON HOSPITAL.

HYPERTROPHIC ELONGATION OF THE CERVIX UTERI—FAILURE OF CAUTERISATION—AMPUTATION BY MARION SIMS' METHOD—SUCCESSFUL RESULT.

(Under the care of Dr. BARNES.)

G., a woman aged 35, was admitted an out-patient on February 12, 1862. She has had five children and one abortion. The last labour was two years ago; it was a cross-birth. Since then she has suffered much from metrorrhagia, dysuria, painful defecation, leucorrhœa, pelvic and dorsal pains, loss of strength and flesh, and bearing down. The os uteri was near the vulva, but there was no marked descent of the body of the uterus; the uterine sound penetrated more than three inches; the apparent prolapsus was due to the greatly hypertrophied and elongated condition of the cervix. The anterior lip was especially affected; it expanded into a hard tumour, which fretted the vagina by constant pressure and friction. The potassa cum calce was applied to the anterior lip, so as to produce a large eschar, and it was thought that some diminution of bulk followed the healing of the sore. The cauterisation was repeated several times in the course of the ensuing four months. The ultimate advantage was very doubtful. She then wore a stem pessary for some time, but this only doubled up the elongated cervix, without producing any diminution of bulk, or bringing the patient material relief. Dr. Barnes, therefore, determined upon amputation as the only means of restoring the patient's health.

On September 5, she was admitted as an in-patient. Under the influence of prolapsus and friction, the enormously enlarged cervical portion, acting as a polypus or foreign body would, had caused considerable inflammation of the vaginal mucous membrane, as well as of that covering the cervix. Dr. Barnes kept her in bed some days, to allow this condition to be relieved under rest. This being accomplished, and a menstrual period having passed by, Dr. Barnes proceeded, on September 27, to amputate the vaginal portion of the cervix on the method practised by Dr. Marion Sims. The patient being placed under chloroform, the uterus was pressed downwards by firm pressure over the abdomen, whilst the cervix was seized and drawn forwards by Museux's vulsellum, the vagina being opened by a duck-bill speculum on either side. The anterior and posterior lips of the hypertrophied cervix were then successively cut off by bent scissors. An even inclined surface was secured by paring off the mucous membrane at the angles of union of the lips. Very little bleeding occurred. A small roll of lint, soaked in solution of perchloride of iron, was placed in the canal of the cervix. The stump was then covered by bringing together the edges of the mucous membrane by iron wire carried by the curved tubular needle. In this manner a very neat and perfectly covered stump was made.



The dotted line A B represents the line of amputation. V. Vagina expanded above by the hypertrophied cervix uteri.

No examination of the patient was made for ten days. At the end of that time, the greater part of the stump was found to have healed. The sutures were removed at the end of fourteen days. There was a little healthy suppuration from the central part, but the cure was essentially complete. The patient suffered very little; she passed a menstrual period without discomfort, was free from vaginal distress, and was made an out-patient on October 21. In November, having returned to laborious avocations, she experienced some degree of prolapsus, which might be anticipated from the long-maintained relaxation of the pelvic structures. In general health she was quite restored. What little local distress remained was effectually relieved by the use of the stem-pessary generally adopted by Dr. Barnes in this Hospital. There is now no excess of cervix in the vagina, and the os uteri may be considered normal.

KING'S COLLEGE HOSPITAL.

CLINICAL REMARKS ON RE-EXCISION OF THE KNEE-JOINT FOR DEFORMITY.

(Case under the care of Mr. FERGUSSON.)

Mr. Fergusson made the following remarks in reference to a case in which he operated to restore deformity, which had followed after excision of the knee:—

The operation was a re-excision of the joint, or rather the cutting out of a wedge-shaped piece of bone. The patient, a girl about fifteen years of age, was first operated on by him about a year ago. She had chronic disease of the joint and a distorted limb. The limb was arrested in its development by the disease; it was bent and useless. He, therefore, performed an operation to take out the remainder of the joint, and a wedge of bone, in order that he might put the limb straight. In cases of deformity from disease of joints, it was right (he said) to try ordinary mechanical means. In some cases they

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were efficient, but a case like this was not a fit one for extension treatment. He, therefore, took out a piece of bone; the result was, that the limb was at once placed in a perfectly straight position. Soon after the operation, however, the girl had severe fever—very like pyæmia. She had abscesses in various parts of the thigh, none of them directly communicating with the wound of the operation; it was, therefore, impossible to retain the limb in the position in which it had been placed after the operation. No splint could be applied, so that during the time of her illness the limb got out of place. After all, however, she recovered well, the wound healed, and anchylosis took place, but, as stated, the limb was in a wrong position, the leg being much flexed on the thigh. There was, however, nothing left but deformity; there was no actual disease. At one time (Mr. Fergusson said) it was thought that, if a diseased joint could be removed safely, the result was very good, and the case would then have been thought a very satisfactory one.

Sir Philip Crampton once removed a knee-joint, and thus got rid of all the disease. The patient recovered, but the leg was bent at a right angle. It was useless, and would have been better off. The patient, however, was delighted with the result—so well satisfied that she bequeathed her leg to Sir Philip. The leg is now in the College of Surgeons' Museum. Such a result, however, would not satisfy him (Mr. Fergusson). His object was to give the patient an useful limb, as well as to get rid of the disease. This latter seemed to be the only result aimed at by some of the cutters of diseased joints. Surgeons might do a great deal, but to say that disease of a joint was cured, when the result was that the limb was useless, was a perversion of language. It was better to amputate than to leave the patient with a leg which was simply cumbersome. As he had said, there were cases in which mechanical means would straighten bent limbs; but, as this was a case of anchylosis, it was better to cut out a piece of bone. This was, therefore, a second excision. In one instance he had excised portions of bone no less than three times, and with a most satisfactory result. Of course, in case of excision of a joint the limb could never be quite as good as its fellow. This could not be expected any more than that a limb, after the so-called cure of disease of a joint, should be perfect. Some writers seem to him (Mr. Fergusson) to expect that the leg, after excision of the knee-joint, should be as good as it had ever been. If compared, however, with a wooden-leg, or the best possible mechanical contrivance, it was much superior.

The worst feature in case of excision, and one much dwelt on, was, that the leg was shorter than the other; granting that, the result was still better than many cases of cures, or than amputation. Another thing against the operation often spoken of was, that the muscle of the calf wasted. This was contrary to fact. In his cases the muscles had regained their fullness and vigour after the operation.

In the case he had just operated on there was less risk than in amputation. In fact, no one could compare the risk of taking a wedge of bone out of an anchylosed limb, and amputation of the thigh.

ST. THOMAS'S HOSPITAL.

CASE OF TYPHUS RESEMBLING TYPHOID, AND PROVING FATAL AT AN UNUSUALLY LATE PERIOD OF THE DISEASE—WITH REMARKS.

(Under the care of Dr. PEACOCK.)

A NIGHT nurse, 27 years of age, was admitted into Elizabeth's ward, St. Thomas's Hospital, on November 25, under the care of Dr. Peacock. She had been ailing for nine days, but so severely ill as to be confined to bed for three or four days. When admitted, she complained of pains in all parts of the body, and especially in the head and back, and of sore throat; and, on examination, the fauces were found red and swollen; the pulse was quick, the skin hot, and perspiring profusely. On examining the body, spots, bearing a complete resemblance to those of typhoid, were found on the abdomen and thorax. They were insulated, elevated, of a rose colour, and faded completely on pressure, and were only few in number. Two days after, she had become prostrated and torpid, and the spots had much altered their appearance; they were still elevated, but no longer of a rose colour, and had become livid, and did not entirely fade on pressure. An obscure purple mottling was also visible in the interjacent skin. At a still later period of two days, the original spots were no longer to be distinguished, but their situations were indicated by small purple patches, not elevated, and not affected by pressure; and the obscure mottling of the interjacent skin had become a full livid rash, which was perfectly characteristic of typhus. With the progress of the disease also, the symptoms had become more decided: her intelligence was greatly impaired, so that she could not be got to take sustenance, or to protrude the tongue; the tongue was dry and black; sordes formed on the lips and teeth: the face was excessively flushed; the pupils contracted; the conjunctivæ injected; and there was tremor of the extremities, great distension of the abdomen, and the involuntary discharge of fæces. The urine was partly retained, partly passed unconsciously. The bowels also were, from time to time, much relaxed. By the employment of blisters to the back of the neck, scalp, etc., and the exhibition of stimulants and support, by the mouth when possible, and by the rectum, she was partially rallied, but the coma recurred; there were slight convulsive movements of the head and neck, and extreme prostration, and she died on December 9, or the seventeenth or eighteenth day of serious illness, and the twenty-third of indisposition.

On examination after death, there was found scarcely any fluid beneath the arachnoid or in the ventricles at the base; the brain retained its natural consistence, but the red dots were unusually numerous. The posterior and inferior parts of the lungs were congested, and in places collapsed. The bronchial tubes, generally of the left lung, and the smaller tubes of the right, contained an unusual amount of secretion, and the mucous membrane of the former was congested. The heart was flaccid, and contained blood in all its cavities, but no coagula. The mucous membrane of the alimentary canal was free from any appearance of disease, except some passive congestion of the cæcum and colon. At the lower part of the ileum the plates were barely visible; not distinctly defined; depressed below the level of the adjacent surface, and marked by the dark spots or lines usually seen after death from acute affections not connected with the bowels. The mucous membrane was not injected, and retained its natural tenacity, allowing of being drawn off in stripes of the usual length. The serous coat was free from any appearance of redness, and the mesenteric and mesocolic glands were not enlarged. Some solid fæcal matter was contained in the colon. The spleen was large, and somewhat soft. The liver, supra-renal capsules, and kidneys were congested.

This case was made the subject of some observations by Dr. Peacock, in one of his lectures. He remarked—

1st. That it showed how closely a case of typhus may sometimes simulate typhoid. The mode in which the case commenced was not that which is usual in typhus. The patient had been ailing for several days before the severe symptoms commenced; and, when admitted, she had rather the appearance of a patient suffering from a feverish cold than from specific fever. She had been acting as night nurse in the ward since the opening of the temporary Hospital in September, and had, during all that time, been exposed to the contagion of typhus from patients under treatment. She had, however, been sleeping in a room on the ground floor, in which there was no proper system of under-drainage, and where, consequently, she might have contracted typhoid. The eruption also, when first seen, bore an exact resemblance to the usual appearance of typhoid spots, and it was only by watching the case that the true character of the rash was made apparent. Dr. Peacock had referred to cases of the same kind in his lectures on the "Discrimination of the Varieties of Continued Fever"(a); but he said that the present was the most striking instance of the kind which he had seen.

2nd. Though the cerebral symptoms were, during the greater part of the attack, very marked, and the patient became comatose, and was slightly convulsed before death, the brain did not present any signs of disease; and even the congestion which was detected was probably only the result of the obstruction to the pulmonary circulation in the last periods of life.

3rd. The congestion and collapse of the dependant portions of the lungs, were very marked; but these also may be ascribed to the failure of power in the heart and of respiratory movements, from the influence of the fever poison.

4th. The patient died at a later period than usual in cases

(a) *Medical Times and Gazette*, 1856.

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of typhus—certainly not before the seventeenth or eighteenth day, probably as late as the twenty-third; and during the latter part of her illness had diarrhœa, at intervals very profuse, and great abdominal distension. If, then, these symptoms had been indicative of any active disease in the intestines, there was ample time for such to have manifested itself. The examination after death showed, however, that the intestinal tissues were entirely healthy, except that some passive congestion existed in the large intestine, corresponding with that of the chylopoietic viscera, and of the body generally. These conditions, therefore, like the involuntary discharge of fæces and the retention of urine, are all to be ascribed to the excessive prostration of strength and of nervous power.

That these various changes may be traced to the direct influence of the febrile poison on the system is in accordance with the deduction, from widely-extended experience, that the various symptoms which accompany fever are to be combatted chiefly by means directed to the support of the patient's strength, in the hope that life may be sustained for a sufficient length of time for the poison to be decomposed or eliminated from the system, and for its effects to cease.

ST. GEORGE'S HOSPITAL.

ANEURISM OF THE ARCH OF THE AORTA PRESENTING BENEATH THE LEFT CLAVICLE.

(Case under the care of Dr. FULLER.)

J. A., a stableman, aged 35, was admitted into the York ward of St. George's Hospital on April 2, 1862. He had been an out-patient for nine months, suffering from cough, pain in the chest, and between the shoulders, shooting down the left arm, and frequent giddiness and headache. When first attacked, he brought up about half-a-pint of dark-coloured blood, and six weeks afterwards had a slight recurrence of hæmoptysis, since which time the sputa have been streaked with blood occasionally. Three weeks before admission, he for the first time perceived a small circumscribed swelling, attended with pulsation on the sternum towards its left side, and on a level with the second rib. Twelve years previously he had a kick on the chest from a horse, but recollects little about it, except that such an occurrnce took place.

On admission, his aspect was natural; tongue white; bowels reported regular; urine clear; his pulse was 72, soft and regular; the right radial pulse was scarcely perceptible. There was dyspnœa and some degree of orthopnœa, and frequent cough, with expectoration of thick yellow mucus. A circumscribed pulsating tumour, about the diameter of a hen's egg, existed to the left of the mesian line of the sternum, on a level with the second rib. He reported that this swelling increased in size after coughing, and on two occasions, after long freedom from cough, had entirely disappeared. The heart's impulse was natural, and its sounds were clear both at the base and apex. The pulsation of the tumour was synchronous with the systole of the heart. Both sounds of the heart were heard over the tumour, and there was no perceptible murmur. Both pupils were moderately and equally dilated.

He was ordered—Tr. hyoscyami, ʒj.; haustus nitri., ʒxj., ter. die.; haustus morphiæ, ʒj.; olei ricini, ℥iv., p.m., (ordinary diet); emplastrum belladonnæ, regioni cordis.

He went on without much variation until the 7th, when the tumour had increased considerably in size; the integuments around it were somewhat œdematous; he suffered much pain in the region of the tumour, was extremely restless, and was unable to obtain ease in any position. Slight ptosis of the right eyelid was also observed, and extreme contraction of the right pupil. The left pupil was moderately dilated, and both acted under the stimulus of light.

On the 8th, paroxysmal attacks of urgent dyspnœa occurred; he complained of frequent giddiness, the pulse was 72, irregular, and the pulse at the right wrist was imperceptible.

From this time the tumour rapidly increased in size, and the symptoms became more urgent and distressing. Considerable pain was felt around the tumour; the dyspnœa became constant; frequent attacks of fainting occurred; and he was usually bathed in a clammy perspiration.

On the 12th the ptosis of the right eyelid was observed to have decreased, but the contraction of the pupil continued as before.

On the 15th, whilst eating his dinner, a paroxysm of dyspnœa suddenly came on, and, after half an hour's struggle, he died.

The post-mortem examination was performed twenty-four hours after death. A soft livid prominence, nearly circular, of about three inches in diameter, covered the upper part of the sternum, and reached as high as the notch. This was most prominent a little to the left of the mesian line. A deep hemispherical cup was hollowed in the upper part of the sternum. This might have held half a tennis-ball. Between the articulations of the two first ribs on the left side the sternum was absorbed and worn through, and the sternal extremity of the first rib was also destroyed. The heart was natural. In front and to the left of the ascending aorta was an aneurismal pouch, which formed two-thirds of a sphere, and was about an inch in diameter. This was connected with the aorta by a smooth round opening, about an inch above the semilunar valves. At the superior part of the arch was another smooth circular opening, of rather more than an inch in diameter. This was placed slightly towards the anterior aspect of the vessel, and led to a large globular sac, thickly lined with coagula. The innominate artery opened into this sac near to its orifice, and, from its position, it was obvious that the artery must have been compressed by the tumour which laid against its anterior wall and its orifice, obstructed by the coagula which lined the sac. The carotid opened into the sac in a similar manner, just within the orifice of the sac and to its extreme left; the subclavian sprung from the aorta just beyond the boundary of the sac. These vessels appeared to be healthy; but the lining membrane of the aorta was raised in many places by soft atheromatous deposits. The right lung was œdematous; it contained a few crude tubercles, and a small vomica at the apex. The left contained several small vomicæ at the apex, crude tubercles scattered throughout, and an old tubercular cicatrix near its inferior edge. Both lungs were adherent to the diaphragm. The kidneys and other abdominal organs were congested, but structurally sound. The arachnoid was somewhat thickened over the superior and lateral portions of the brain, and was studded with minute opaque spots. At the base of the brain it was quite natural in appearance. The substance of the brain was watery; and seven drachms of fluid were collected. The blood throughout the body was very fluid.

HOSPITAL FOR THE EPILEPTIC AND PARALYSED.

EPILEPSY—AURA FROM THE TIP OF THE RIGHT INDEX FINGER—CONVULSIONS AND CRAMPS ON THE SAME SIDE OF THE BODY—RECOVERY.

(Case under the care of Dr. BROWN-SEQUARD.)

HENRY E., aged 17, was admitted an in-patient on May 7, 1862. As the interest lies chiefly in the peculiarity of the aura, and on the treatment of the case, many things noted according to a certain scheme at the Hospital are here omitted.

There was no history of any of the class of diseases supposed to be hereditary, except that his mother had a fit of some kind about a year before her death, which was at the age of 37. He had had, he thought, some kind of convulsive seizure in infancy, but could not be certain of it. He had never had worms, except ascarides five years before the first fit of the present series.

The first attack occurred in sleep. He was in it, he was told, for three hours, but he knew nothing of it next day; except that he was a little sickly, he felt quite well again. On the day after the fit, he had, what he then thought little or nothing of, a cramp in the right side of his body, the face, arm, and leg. He, however, kept well for six months, and then had another fit. Altogether, he has had twelve. He has no tremor, nor giddiness, nor *petit-mal*, and rarely headache, and his memory is good. His sight and hearing are good, and he has no loss of sensation or of motion anywhere, and, except a little temporary loss of power on one side, after an attack of cramp, he is quite well, except when he has the fits. In other words, his condition between the paroxysms appears good. His urine is free from albumen and sugar.

He always knows when the fit is coming on by a twitching and sensation of "pins and needles" in the tip of the right index finger, and this point is at all times tender to the touch.

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Next, the feeling of "pins and needles" goes up the arm to the shoulder, and then down the side to the foot, so that after a while he has the sensation on the whole of the right side, except the face and head. Very soon after this warning he becomes insensible, but he has no twitching of the arm and leg before this. No accurate description of the fits was to be obtained, as he only had one after he came to the Hospital, and in this he was not affected quite in the same way as he had previously been. He had no warning. He was convulsed, however, on one side, that on which the aura was felt. He had several attacks of cramps in this side, and probably these were abortive fits, not going on to complete insensibility. In these attacks the face was drawn to the right side, and the arm and leg of the same side were drawn up. Once, after a rather more severe attack than usual, he lost power on this side of the body, the arm, and leg. When he flexed the last joint of the finger it caused pain, which "ran up the arm as high as the shoulder; it was like a cramp." He had the attacks of cramp about two or three times a-week. Sometimes, also, the hand would simply "crumple" up.

Iodide of potassium was given, and the cramps were kept off by blisters round the finger, below the point from which the aura started. This kept off the cramp for long periods. Next, an ointment of aconite was applied to the finger. He had but one real fit after admission, and after August 18 he had no attack of any kind. Up to this date, December 5, he is well.

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Medical Times and Gazette.

SATURDAY, JANUARY 3.

1863.

The intelligence of Dr. Knox's death last week cut short the article in which we had proposed to ourselves to review the current events of 1862. That year was ushered in by a cloud that overshadowed every grade of society. The death of one so reverenced for qualities of heart and head as was the Prince Consort—a man who, by the sole force of moral and mental worth, and by unobtrusive, though unremitting toil for the good of people and Sovereign, had won the esteem, nay, the affection of a nation notoriously slow in surrendering national prejudices, and insular in feeling as in geographical position—sat like an incubus on all. Bitter the regrets, and all the more poignant, because the worth which death has indelibly stamped, in life too often escaped recognition. With the Sovereign the nation sympathised, as only a people can whose home-ties and domestic affections are the ruling powers of their national life. But time has softened, although it has not repaired the loss, and the year wanes amid brighter hues, and under a more joyous sky. True, a dark shadow still hangs over a large portion of the national industry. But it has called into play, on the one hand, the noblest qualities of the sufferers; on the other, the most generous efforts on the part of those who are removed from its immediate influence. The pulse of the nation beats healthily, and its aspect is hopeful. The marriage of the heir to the throne, accompanied by every circumstance of political and personal fitness, will throw a brightness over the coming year, which must penetrate at once the humblest cottage and the proudest hall. Our Profession will cordially join in the general hope that, in the new ties which are thus to be founded, our beloved Sovereign may find alleviation under her burden of life-long sorrow.

We, too, sustained heavy losses by death. The mind reverts to the familiar names of Brodie, Stanley, McWilliam, Farre, Waller, Fyfe, Traill, O'Beirne, Crozier, and many others of minor note. Abroad, Medicine has lost one of its brightest ornaments by the death of Professor Schroeder Van der Kolk. No word of ours is required to embalm their memories or extend their fame. To us their example and their works remain,—a memorial and a heritage.

To turn to lighter topics. 1862 was productive of many events which directly affect the position of our calling. On the brighter side of the picture we find certain efforts that were made, on the part of the General Medical Council, and of most of the examining bodies, to extend and improve Professional education; the growing appreciation, on the part of the public, of the pre-eminent fitness of the Physician to investigate judicially the cause of death in doubtful cases, and the extension or adoption of sanitary improvements in many towns and districts. The election of Dr. Lankester to the coronership of Central Middlesex, uninfluenced as it was by political motives, may be taken as an exponent of the general reception of a truth which has been only gradually winning its way. Then, again, the meeting of the British Medical Association in London—the gathering together in our metropolis the representatives of foreign Medical science, attracted by the great Exhibition in Hyde-park, and the consequent traffic in intellectual wealth, and establishment of reciprocal friendships, are all circumstances which tend to enhance the position of the Profession scientifically and socially. Medical science, too, has itself advanced. New means of examination and diagnosis are being discovered, or old ones improved, every day. We need only point to the use of the laryngoscope and of the ophthalmoscope in the investigation of obscure disease of the vocal organs, the eye, and the brain. Curative measures are now daily adopted, which, a few years ago, were scouted as impracticable or worse. The operation of ovariotomy is saving many lives, which, not long since, were hopelessly condemned. The conditions of safety and cure are being reduced to something like mathematical certainty, and the Profession are daily proving their claim to be regarded the benefactors of mankind.

Amongst the most notable recent advancements in science is the discovery of dialysis by Mr. Graham—a process which, by taking advantage of the different rates of diffusibility of liquid substances, effects the analysis of composite fluids by a very simple process, manageable by those who have no great knowledge of analytical chemistry, and applicable, among other things, to Medico-legal inquiries, therapeutical preparations, and inquiries in physiology and organic chemistry. A full notice of the process and its applications will be found at page 111, vol. ii. of our journal for 1862.

If we now turn to the future, the point to which the attention of the Medical press is likely to be emphatically directed in 1863, is the action of the General Medical Council. Long denied to that passionate importunity which accompanies hope deferred, Medical Reform came at last. A Council was elected, representing institutions rather than the Profession directly, but certainly consisting of an unexceptionable selection of the best names in the Profession. Assured of peace at last, and of the existence of an authority whose word should be final, our members submitted quietly to what was virtual disfranchisement, and consented to pay a somewhat heavy fee for admission to the new register. Ere long, it was found that the Council afforded no protection to the Practitioner; they refused to

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prosecute offenders. Their delay in issuing the new British Pharmacopœia has been unlucky, though unavoidable. They responded promptly and efficiently to the voice of the Profession in repudiating the new grain weight. But the delay in issuing the Pharmacopœia, coupled with the activity of the leading pharmaceutists in devising new forms of medicine, seem to show that the functions of a Pharmacopœia will henceforth be very limited. There must be standard strengths for solutions and compounds of the more energetic and poisonous medicines, and for the preparation of some of the more commonly-used compounds, such as the colocynth pill. But for the future, the list of the "Materia Medica" will depend on the repute of medicines for usefulness; the preparation of the chemical compounds will be directed by the considerations of cost and convenience to the manufacturer, whilst, as for *prescriptions*, properly so-called, they must and will vary at the pleasure of prescribers. Some new belladonna liniment may any day be discovered which will supersede that which has already acquired an undesirable notoriety.

But it is in respect to the functions of the Medical Council, as a Council of *Education*, that the greatest disappointment has arisen. It is now matter of history, that the Council propounded a certain scheme of education; that the College of Surgeons set them at defiance, and proposed another scheme, diametrically opposite to that which constituted its main feature; and that the Council, after discussion, quietly submitted to the revolt of the College of Surgeons. Thus, ancient chaos would seem to resume her sway, were it not that the growing appreciation of sound and prolonged Medical education by the public, and the good sense of students, will impel them to pursue the higher and better course marked out by the Medical Council, and to give that body a moral support against the defection of one of the most powerful corporations.

The peculiar function of a weekly journal is to lay before its readers the most advanced researches,—things that are not yet to be found in books. The substance of most of the best books appears in our columns, in the form of vigorous first sketches, a year or more before it is collected into those masses which, out of deference to ancient civilization, we still call "volumes." Another is to furnish an easy vehicle for bringing forward those results of long experience which are enumerated in the private notes and case books of the ablest Practitioners. The lectures and papers of Laycock, of Gulliver, Arthur Mitchell, Rolleston, William Adams, Professors Owen, Williams, Beale, and Radcliffe, Spencer Wells, Ramskill, and Soelberg Wells, well illustrate one department; and those by Conolly, Ramsbotham, John Adams, W. R. Wilde, and Whitehead, the other; whilst the crowd of original observations by such men as Paget, Le Gros Clark, Wilks, Risdon Bennett, Bulley, Peacock, Kirkes, George Johnson, Basham, Richardson, Cock, Prescott Hewitt, Barnard Holt, Gull, Aitken, Fincham, Hillier, Lawson, Cotton, Leared, Price, De Morgan, Fayrer, Alison, Ogilvie, Haynes Walton, Hutchinson, Hughlings Jackson, well show the advancing position which our Profession is taking up in its warfare against the multiform causes of mortality.

So far as the future is concerned, we can assure our readers that we have at our command a mass of original and spontaneous communications which gives us the occasional embarrassment of selection, but that, with due foresight, we take care to secure contributions on those points in which there is something to be learned which has not yet found its way into books. For instance, we propose, in some of the following numbers of the *Medical Times and Gazette*, to give an account of the details and results of the series of experiments on the urine of healthy men, recently undertaken by the Rev. Professor Haughton, M.D., with the object of founding a theory of work applied to man considered as a machine, mechanical and mental. His establishment of a definite relation between the daily work, bodily and mental, and the daily food of man; his demonstration of the greater amount of food required by brain-workers than by mere mechanics; and his estimation of the relative nutritive values of Hospital diets, will be interesting to all of our readers. Equally so, no doubt, will prove an account of his researches upon the antagonism of strychnia and nicotine, of his investigations into the phenomena of saccharine and insipid diabetes, and of his experiments on the mode of action of the muscles by the determination of the pitch and note of the muscular *susurrus*. For this purpose we have secured the assistance of Mr. A. W. Foot, M.B., who is familiar with the views of Professor Haughton on these subjects, having been fortunate enough to have assisted in many of his experiments.

Professor Simpson will favour us with lectures on Fibroid Tumours of the Womb; Professor Quain, F.R.C.S., with clinical Surgical observations; the experiences of Conolly and Ramsbotham will be continued. We are promised some more of the clinical records so carefully kept up by Dr. Robert Lee, whose great authority in Midwifery makes us regret his opposition to some new curative procedures. We shall, with the aid of a numerous and able staff, direct the attention o our readers to the subjects of Chemistry, Philosophical Anatomy, the Microscope, and Blood-letting. But, instead of more promises, we will ask any one of our readers to estimate the enormous mass of fresh and varied Professional information contained in our volumes for 1862, and accept them as evidence of what we shall give them in 1863.

THE WEEK.

DR. RADCLIFFE'S LECTURES AT THE ROYAL COLLEGE OF PHYSICIANS IN LONDON.

In his eighth and last lecture, Dr. Radcliffe spoke of pain and paralysis, prefacing what he had to say with some remarks on the "state of irritation." It is impossible, in the few lines at our disposal, to give even the barest outline of the argument used when speaking of the "state of irritation"; and it must suffice to say, that a physical explanation was offered which was in accordance with the physiological view of muscular action and sensation propounded in the first four lectures, and that the "state of irritation," thus explained, is seen to have nothing to do with an inflammatory or congestive condition, except that it may, in some instances, give rise to such a condition secondarily. Speaking of pain, and sensation analogous to pain, Dr. Radcliffe adduced evidence to show that their physiological and pathological conditions were, in every particular, analogous to the physiological and pathological conditions of the various forms of convulsion, spasm, or tremor. The physiological evidence adduced was very curious, the facts themselves being at once novel and striking. The pathological evidence amounted to this—that pain, and the sensation analogous to pain, were, as a rule, associated with a state of wanting vigour in the circulation, respiration, and innervation, and not with the contrary state. It was argued, for example, that pain, as a rule, is the precursor of inflammation, and not the attendant; that pain gives place to tenderness when inflammation is developed, except in those cases in which the inflammation is in a place where the due amount of swelling cannot take place, and where, consequently, this resisted swelling becomes a very intelligible cause of pain. The treatment suggested by these considerations is analogous to that recommended in the different forms of tremor, convulsion, and spasm; and, with respect to this matter, the lecturer said, that his own experience left him no room to doubt that this mode of treatment led to more satisfactory results than that which is dictated by the notion, that pain and the sensation analogous to pain are the signs of exalted vital activity in nerve tissue. With respect to paralysis, the lecturer had much to say upon the current views which look upon cramps and other disorders of muscular motion,

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and pain and the analogous disorders of sensation, as conclusive evidence that the paralysing lesion is of an inflammatory or congestive character. Dr. Radcliffe holds that the very opposite view is much nearer the truth, and he supports his opinions with no small amount of evidence. For the rest, something was said upon the use of strychnia and belladonna in the treatment of paralysis; and the conclusion come to is, that the two classes of cases in which these drugs are likely to be useful or harmful are not those in which they are, on high authority, spoken of as being useful or harmful, but rather the reverse. In a word, the lecturer maintained that symptoms of irritation are in no sense a reason for the adoption of remedies which will diminish a hyperæmic condition of some part of some nervous centre, and in that way lower functional activity, but rather the reverse; and he asserted broadly that he had good reason for believing that this view would bear the test of actual practice.

FEMALE PHYSICIANS.

We have received the fourteenth "Annual Catalogue and Report of the New England Female Medical College," published at Boston, U.S., 1862. As we have said before, it is a College constituted by public authority, and partly supported by endowments. It has produced forty-two graduates in nine years. We only, at present, quote the following emphatic passage:—

"The objection urged in England against the education of male and female Medical students together, on the score of propriety, appears to us an entirely valid one, and it is likely to be avoided there, as it is here, by the establishment of Medical Colleges for women."

THE IMPUTED PLAGIARISM.

The imputation of plagiarism, to which we referred in a note last week, has again been brought under our notice by a letter from Dr. Murchison, which we publish in another part of our columns. Dr Murchison's "Researches on Fever" have given him a lasting claim on the consideration of the Medical Profession. Few men have sought or obtained larger opportunites of studying the continued fevers of our own and warmer climates, and, we are bound to say, that few men have made better use of their opportunities. He has observed fever in Bengal, in Burmah, Dublin, Paris, Edinburgh, and London; and has twice experienced, in his own person, the dire, but fortunately, in his case, not fatal, effects of the disease of his special adoption. We may further say, that the results which he has obtained are so important, that any work on "Fever" in which they were overlooked would be simply behind the present position of science. It was, therefore, with no surprise that we read the following passage in the preface to his comprehensive work just published:—"Many of the tables contained in the essay referred to (read before the Medical and Chirurgical Society in 1858), together with my remarks upon them, have been adopted by Dr. Tweedie, in his 'Lumleian Lectures,' published in the *Lancet* for 1860. Dr. Tweedie being about to republish his lectures, I feel it due to myself further to state, that most of his facts and reasonings, bearing on the question of the 'Change of Type of Continued Fevers,' will be found in a paper published by me in the *Edinburgh Medical Journal* for August, 1858." He, however, goes on to say—"As Dr. Tweedie omits to mention my paper, I think it necessary to allude to the circumstance, lest it might appear that I had now borrowed some of my remarks from his lectures without acknowledgment." The information we received last week led us to suppose that the tables drawn up by Dr. Murchison were compiled at the request of Dr. Tweedie from the records of the Fever Hospital, in order to be used in his lectures before the College of Physicians, and that, therefore, the tables, and the deductions from them, were fairly common property, or, at least, might be ceded by a junior to a senior Physician without the slightest imputation. Dr. Murchison's letter gives a different complexion to the affair. We confess we are unable to understand how the results at which Dr. Murchison had arrived from a study of the statistics of the Irish Hospitals could be claimed by Dr. Tweedie, and the same remark applies to the facts and reasonings on the "Change of Type of Continued Fever," published in the *Edinburgh Medical Journal*. If Dr. Tweedie (than whom, as an energetic and accomplished worker in the same field as Dr. Murchison, no man deserves more Professional respect) will throw some further light on the subject, we shall gladly receive it. In the meanwhile, we trust that a misunderstanding, which is detrimental to the interests of Medical science and Professional honour, will not be allowed to continue. Plagiarism is a harsh term. We have said that Dr. Tweedie could not, in justice to his hearers and readers, do otherwise than quote Dr. Murchison; and he has more than once referred to Dr. Murchison by name in connection with the passages in question. It would have been better had he more carefully and clearly ascribed to their source the paragraphs which he quoted; but the character and position of the author of the Lumleian Lectures, and his connection with Dr. Murchison as a colleague, forbid us to suppose this anything worse than an inadvertent omission. The very nature of scientific observations forbid their being clothed in a variety of diction; and it is a thousand times better to quote *verbatim* an original writer on matters of science than to obscure or weaken his meaning by translation. In fact, even out of pure science, by far the larger amount of literary labour consists in pouring, either knowingly or unknowingly, from one vessel into another. We regret that this matter was not allowed to remain where Dr. Murchison left it in his preface. He there had fully and sufficiently vindicated his claim to his own property. But it will be observed that he there does not accuse Dr. Tweedie of plagiarism; and we have undoubted authority for asserting that Dr. Murchison has had nothing whatever to do with any review of his book that has appeared since its publication. What would be the effect on the library of the College of Surgeons if all the Medical, scientific, and philosophical works in it were, by some benevolent fairy, reduced to the dimensions of the original observations, facts, and reasonings of their respective authors? Eight-tenths would vanish at once, and the transformation of the remainder would be as startling as the Miltonic miracle—

> "They, but now who seem'd
> In bigness to surpass earth's giant sons,
> Now, less than smallest dwarfs, in narrow room
> Throng numberless."

THE ALLEGED NEGLECT OF DUTY BY A MEDICAL OFFICER AT LIVERPOOL.

An investigation before a Poor-law Commissioner has lately taken place at Liverpool, which furnishes another instance in support of the moral we have been lately inculcating. As Medical men we are literally the servants of the public, and if we value our good name and peace of mind we must unreservedly accept our position. Our services must always be rendered when required, at whatever sacrifice of ease, comfort, or even physical strength, unless absolute illness prevent, or we can procure a substitute. "Ready, aye ready," is the only motto, but it is a cognizance we may well be proud to bear. We know that our aid is often not appreciated; that it is very often unnecessarily sought, and repaid with the worst ingratitude; that no consideration is shown for the ease or convenience of the Doctor. Still, give it we must, and that promptly, if we would be true to ourselves, to our own reputation and interests, and to the honour of Medicine. The case which has again obliged us to touch on this subject is, doubtless, one of a kind of considerable hardship to the Poor-law Medical Officer. Late in the evening, after the long day's work is over, an order is put into his hands requesting him to see a pauper

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patient. He learns, on inquiry, that the person has been ill for days, and he naturally enough says, "I can't come to-night—I will call in the morning." He does call the next day, and finds that the patient has died in the interim without Medical attendance. Stripped of all the minor points of evidence, many of which are most contradictory, this is the history of the unfortunate business in which Dr. Lodge has become involved. In his case, there are many extenuating circumstances. The order he received was not marked "urgent" by the relieving officer, as it should have been, according to the regulations of the Poor-law Board. This functionary had also neglected to visit the man before signing the order for Medical relief. It is true that he alleged that there was an understanding between himself and Dr. Lodge, that orders should not be marked "urgent," except in special cases. This, however, was denied by Dr. Lodge, who proved that he had received an order so marked in the case of another patient but a short time before. The greatest mistake which, in our judgment, Dr. Lodge committed, was that of giving a certificate as to the cause of death, although he had never seen the patient during life. It is to be feared that this is too often done by some Practitioners; but we hold that it can never be justified. In another part of our columns is a notice of a remarkable case of death from puncture of the pericardium, in which the same error was committed. We know well that Physicians and Surgeons to Hospitals and Dispensaries are frequently compelled to give certificates of death to the friends of outpatients, under circumstances which are far from being entirely satisfactory to the certifiers; but in all such cases the Practitioner has seen and prescribed for the individual, and they are, therefore, in a different category. We assert, that under no circumstances can a certificate be given, with propriety, unless the patient has been attended during life, or a post-mortem examination has fully revealed the cause of death. In the latter case, the whole circumstances of the case should be set down in a certificate especially drawn up for the purpose. The ordinary form should not be used. A woman, a Mrs. Jardine, who carried the order to Dr. Lodge, asserted that she informed him as to the urgency and danger of the case. He, however, did not allow that this was the fact. In his evidence he said:—

"He remembered Mrs. Jardine bringing the order to his house for him to attend William Saxan. He received it about seven o'clock, and he did not remember her saying that it was an urgent or dangerous case. The order stated that Saxan was suffering from dysentery, and the woman said he had been suffering from it nine or ten weeks. She asked him to go and see Saxan that same night, but she did not say it was a dangerous case, nor did she ask for any medicine to soothe the man, or he should have given it. He heard the woman state in her evidence that she applied for medicine, and he did not cross-examine her upon that point, because he thought he could elicit nothing more than she had stated. The woman said she wanted to get the man into the workhouse that night, as her husband would not allow him to remain in the house; but when he found it was a case of chronic dysentery he declined to go that night, as the order was not marked 'urgent,' and the woman gave him no reason that it was a dangerous case. He thought she wished him to see the man, not because the case was urgent, but because she wished to get him into the house that night; that was his impression. He did not tell her that all persons requiring parish relief must have their notes signed by nine o'clock in the morning. She had said so, and he did not cross-examine her, because he had no witnesses to contradict her.—The Commissioner: Is it usual for a Medical man to give a certificate of the cause of death when he has not seen the deceased alive? Witness: It was not usual, but it was sometimes done when the Medical man was satisfied that death had resulted from natural causes. —The Commissioner: How do you reconcile this? You certify that you attended William Saxan, aged 64. Witness: I think I cannot defend the giving of the certificate in that form. Had I written it upon a plain piece of paper it would have been different, and I ought to have passed the pen through the words—'I hereby certify that I have attended.' I had never attended upon the man or prescribed for him in my life. The coroner's clerk (Mr. Blake) told me that I was fully justified in the course I had taken in giving this certificate, although I had never seen the man."

In the course of the investigation a large number of Dr. Lodge's pauper patients came forward to testify to his constant kindness and attention. The case remains for the decision of the Poor-law Board. We trust that they will carefully weigh the points urged by Dr. Lodge in his defence, viz., the imperfect character of the order he received, and the fact that he supposed the application had only been made to him in order that the man might be received into the poor-house the same night. These are certainly exculpatory points, which, if they do not entirely justify, at least place Dr. Lodge's refusal in a different light.

PROPOSED ESTABLISHMENT OF DEODORISING WORKS AT FULHAM—POLLUTION OF THE THAMES.

The District Board of Works of Fulham, and that inscrutable corporation known as the Metropolitan Board of Works, are at cross purposes, and the subject of their difference is one of no minor importance, for it involves a question of principle in which we are all concerned, both as Medical men, as sanitarians, and as dwellers in London. The Fulham Board very properly stands upon its rights, and, fortifying itself with the professional opinion of its accomplished Medical Officer of Health, Mr. Burge, refuses to be silent. We will endeavour to explain to our readers the ground of dispute. But for this purpose we must go back a few years—to the passing of the original Act for the better local management of the metropolis in 1855. By that Act the main sewers in the metropolis were vested in the Metropolitan Board, which was required to carry out such "works as they might think necessary for preventing all or any part of the sewage within the metropolis from flowing or passing into the river Thames, in or near the metropolis." They were also empowered to dispose of the refuse from the sewers as they might see fit, "but so as not to create a nuisance." Public protection against the adoption of any inefficient plan of interception was provided for, or attempted to be provided for, by the necessity they were laid under of obtaining the approval for their plan by her Majesty's Commissioners of Public Works. We pass over, as unnecessary to dwell upon here, the difficulties which this arrangement introduced into the settlement of a plan. Suffice it to say that a plan was at last agreed upon, and an amended Act was obtained to sanction an extension of the time within which the works were to be completed. This amended Act was passed in 1858, and it commences with these words: "Whereas it is necessary, with a view to the health of the metropolis, that works should be speedily undertaken and completed for the purification of the Thames, and for the improvement of the drainage of the metropolis," etc. It passes on to say that the Metropolitan Board shall cause all works to be executed under this Act, to be constructed and kept so as not to be a nuisance, and shall, in deodorising any sewage, and in disposing of any sewage or refuse from sewers, act in such a manner as not to create a nuisance; and the occurrence of any such dead lock in future as was threatened under the scheme which demanded the sanction of the Commissioners of Public Works, was got rid of with the necessity of obtaining any such sanction. In place of it, the Board were left to follow its own devices uncontrolled; and a power was given to the Secretary of State to direct a prosecution in the event of any nuisance being actually created. We have been thus full in referring to the Acts of Parliament in order that the state of affairs, which we are about to detail, may be fully understood. The Metropolitan Board, in dealing with the sewerage of the extreme west of London, propose carrying out a plan which the Fulham District Board believes cannot be carried out without infringing the very principle on which

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the whole main drainage scheme hinges, and without nullifying the very objects for which it was projected, namely, the purification of the Thames and the amendment of public health. True, the Fulham Board need not protest; they may wait, and perhaps, like good subjects, ought to wait, until they and their constituents are arrived at that bourne whence they will not care to urge the Secretary of State to institute a prosecution. But as they prefer, very naturally, to complain while above ground, instead of giving directions to their statuary to inscribe upon their tombstones—"Poisoned by order of the Metropolitan Board of Works," they have compromised their loyalty by two memorials to the Board, in which they humbly plead that they would rather live a little longer.

The plan of the Metropolitan Board of Works is this—to construct works for the deodorising of the sewage of the western district at Sand's End, Fulham, close to the Cremorne Gardens, the amount to be daily operated on being estimated at 9,500,000 gallons, and then to cast the deodorised sewage immediately into the Thames. The tank for the reception of this amount of sewage will occupy two acres in extent, with a depth of eleven feet. The material to be used is the perchloride of iron. Whether the clear liquid only is to be thrown into the Thames, or the whole sewage, solid and liquid together, does not, from the report of Mr. Bazalgette, the engineer of the Board, appear quite evident. The latter, however, seems to be what is really intended. To either arrangement, however, the Fulham Board and their Medical Officer of Health take exception, and the grounds on which they do so are stated at length, both in the memorial of the Board and in the excellent report upon the subject drawn up by Mr. Burge. Even on the financial part of the question, the Fulham Board joins issue with the Metropolitan Board; but, with a rare appreciation of their responsibility as guardians of the public health, they regard this "as being not even of secondary importance in the matter, when they consider, that the great object of the Legislature, in the constitution of the Metropolitan Board of Works, was the purification of the river Thames from those evils occasioned by the sewage of the vast metropolitan area flowing into it; and, being convinced that such evils can be perfectly prevented, they say again, that the western district should not be made an exception in the scheme of interception." Their first memorial was forwarded in August; their second, on December 3; and it is to the latter that the lucid statement of Mr. Burge is appended, which will now occupy our consideration. First, Mr. Burge applies himself to the question of deodorising at Fulham, upon the notion that the whole deodorised material will be thrown bodily into the Thames. Here he objects, that not only is the perchloride of iron an inefficient agent in preventing putrefaction, but that a further result of its use would be the contamination of the river with arsenic. Drs. Odling, Letheby, Hofmann, and Frankland all agree in this, that the perchloride of iron has, in respect of deodorising, a very limited operation; that it is able, for the space of a few days, to retard or delay the putrefaction of sewage, which, in warm weather especially, soon proceeds as actively as if no perchloride had been used; that it is probable that the water of the Thames would be blackened by the use of this material; and that the bulky precipitate would, from its high specific gravity, soon subside upon the banks of the river, where its disgusting appearance would be certain to excite alarm, and where putrefactive changes, which it must undergo, would assuredly render it no less offensive than the present mud. And, as respects the arsenical contamination, Mr. Burge quotes from a report of Dr. Letheby, in which he shows that Dale's perchloride contains no less than 296 grains of chloride of arsenic in the gallon of solution. Even on Dr. Hofmann's showing, it contains 126 grains. The latter chemist asserts, that the arsenic will find its antidote in the peroxide of iron formed in the decomposition of the perchloride; but Mr. Burge argues, that, "even if thus precipitated, it assuredly would, by contact with chlorides and other chemical agents in solution in the water, become again converted into a soluble state, and carry poison in its course." Even allowing to the full the antidotal power of the peroxide of iron (which, on the authority of Orfila, he disputes), Dr. Letheby, taking a medico-legal view of the matter, objects to this addition, as throwing a probable obstacle in the way of modern criminal jurisprudence. He writes:—

"Over and over again, the presence of this poison, not in the proportion of 1 part in 3000 (which would be the proportion it would hold in the sediment from sewage), but of less than 1 part in 140,000 of the soil of a graveyard, has embarrassed the labours of the chemist, and obstructed the progress of justice. Many a criminal, accused of having murdered with arsenic, has found a successful defence in the fact, that the soil in which the dead body has laid may have been charged with arsenic, and may have furnished the poison found in the corpse. Who, therefore, would rashly complicate such an inquiry by adding arsenic to the soil in which a poisoned body may be found? Or why, as in the present instance, should you resort to a disinfectant which is not only useless and expensive in its application, but so dangerous in its results; for where, let me ask, would be the chance of a conviction if, after the saturation of the soil of the Thames with arsenic, a cunning poisoner were to get his victim stranded upon the shore of the river?"

But what if the deposit be not thrown into the river, but only the clear, deodorised liquid? To this, also, Mr. Burge objects. Of course, this plan would involve a process of filtration which necessarily would occupy more or less time, and this process, Drs. Hofmann and Frankland agree, is involved in considerable difficulty: "The putrefactive tendency of the deposit separated by filtration or subsidence, renders its rapid removal from the reservoirs or filters a matter of the utmost importance, especially during summer, for the process of putrefaction, when once commenced, can be arrested only by quantities of disinfectants practically impossible." They add: "The actual process of deodorisation will probably present less difficulty than the mechanical separation of the deposit by filtration or subsidence. This separation will involve the temporary storage of immense quantities of sewage, the rapid removal of large quantities of deposit, and a number of operations which can be successfully carried out only with considerable system and under strict inspection. Operations of this kind should be, as far as possible, conducted at a distance from densely-populated districts." So much for the deposit which is to be dealt with; but what harm can arise from the deodorised clear liquid? Listen to Dr. Letheby:—

"When chloride of iron is added to sewage, the utmost effect of it will be but to fix a small portion, about one-third, of the ammonia contained in sewage, and to precipitate the sulphuretted hydrogen as a black and filthy-looking compound. This precipitate will be rapidly cast down, and will carry with it the suspended matters of the sewage, leaving a clear liquor, *in which the organic miasms are untouched;* and here it is that chemistry, when unassisted by pathology, physiology, and hygiene, is liable to the most serious errors, and may give rise to a dangerous confidence in her abstract speculations. Doubtless, the removal of a filthy odour like that of sulphuretted hydrogen may, in some degree, be an advantage; but there is not the remotest proof that these are the only or even the principal agents which excite disease, and there is no scientific reason whatever for believing that their removal is sufficient to interfere with the origin and spread of epidemic disease."

We have preferred using the very words of these eminent chemists, behind whose authority Mr. Burge entrenches himself, because we could not state the argument more concisely in our own language.

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On Tuesday evening, the Metropolitan Association of Medical Officers of Health met to hear a paper from Mr. Burge, and to receive a report from a committee which had undertaken the consideration of the subject. This report bore the signature of Dr. R. D. Thomson, one of the most eminent chemists in London. After pointing out that the proposed plan was mainly adopted upon economical grounds, it stated that "the use of perchloride of iron as a disinfectant was originally recommended by Mr. Ellerman in 1847, and reported on by a committee of the vestry of Marylebone, in December of that year, as being somewhat superior to chloride of lime, chloride of zinc, and nitrate of lead, in destroying the odour of night soil and other similar substances. But the committee," so the report goes on, "are not aware that there is a single ascertained fact to warrant the conclusion, that the perchloride of iron absolutely removes any deleterious ingredient from sewage, or that sewage thus merely mingled with solution of perchloride of iron, and discharged into the saline water of the Thames in summer, does not undergo the usual putrefactive decomposition to which the river has been subjected in a greater or less degree for several years. Such deodorisers appear only to act on sewage in its concentrated form. The truth of this position was demonstrated some years ago, when an attempt to deodorise the contents of the main trunk sewers by means of lime ended in failure, because, as soon as the sewage was diluted with the impure river water, the influence of the deodoriser terminated, and a putrefactive action was set up in the body of the stream, which was as energetic as if no disinfecting agent had been employed. The committee are, therefore, under the necessity of coming to the conclusion, that the simple mixture of the perchloride of iron with the sewage will only operate during the brief detention of the sewage in the reservoir, and that its use will be found expensive and fruitless, so far as the removal of the smell from the river is concerned." This report received a full discussion, in which several of the most distinguished of the Health Officers present took part. Mr. Burge asserted, as the result of his own experiments, that the clear liquid of sewage, after addition of the perchloride, ran into putrescence at a temperature of 65° or 70° in the course of a few days. Mr. Liddle, Dr. Aldis, and Mr. Chadwick, quoting from the several reports of Mr. Bazalgette in 1856, 1861, and recently, dwelt much upon the breach of faith which they exhibit in the matter of interception, since, from the first of these reports to the Metropolitan Board, Mr. Bazalgette appeared to drop the deodorising scheme for the western division in consideration of "objections which had been raised to the establishment of deodorising works in the locality mentioned;" and no hint has subsequently been given that he and the Metropolitan Board of Works in any way contemplated returning to this idea. The result of the meeting was the passing of the following resolution:—

"That the attention of the Association having been called to the plan proposed for the deodorisation of the sewage of the western district of the metropolis, and its subsequent discharge into the Thames, the Association wish to record their opinion that it will be ineffectual in its operation, pernicious in its influence on the river, and entirely subversive of the principles on which the intercepting scheme was originally based."

They passed further resolutions, to the effect that this expression of opinion should be forwarded to all the vestries and district boards of the metropolis, and that a deputation from the Association should wait upon the Metropolitan Board of Works, in the hope that they may be induced to reconsider their determination. Mr. Burge, the Fulham District Board, and the Health Officers of London, have thus done their duty manfully. It remains to be seen what effect these protests will have upon the central authority, which has the power to do a large benefit to the metropolis, or an incalculable damage.

REVIEWS.

Statistical, Sanitary, and Medical Reports for 1860: *Army Medical Department.* ("Ophthalmic Surgery." By Assistant-Surgeon Dr. P. Frank.)

Ophthalmia. By Assistant-Surgeon Dr. Marston, Royal Artillery. (Reprints of Contributions from "Beale's Archives of Medicine.")

We have, from time to time, kept our readers *au courant* with the latest observations of continental writers upon Ophthalmia, in its epidemic or endemic forms. It is not a little remarkable that English authors should have hitherto maintained a perfect silence with regard to the very important pathological changes and appearances in the palpebral conjunctiva, which the eyelids of soldiers and others, living gregariously, so frequently exhibit. To the Danish, Belgian, and German observers, we have been indebted for all we know upon the subject.

Perhaps no disease is of more importance than Ophthalmia; whether we have regard to the organ attacked, the frequency of its occurrence, the rapidity with which the disease often attains a widely-spread sphere of prevalence in regiments, schools, etc., its contagious properties, and the enormous cost which ophthalmia annually entails upon our Government. In the two works at the head of this article, we have such a large mass of information and observation, that English observers can no longer be said to be left behind in the progress of this part of our science; nor can the facts described be any longer ignored, as if they either did not exist, or had failed to be regarded.

For the present, we refrain from entering any further into the materials of this Medical blue book than into the part bearing upon this subject.

In Dr. Frank's most able Report upon "Ophthalmic Surgery," we have a very full and highly interesting account of all the cases of ocular disease admitted into the Surgical Division of Fort Pitt. The paper is too long for analysis here, but we would particularly direct attention to those cases illustrated by capital views of the ophthalmoscopic appearances, and to his observations upon internal lesions of the eye. To say that this Report could only have been written by an exceedingly well read and accomplished Surgeon in this branch of his art, is a small meed of praise; for it contains the result of so much personal experience and original observation, that the best informed will find matters for suggestion and thought, as well as matters of a practical interest in it (a).

Dr. Marston's pamphlet is a reprint of papers originally published in Beale's "Archives"; and it must prove a source of much pleasure to him to find his observations upon conjunctival disease so fully corroborated by Dr. Frank's Report.

We shall confine ourselves, for the present, to the subject of that ophthalmia, or conjunctival disease, of which both writers treat.

The specific feature of this affection—and one which contradistinguishes it from ordinary conjunctivitis—is the presence of small deposits in that membrane, as the sole characteristic of its primary stage. Dr. Frank says:—

"The first signs of abnormal nutrition consist in the appearance of small, round, opalescent, sago-grain-like bodies, either isolated, or disposed in clusters or rows, more or less densely crowded over the conjunctival surface, and generally making their first appearance on the lower lid. These so-called vesicular granulations may form and exist for an indefinite period, without the occurrence of any inflammatory symptoms calculated to direct attention to the affected lids."

The histological origin and exact seat of these bodies have been strongly-contested points, as Dr. Frank's references sufficiently indicate. Our limits will not allow us to follow our authors into these; suffice it to say, that the original statement by Van Roosbroeck and Bendz, relative to the presence of closed, solitary follicles in the palpebral conjunctiva, must be conceded as correct. Dr. Marston says:—

"It is in the highest degree probable that the vesicular

(a) The great merits of this Report remind us that the Army Medical Department can no longer number its writer among its members. The retirement of a man like Assistant-Surgeon Dr. Frank can only be regarded as a great loss to the service. The influence exerted by the presence of an enthusiastic, able, and ingenious man in the junior ranks, upon his fellows, is always great and useful. We should be glad indeed—for the sake of the soldier and the credit of the authorities—to see such men animated by a stronger attachment to the public service, instead of, as now, so frequently quitting its ranks.

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looking bodies, sparsely shed in the palpebral conjunctiva, are these follicular organs altered by disease. When, however, the disease has continued for any time, or advanced to any extent, it will be found that these bodies exist in such disproportionately large numbers, and often in such superimposed strata, as it were, as to lead to the conclusion that they cannot *all* have had their origin in pre-existing follicles. The appearance of follicles is exactly mimicked by the morbid products in the connective tissue; and in diseased lids it is extremely difficult to determine the one from the other."

He adds, therefore, that these bodies may also have their origin in the delicate sub-epithelial stroma; and that, then, there will be a little nest of cell-growth bounded by fibrillated-looking tissue, in the meshes or interstices of which the new products are seated. So defined, these bodies exactly assimilate to follicles filled with granular and cell contents, nearly identical in appearance and constitution with that vesicular-looking condition which the mucous follicles of the colon assume in incipient dysenteric disease.

Dr. Frank has some very interesting remarks upon the same subject which are very nearly allied to those quoted. What our authors strive to prove—and, to our minds, have succeeded in proving—amounts to this:—These little bodies are among the commonest appearances of diseased conjunctiva in bodies of human beings living as in regiments; and they are very powerful predisposing causes to ophthalmia in general, particularly to that form which results in the "granular" lid, although their presence, *per se*, may give rise to scarcely any symptoms, and their detection may require careful scrutiny of the eyelids. Thus we read:—

"In order to study the typical character of vesicular granulations, they must be sought for in the conjunctivæ of apparently healthy eyes; and this has led to their existence being overlooked and denied by many who are not in the habit of examining the conjunctiva prior to the invasion of inflammatory symptoms. Innocent as these primary lesions may appear, they gain in importance by the predisposition they engender to inflammatory attacks, and by the contagious nature of the secretion, which, under such circumstances, is furnished by the affected conjunctiva."

Dr. Marston says:—

"The vesicular bodies appear as the primary lesion, and are the very first products generated by the morbific agency. That these are not the sequelæ of an inflammatory process, but rather the powerful predisposing causes to, and modifying agents of, any inflammatory phenomena that may ensue, appears certain."

In his paper, he attempts to trace the relation of these bodies to the prevalence of ophthalmia, in an epidemic or endemic form, among the military at Malta and Gibraltar, and at the conviet establishment at the latter station. Those scourges of the army—"purulent ophthalmia" and "granular lids"—must, in future, always be viewed with reference to the existence or not of a pre-existing stage of vesicular granulation.

The reason these bodies are not found is, that they are not looked for until inflammatory changes have ensued, by which their presence is masked. Dr. Frank says, in a note:—

"The influence of a hyperæmic condition in masking vesicular granulations can be easily appreciated by their disappearing, as it were, before the very eyes of the observer, when a lid has been kept everted for a short time, and reappearing again when the congestion has been allowed to subside."

Both writers enter into the causes of this singular affection—Dr. Marston, by recording the actual results of his own experience and observation; Dr. Frank, by epitomising the views of the latest and best writers upon the subject. They may be referred to two heads:—1. Contagion. 2. An unhygienic mode of life, by which miasmata are generated. The last appears highly probable as a cause of such generation, irrespective of the former, from the observations made, not only upon man, but the lower animals. Of the first, as a cause, there is so little doubt, that many writers consider this as the only means by which the specific agent, or virus, is propagated. Dr. Marston writes:—

"So certain do I feel that the prevalence of vesicular disease of the lids is in direct ratio to the amount and degree of defective sanitary arrangements, that I conceive the palpebral conjunctiva offers a delicate test and evidence as to the hygienic condition of a regiment."

Much has been lately said as to the propagation of ophthalmia through the agency of pus cells, floating in the atmosphere of ophthalmic wards. The statement was originally made by Eiselt, and his observations have been corroborated by some recent experiments at Lariboisière Hospital. Professor Parkes, in his interesting "Review of the Progress of Hygiene during the Year 1861," in the present blue book, remarks, that Dr. Frank (by means of an aëroscope, used in the wards of Fort Pitt), had detected, in several instances, unequivocal epithelium cells. Dr. Marston, by means of the same instrument, does not appear to have satisfied himself of the presence of pus globules, in a current of air driven over a vessel containing moist pus, although he could easily determine their presence in air passing over desiccated pieces of lint which had been previously steeped in fluid pus.

The subject should be carefully followed up by investigations in places where cases of purulent ophthalmia are located.

Dr. Frank points out how this apparently trifling and incipient stage may lead to atrophy of the tissues, incurvation of the lids, and disordered vision. If these statements bear even an approach to accuracy, how important are they! To state the presence of "sago-grain-granule" in the eyelids of men of a regiment, for instance, is tantamount to saying that ocular disease, or a predisposition to the gravest kind of ophthalmia, is endemic in that regiment. Difficult as these cases are of treatment in their advanced stages, they are easily treated during the earlier. What is far more important, however, is the knowledge that we possess a power over the spread of the disease to healthy individuals.

Dr. Marston's very able paper contains tables, by which the proportion of vesicular to healthy lids, and the proportion of each of these to the more advanced stages of the disease, can be traced. It has many illustrations also, one of which is colored; and, in an appendix, he describes the form and epidemic progress of the ophthalmia lately affecting the children of the Central London District Schools. In this he embodies also important observations from Mr. Bowman's reports to the Board of Guardians of the school in question.

We cannot do better than conclude, first, by strongly recommending those of our readers likely to be interested in these subjects to read these articles; and secondly, by quoting from Dr. Frank's paper:

"The interest of the affected individuals, and of the community to which they belong, demands most careful attention to these primary conjunctival changes; and it may be presumed that, in regiments to which ophthalmia clings, an explanation of its endemicity may be found in the presence of men affected with this insidious lesion.

"We might regard the presence of foci of this, as well as of all other infectious agencies, with indifference, if we could place implicit reliance on the infallibility of our sanitary arrangements, and their strict and universal observance. In the meantime, measures of isolation should not be despised, and a careful treatment of the disease in its embryotic stage should be thought worthy of attention by military Surgeons as a prophylactic measure of signal importance.

"A due appreciation of the fact, that the conjunctival deposits can exist for an indefinite period without giving rise to any inflammatory symptoms, is, therefore, not only necessary for the efficient prevention and treatment of the disease, but also to enable justice to be done to the claims of the soldier who is disabled by the results of ophthalmia.

"In the abstract of a private, invalided from the 41st Regiment, it was stated that the disease was contracted in St. Lucia, where ophthalmia was *not prevalent* at the time; the disease was, however, prevalent at head-quarters of the regiment; and not only were the anatomical changes in the conjunctiva the same as are only observed in genuine miasmatic ophthalmia in this and other cases from the 41st Regiment, but the most exquisite vesicular granulations were discovered in the conjunctiva of two other men with eyes apparently healthy, invalided for other causes from the same corps. It was, therefore, justifiable to assume, that the first patient had contracted vesicular granulations before his company was detached from head-quarters, but that the infected lids had remained quiescent till an exciting cause of sufficient intensity to bring on an acute inflammatory attack had acted upon them."

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FOREIGN CORRESPONDENCE.

AUSTRIA.

CARLSBAD, December 9.

THE CONGRESS OF GERMAN NATURALISTS AND PHYSICIANS.

SEVERAL important communications were made to the section for Surgery and Ophthalmology of the above Congress, which have not been mentioned in my previous letters. Professor Von Hübbenet, of St. Petersburg, spoke on "Pyæmia," as observed after amputation and disarticulation. His experience in the Hospitals of Sebastopol was decidedly in favour of the latter operation. During the siege of that fortress, he had performed altogether 3345 major operations (amputations, resections, and disarticulations), but had, from want of time and other circumstances, been unable to observe more than 636 cases in their entire course. Amongst these there were 338 operations on the right, and 298 operations on the left side: of the former, 63 were successful; of the latter, 74; that is, altogether, 137 (21 per cent.) The most unfavourable cases were those of amputation of the thigh, as out of 264 only 24 (9 per cent.) recovered. The unfavourable results observed in Sebastopol were chiefly due to the crowded state of the Hospitals, and the destructive action of the modern projectiles, but not to any want of proper care, which was, on the contrary, more anxious than it had ever been in times of peace. Another circumstance which had to be taken into consideration, was the low and depressed spirit of the vanquished army, which was especially perceptible in those who had not taken part in the pitched battles, but had always been in the fortress. No importance, however, was to be ascribed to the less considerable force of vitality in the Sclavish nations, upon which Dr. Paul had laid so much stress; for of 33 operations performed upon French prisoners, only three proved successful. In the majority of cases, the amputations were done early and without scrupulous regard to the indications laid down in treatises on Surgery; the excuse for this being, that hygiene and the consideration for other patients required bad contused wounds to be changed into clean incised wounds. Simple dry dressing was used throughout, and the diet and medicines prescribed were made to suit the requirements of each individual case. In the discussion which followed, Dr. Paul mentioned that, in 12,000 cases of amputation and disarticulation he had collected, the rate of mortality was 1 in 4 of the former, and 1 in 5 cases of the latter operation.

Dr. Von Troltsch, of Würzburg, spoke on the "Diagnosis of the Diseases of the Ear," and condemned, in rather severe terms, the way in which this was generally made. He entered fully into the objective and subjective means of examination, and said that the former, such as speculum, funnel, catheter, rhinoscopic mirror, etc., might serve to lead us to conclusions concerning morbid conditions of the external meatus, the membrana tympani, and the Eustachian tube, but did not help us to distinguish diseases of the cavity of the tympanum and the labyrinth. These latter could only be recognised by subjective signs. The majority of cases of deafness were due to morbid processes about the two fenestræ. Diseases of the labyrinth were rare, and could only be diagnosed after excluding all others. The cavity of the tympanum was chiefly affected by catarrh. There were many peculiar symptoms observed in persons suffering from deafness: some were able to hear the ticking of a watch at a certain distance, but did not hear spoken words; others heard, with one ear, only sounds, and with the other, words; others heard only certain notes of the scale, etc.; but, contrary to the opinion of other aurists, Dr. Von Troltsch contended, that at present we knew nothing certain with regard to the signifance of these peculiar symptoms, nor did we know by what morbid changes they were produced. Dr. Voltolini, of Breslau, quite agreed with the speaker in this particular, but contended, that diseases of the labyrinth were more frequent than Dr. Von Troltsch was inclined to assume; it was such diseases, and also morbid processes in the acoustic nerve itself, which caused absolute deafness.

Dr. Wuth, of Hanover, exhibited a hypertrophied lachrymal gland which he had removed from a patient who, after the operation, merely complained of impaired motion of the eyelid, dryness of the conjunctiva, and a sensation of burning in the eye. Professor Arlt, of Vienna, said that he had never observed a case of hypertrophy of the lachrymal gland; this organ could, from its seat and surroundings, only be hypertrophied in a backward direction, and would necessarily cause exophthalmos; it was impossible to excise it without removing, at the same time, a portion of the conjunctiva; and he was inclined to consider the specimen exhibited to be a tumour. Dr. Niemetschek, of Prague, however, remarked, that he had seen a specimen of hypertrophied lachrymal gland in the collection of Professor Adelmann, and which had been microscopically examined by Virchow, who had found that it was true hypertrophy. Professor Patruban then spoke on "Neurectomy for Tic Douloureux;" and Dr. Van der Loe, of Venlo, described a modification of the plaster of Paris splint, which had the advantage that, after the gypsum had become quite hard, it could be easily removed and again put on. Dr. Förster, of Breslau, then read a paper on the "Limits of the Field of Vision," and described a series of experiments he had undertaken on this intricate subject. Professor Von Hübbenet spoke on "Hemeralopia," and said that he had observed annual epidemics of this affection in Russia, during Passion time, and which disappeared spontaneously after that period. There was, in these cases, peripheral limitation of the field of vision, dryness of the conjunctiva and cornea, and fatty degeneration of the epithelial cells. Dr. Förster said that hemeralopia was rare in Silesia, but that he had seen a few epidemics of it. Professor Arlt contended that there were two different forms of this affection: one of them was related to retinitis pigmentosa, was, probably, a hereditary disease, and always accompanied by limitation of the field; the other form was much the same as snow-blindness, which was observed in the Alps, was caused by dazzling, and was, in recent cases, curable by shutting the patients up in a dark room. In this form there was only hyperæmia of the retina, but no other pathological alteration, and no limitation of the field. After Dr. Niemetschek, of Prague, had made some remarks on a "Case of Villous Tumour of the Cornea and Conjunctiva," Dr. Ellinger, of Mergentheim, spoke on the "Treatment of Erectile Tumours by Liquor Ferri Chlorati," which was attended with favourable results. Dr. Strobel declared himself averse to this operation; while Drs. Eulenburg and Paul asserted that it was well worthy of a trial. The statement, that the blood coagulated after the injection, that the tumour became harder and smaller, and could, therefore, more easily be excised, was, no doubt, correct; but the solution used by Dr. Ellinger (viz., one drop of liquor ferri to thirty drops of water) was too weak.

In the section for Gynæcology, Dr. Freund, of Breslau, spoke on "Retroflexio Uteri," and its consequences, such as chronic infarctus, diseases of the bladder, indigestion, etc. In this affection the connective tissue was considerably altered at those points where the flexion had taken place; there were adhesions between the fundus and the rectum, owing to peritonitis, and which were frequently incurable. The posterior wall of the flexed womb was filled with masses of connective tissue, the seat and extent of which determined the ease or difficulty of reposition. Hydronephrosis was a frequent concomitant affection, and was caused, either by real stenosis of one or both ureters, or by flexion, owing to dislocation of the womb. After pertonitis the ureter frequently adhered to the lateral wall of the uterus; and this explained the symptoms of hydronephrosis during life, viz., violent lumbar pains, shooting downwards along the ureters, neuralgia in the lower extremities, headache, difficulties of the bladder, and dyspepsia, all of which were formerly incorrectly attributed to hysteria. The condition of the urine resembled that observed in catarrh of the bladder. Pyelitis might often be the consequence. Regarding the treatment, Dr. Freund recommended reposition by mechanical means, more especially by Valleix's sound and medicated enemata.

Professor Hecker, of Munich, spoke on "Congenital Rickets," a subject which he had, together with Professor Buhl, closely studied. He also exhibited some extraordinary specimens of this disease. Dr. Hegar, of Darmstadt, then read a paper on "Abortion in the First Few Months of Pregnancy." This was a very frequent occurrence, as for eight or nine regular births there was one abortion.

In the section for Zoology and Comparative Anatomy, Dr. Von Frauenfeld, of Vienna, gave an account of the scientific collections made by the naturalists of the Austrian ship *Novara*, during her voyage round the world. A *catalogus raisonné* of these collections, which will soon be exhibited in

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the Viennese Museum, is just being written by the most eminent zoologists of the Austrian capital. The largest number of new species brought by the *Novara* is of the class of insects. The spiders seem to have been particularly well preserved: the following was the method pursued:—They were first placed in weak spirit, and afterwards in strong alcohol; they were then put in small bottles, each one being separated from its neighbour by a piece of cotton-wool. Fishes were wrapped in cotton-wool, and packed up in boxes of sheet-iron; when such a box was full, it was soldered up, so that only a small opening remained; the box was then filled with alcohol, and the last opening also closed. Professor Stein, of Prague, then described several new species of Infusoria he had discovered in the Baltic, during a sojourn at Vismar; and afterwards spoke on the "Paramæcium Coli," an infusorium which had been discovered by M. Malmsten, of Stockholm, in the lower bowel of two men who had fallen ill with choleraic symptoms. Leuckart had already found that this "paramæcium coli" was no paramæcium at all, but was identical with an infusorium very frequently met with in the rectum of the pig, and which he described as a species of Holophrya. Professor Stein has, however, by close observation, been led to the conclusion, that, from the peculiar position of the cilia, the animal appears to be a species of Balantidium. Up to the present time, only one species of this animal was known, viz., the Balantidium entozoon, which is often found in the rectum of the frog: Professor Stein, however, has discovered two new species of it, one of which (*B. elongatum*) lives in the rectum of the *Salamander aquaticus*, and the other (*B. duodeni*) in the upper part of the small intestines of *Rana esculenta*. Several other communications on newly-discovered animals were made; but as they were only of interest to zoologists, and of no importance to Medicine, I shall not enter into the subject of these papers. The papers read in the section for Physics, Mathematics, and Astronomy were likewise of no general or Medical interest.

In the section for Chemistry and Pharmacy, Professor Böttger, of Frankfort, described the metal "Thallium" which had been discovered by Mr. Crookes, and was distinguished by a peculiar spectral line. It was chiefly met with in the refuse of sulphuric acid manufactories. He showed the thallium line in the spectral apparatus; and Dr. Scheibler, of Prague, showed the lithium lines by burning tobacco leaves. Dr. Jeiseler, of Königsberg, made a linguistic communication on the "Spelling of Sulphur," which, according to him, should be "sulfur," as that was the spelling of the Sanskrit root. Professor Böttger then spoke on the "Most Powerful Means of Oxidation," which, according to him, consists of a mixture of two parts of permanganate of potash and three parts of sulphuric acid. Dr. Ilisch, of St. Petersburg, attacked Liebig's theory of fermentation, and contended that fermentation was impossible without sporules, that albuminous bodies in a state of incipient decomposition were likewise necessary for it, and that compounds of ammonia promoted fermentation. Dr. Scheibler described the effects produced by light upon solutions of sugar, and declared Gerhard's parathionic acid to be a myth. M. Patera showed some compounds of the new spectral metals "Cæsium and Rubidium," which had been obtained from the Carlsbad sprudel. Professor Strecker spoke on the "Effects of Hydrogen in the Nascent State upon Nitro-benzoic Acid," and described two new bases which were homologous to creatine and creatinine, viz., glycocyamine, obtained by combination of cyanamide and glycocholl, and glyco-cyanamidine, obtained by heating glycocyamine with hydrochloric acid to 300°.

DR. A. DAVIDSON, the Medical missionary sent out by the London Missionary Society, writes from Madagascar thus:—"I reached the capital (Antananarivo) after twelve days' jolting in a palanquin. I opened a dispensary the first week I arrived. My patients at present are at the rate of 5000 or 6000 per annum." After describing some of his surgical operations, of which there are many, he says:—"I have a part of my dispensary set apart for such cases, that they may continue beside me during treatment. The dispensary has been presented by the Prime Minister, who had gout, but is now better. He has suffered nine years, sometimes a month ill at a time. I have been chosen Court Physician, and have received from the King the medal of the Order of Radama for my successful treatment of his son."

GENERAL CORRESPONDENCE.

DR. TWEEDIE'S LECTURES ON FEVER.

LETTER FROM DR. MURCHISON.

[To the Editor of the Medical Times and Gazette.]

SIR,—I trust to your justice, to allow me to reply to a paragraph in the last Number of your journal. You have either been greatly misled, or your information has been derived from one entirely ignorant of the facts. The materials, to which you allude, were not analysed by me for the purpose of illustrating Dr. Tweedie's lectures, but were prepared expressly for the paper published by me in the *Med. Chir. Transactions* (vol. xli.) I had the permission of the Fever Hospital Committee, and the sanction of *both* the Physicians, Dr. Southwood Smith and Dr. Tweedie, for making this use of them. My investigations were commenced long before I knew that Dr. Tweedie was going to give any lectures on "Fever"; the paper was presented to the Society on March 30, 1858; and it was finished and submitted to the perusal of Professional friends several weeks before Dr. Tweedie gave his first lecture on March 12, 1858, as I can prove by the testimony of a distinguished Fellow of the College of Physicians who attended Dr. Tweedie's lectures. It is not the case that my investigations were made under Dr. Tweedie's directions, or that he suggested any plan whatever for conducting them. The fact is, that a portion of the tables drawn up by me with great labour, together with a few brief memoranda explaining their object, were lent by me to Dr. Tweedie, for the illustration of his lectures, *but it was on the distinct understanding that they had been prepared for my memoir above referred to.* A comparison of our respective works is sufficient to show that I was not a mere mechanical drudge in the hands of Dr. Tweedie.

You err, however, in thinking that Dr. Tweedie has been accused of appropriating, without acknowledgment, the statistics of the Fever Hospital tabulated by me; for, in truth, at page 198 of his Lectures, he acknowledges that he is indebted for the tables in question to my paper in the *Med. Chir. Transactions.* He observes:—"I am bound to acknowledge that for the statistical facts I am indebted *to the recently-published paper* of my colleague, Dr. Murchison, who, availing himself of the ample opportunities the Fever Hospital afforded, has produced a most valuable monograph on the mortality of the different forms of fever, and on the causes which apparently influence their prevalence.—*Med. Chir. Transactions*, vol. xli." (Dr. Tweedie's Lectures, p. 198).

The complaint is, that Dr. Tweedie has appropriated the conclusions to which I was led by my researches, and, in fact, the *ipsissima verba* of my published essays, in such a manner that, if I had not noticed the circumstance, I would have rendered myself liable to the imputation, that, in my recently-published work, I had borrowed some of my remarks from his lectures, without acknowledgment. Several of the passages in question had no reference to the statistics of the Fever Hospital. The paragraph in my Preface, objected to by Dr. Tweedie, was referred *by him* nearly four weeks ago to a distinguished Fellow of the College of Physicians, who, after the closest inquiry, and hearing all that both parties had to say, informed Dr. Tweedie, by letter, that he considered my remarks justified, and that silence on my part would have laid me open to serious misconstruction.

That my remarks were called for you must admit, on perusing the paragraphs here appended in parallel columns. They illustrate the use which has been made of my writings; they prove that Dr. Tweedie has been credited with having written a paragraph contained in my previously-published essay; and they show that the very way in which he has introduced my name is calculated to disconnect me from the authorship of the passage. Moreover, the numerical results here given, extending over forty years, and having no reference to the London Fever Hospital, were worked out by me specifically for the memoir referred to.

I shall not trouble you with further details, which will be found in a letter addressed by me to the *British Medical Journal.*

I am, &c.

CHARLES MURCHISON.

79, Wimpole-street, W., December 27.

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DR. MURCHISON.
(*Medical and Chirurgical Transactions*, vol. xli., 290; communicated March 30, 1858.)

"To all of these results the Irish Hospitals present a marked antithesis. Out of 150,939 cases of fever admitted into the Dublin Fever Hospital since the year 1817, only 10,632, or less than 1 in 14, have died; and during the last eighteen years it will be seen from the table that the mortality has only been 1 in 13⅞. Again, in the Cork Fever Hospital, the mortality has been even much less. Since the year 1817, out of 82,293 patients only 3222, or 1 in 25¼, have died; and during the eighteen years contained in the table the mortality has only been 4¼ per cent., or 1 in 23¾. Moreover, the rate of mortality has varied much less in different years than it does in England and Scotland. Thus, in Dublin, in no year during the last forty has it reached 10 per cent.; and in the Cork Hospital in only one year of the last forty has it slightly exceeded 6 per cent. In the year 1858, Dr. Cowan, of Glasgow, drew attention to the striking discrepancy in the mortality from fever between the British and Irish Hospitals; and I find, on referring to Barker and Cheyne's Report of the Irish Epidemic of 1817-19, that out of 100,737 patients in the Hospitals of all Ireland, 4349 died, making a mortality of 4·3 per cent., or of only 1 in 23¼. No doubt the circumstance, to which I have just called attention, is partly accounted for by the greater facilities afforded to mild cases for entering the Hospitals in Ireland; but whether this be the case or not, it plainly shows that there is a form of fever constantly present in Ireland, which is much milder, and the mortality from which is much less, than is the case with the fever we more generally meet with in this country."

DR. TWEEDIE.
(*Lancet*, May 19, 1860, p. 486; and "Lectures on Fevers," 1862, p. 202.)

"To these results the Irish Hospitals present a marked antithesis. Out of 150,939 cases of fever admitted into the Dublin Fever Hospital since the year 1817, only 10,632, or less than 1 in 14, died; and during the last eighteen years the mortality has been only 1 in 13⅞. Again, in the Cork Fever Hospital the mortality has been much less. Since the year 1817, out of 82,293 patients only 3222, or 1 in 25¼, have died; and during the eighteen years contained in the table the mortality has only been 4¼ per cent., or 1 in 23¾. Moreover, the rate of mortality has varied much less in different years than in England and Scotland. Thus, in Dublin, in no year during the last forty has it reached 10 per cent.; and in the Cork Hospital, in only one year of the last forty has it slightly exceeded 6 per cent. In Barker and Cheyne's Report of the Irish Epidemic, 1817-19, it is stated that out of 100,737 patients in the Hospitals of all Ireland, 4349 died, making the mortality 4·3 per cent., or only 1 in 23¼. No doubt, as Dr. Murchison says, this small mortality is partly accounted for by the greater facilities afforded to mild cases for entering the Hospitals in Ireland; but whether this be the case or not, it plainly shows that there is a form of fever constantly prevailing in Ireland which is much milder, and in which the mortality is consequently much less, as compared with the fevers that prevail in this country."

DR. PICKELLS.
(*Cork Fever Hospital Report for* 1860, read February 21, 1861.)

"To these results, the Irish Hospitals," Dr. Tweedie remarks, "present a marked antithesis. Out of 150,939 cases of fever admitted into the Dublin Fever Hospital since the year 1817, only 10,632, or less than 1 in 14, died; and during the last eighteen years the mortality has been only 1 in 13. Again, in the Cork Fever Hospital the mortality has been much less. Since the year 1817, out of 82,293 patients only 3222, or 1 in 25¼, have died; and during the eighteen years contained in the table the mortality has been only 4¼ per cent., or 1 in 23¾. Moreover, the rate of mortality has varied much less in different years than in England and Scotland. Thus, in Dublin, in no year during the last forty has it reached 10 per cent.; and in the Cork Hospital in only one year of the last forty has it slightly exceeded 6 per cent."

REPORTS OF SOCIETIES.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, DECEMBER 5.

MR. JAMES R. LANE, Vice-President, in the Chair.

A PAPER, by Dr. CAHILL, was read on

PLUGGING THE NOSE.

In cases of excessive epistaxis, the author had found that the ordinary mode of plugging the nose effectually, both in front and behind, was attended with considerable distress to the patient, and with some inconvenience to the operator, although it might not be attended with much difficulty. The method he had adopted consisted of passing a piece of dry and compressed sponge, about two inches long, and of sufficient size to pass easily, along the floor of the nares. This was secured in the middle by a piece of tape or twine doubled. When the sponge was fairly pushed by a probe, or, what was better, a female catheter, through the posterior nares, the tape was drawn upon; the sponge then took a direction transverse to the nasal cavity, doubling upon itself, and so blocked up, when swelled by the absorption of blood, the posterior nares. The two ends of the tape now passing out of the nostril, being then separated, the anterior cavity was filled with cotton-wool, and the tape then tied across the whole in front of the nose. Removing it was easily managed by pushing the sponge into the pharynx, and so brought out through the mouth. The simplicity of this operation was shown by the author upon the skeleton.

A paper, by Dr. WAY, was read on

STRICTURE OF THE ŒSOPHAGUS.

The disease had occurred in a woman aged 52, which had commenced two months previously to her death with the usual symptoms, viz., difficulty of swallowing, vomiting immediately after taking food, accompanied with pain. Towards the termination of the disease, shreds of mucous membrane were vomited, with some relief to the symptoms. These shreds of membrane, upon examination, were found to be perfectly healthy. The post-mortem examination showed the upper part of the œsophagus to be dilated, and the stricture to be confined to the lower fourth. The mucous membrane of this part had been removed, exposing the sub-mucous tissue, which was found infiltrated with colloid cancerous disease. There were also some small glands affected in the same manner. The liver was elongated, but no trace of cancer could be discovered. The post-tracheal glands were cancerous. Life had been prolonged by nutrient enemata. The diseased portion of the œsophagus was exhibited.

A paper, by Dr. MARTYN, was read on

INDUCTION OF PREMATURE LABOUR.

This proceeding had been recommended, and performed by him in the case of a woman aged 45, who had previously had four children, and whose labours had been more tedious and difficult at each succeeding delivery. Still-born children had been the result of the long-continued pressure and the violent contractions of the uterus. Contraction in the antero-posterior diameter of the pelvis had been made out to be the sufficient cause of the obstruction. At the end of the eighth month, the author, to induce premature labour, injected, by means of a catheter, four ounces of warm water a few inches within the os uteri. Three hours afterwards slight pains came on, but without any further result. The following day, six ounces of water were injected six inches within the uterine cavity. Labour pains set in four hours afterwards. Prolapse of the funis took place, when the liquor amnii was discharged, but the author managed to hook the funis over one of the arms of the child while still *in utero*, and, leaving the rest to the natural efforts, the child was born eight hours from the commencement of the labour pains. Both mother and child did well.

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OBITUARY.

MR. EVANS, OF BELPER.

The death of Mr. Evans, of Belper, which took place on November 20 last, is an event which requires more than a passing notice.

For the last eight or ten years, owing to the infirmities of advanced age, he had retired from the active duties of his Profession, but for many years previous to that time he was known far and wide as one of the most eminent Surgeons of his day. As an operative Surgeon and oculist, he was surpassed by few, his operations in many cases being marked by great ingenuity and boldness—a boldness almost always justified by success.

He tied the carotid artery three times—twice successfully. As a lithotomist and operator for hernia and cataract, he was particularly successful.

One striking excellence in Mr. Evans' professional character was the tenacious perseverance he displayed in applying the resources which great natural ability and careful observation constantly suggested; and he was thus, under Providence, the means of saving life under circumstances often considered hopeless, as illustrated by the following cases:—

A case of poisoning by laudanum—the patient having taken an ounce and a-half of laudanum and half-a-pint of gin—in which he successfully emptied the stomach on December 6, 1817, by means of a large syringe attached to an œsophageal tube, on the principle of the stomach-pump, two years before that instrument was invented. The case was published in the *Transactions* of the Associated Apothecaries and Surgeon-Apothecaries of England and Wales for the year 1823.

But the operation which caused a great sensation at that time, and extended his reputation to foreign countries, was a case of aneurism of the arteria innominata, treated successfully by ligature of the common carotid on the distal side of the tumour, and recorded in the *Lancet* of November, 1828, and in Wardrop's work on "Aneurism." It may be interesting to the Profession to know that the patient on whom this operation was performed, is still living at Belper, in the enjoyment of good health, after a lapse of thirty-four years.

About the year 1833 he extirpated a cancerous uterus in the case of Mrs. H., who survived the operation thirteen months. The uterus is at present in the museum of Queen's College, Birmingham.

The unwearied attention and kindness which Mr. Evans exercised in the discharge of his Professional duties, his readiness at all times to lend his aid, and the confidence he inspired in those who sought it, will be testified to by all who knew him, in every station of life.

Of his general character it is more difficult to speak. Unobtrusive and retiring, and possessing an almost child-like simplicity, he was distinguished in an eminent degree by that charity which "thinketh no evil;" while, at the same time, he was ever active in suggesting and promoting every good work. He is gone, full of years, to his rest, having entered his 83rd year; but his memory will be long cherished, not only by his numerous family, but by the many friends far and near who have long appreciated his worth.

MEDICAL NEWS.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise on Wednesday, December 24, 1862:—

Peter Swales, Helmsley, Yorkshire; Francis Young, 114, Carlton-road; William Leonard Cass, Goole, Yorkshire; Adam Rae Martin, Rochester, Kent; Albert Louis Peacock, Huntingdon; James Murray Lindsay, Queen's-road, Grove-lane, Camberwell.

APPOINTMENTS.

Aldridge, Russell, M.D., L.R.C.S. Edin., L.S.A., Yeovil, to be Certifying Surgeon under the Factory Inspectors' Act, *vice* Sperland.

Brown, Alfred, M.R.C.S., has been appointed Consulting Medical Officer to the Dispensary, Wandsworth.

Heath, Christopher, F.R.C.S., has been appointed Lecturer on Anatomy at Westminster Hospital.

Holthouse, Carsten, F.R.C.S., has been appointed Lecturer on Surgery at Westminster Hospital.

Wyer, Otho, M.R.C.S. Eng., L.S.A., Nuneaton, to be Certifying Surgeon under the Factory Inspectors' Act, *vice* Herbert.

DEATHS.

Barnes, John, Surgeon, Maghull, on December 21.

Bosley, Peter, F.R.C.S. Eng., at Worthing, on December 22, aged 56.

Mackenzie, John, L.R.C.P. Edin., at Ullapool, N.B., on December 17, aged 27.

Maillardet, John William, at Crail, Fifeshire, on December 19, late Deputy Inspector-General of Hospitals of H.M. Madras Army, aged 57.

Ody, John, M.B. Lond., M.R.C.S. Eng., at Market Harborough, on December 24.

Sawyers, Joseph, M.D. Aberd., 86th Regt., at Waterford, on December 26, aged 35.

University of Dublin.—At the winter commencement held in the Examination-hall of Trinity College, on Wednesday, December 17, 1862, the following Medical and Surgical degrees were given:—*Doctors in Medicine*—Rev. Samuel Haughton (*stip. cond.*); Thomas Waugh Belcher. *Masters in Surgery*—John Blair Elmes; Philip P. Lyons; John Fred. Boyes. *Bachelors in Medicine*—John E. Barker; Francis Johnson; Thomas White; Philip Patterson Lyons; Dionysius F. Keegan; John Fred. Boyes; Rev. Samuel Haughton (*stip. cond.*); William H. J. Humphreys; Arthur Wynne Foot.

University College Students' Christian Association.—On Friday evening, December 19, a special meeting of the above Association was held in the lecture-room behind Regent's-park Chapel, to commemorate the founding of the Society, exactly twelve months previously. The chair having been taken at eight o'clock by Professor Malden, A.M., the Rev. Dr. Hoppus offered prayer. The Secretary, Mr. Coxeter, then read the past minutes of the Society, after which short addresses were delivered by the President, Mr. C. Reed, Professor Hoppus, Dr. Hare, Dr. Edward Ellis, Mr. W. Scannell Lean, Mr. Bompas, M.A., and others. About forty students were present on the occasion. In concluding, the chairman expressed the very great pleasure he had felt in being present at such a meeting, and sincerely hoped that the Society would be increasingly prosperous. This Association, now numbering nearly fifty members, composed of students from both the faculties of Medicine and Arts, and which is entirely unsectarian in its character, has for its objects the conversational study of the Scriptures and prayer; and it also affords to new students, especially those who are strangers in London, an opportunity of forming good and useful friendships.

The Rector of Wanstead writes to the *Times* that—"Thomas Lucas died at Wanstead on Saturday, December 20, 1862, at the reputed age of 105, and was certainly 104. He was born at Bygrave, in Hertfordshire, and was baptized in 1762. According to what his mother told him, he was either four or five years old when baptized, and he remembered walking to church on that occasion, when a younger brother was baptized with him. The old man's memory was so good that there seems no reason for doubting the accuracy of his statement. His family consider him to have been 105. He was formerly farm-bailiff to Mr. Long Wellesley, at Wanstead-house, had been married, and had several children, of whom some at advanced ages are still living. He had a remarkably healthy aspect and clear grey eye, was of courteous manners, and of a very cheerful temper, and retained excellent health and the complete use of all his faculties (including his memory, hearing, and eyesight) till almost the end. Until within a few months of his death, he chopped his own firewood, was conversational and agreeable to visitors, and was generally in the full enjoyment of life. As he died on December 20 (the day before his birthday, which was on December 21), he had, in point of law, completed 105 years. He suffered considerably during the last six weeks, but his end was tranquil and happy."

An Unqualified Practitioner.—On Tuesday, the adjourned inquest on the body of Mrs. Sarah Bowler, who, it was alleged at the former inquiry, had met her death through the unskilfulness of her Medical man, a non-qualified Medical Practitioner, was resumed at the "Wheatsheaf," St. Leonard's Avenue, Bromley, before H. R. Walthew, Esq., the deputy-coroner. Mr. Marsh appeared for Mr. Talbot, and a large number of the Medical Profession were present. From the evidence adduced at the former inquiry, it appeared that the deceased was delivered of a male child on Monday, December 8, by Mr. Talbot, of Grundy-street, at ten o'clock in the morning, hæmorrhage occurring immediately after. At one o'clock, Dr. Kennedy was seen passing by, and Mr

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Talbot tapped at the window, and called him in. Dr. Kennedy immediately removed the placenta, but deceased died half-an-hour afterwards. He was of opinion that the placenta should have been removed within from half-an-hour to three quarters after the hæmorrhage occurred. The coroner now observed that, since the former inquiry, he had referred to "Denham's Practice," and he believed it was a general opinion that the placenta should be removed as soon as possible after the child was born, providing the patient was not in a fainting condition. There was no doubt that three hours was a very long time to elapse before taking those steps; and, with respect to the law, if it was proved that the deceased was able to undergo the operation, but that it was unnecessarily delayed, then the case would amount to that of manslaughter. Dr. Kennedy had stated that, when he was called in, the deceased was not in a fainting state; on the other hand, Mr. Talbot stated, that she was in a fainting condition the whole of the time. He (the coroner) was surprised that a gentleman like Mr. Talbot should practise without being properly qualified under the Act. Mr. Talbot had stated that he attended lectures for three or four years at Guy's Hospital, but the attending of lectures, and holding certificates to that effect, did not qualify a man for practice, but merely showed that the holder of them had been present on such occasions. The jury having consulted, returned a verdict, that deceased died from hæmorrhage produced by natural causes.

DEATH BY FIRE.—At the inquest held by Mr. Bedford on the bodies of six children named Spencer, who perished by fire, in Soho, Dr. Buzzard said:—"Certain characteristics were common to all of them. There was little or no decomposition. In all the eyelids were firmly closed. In all the extremities were contracted, and the fingers firmly clenched. With one exception the burns were not at all deep, but they were very extensive. As a rule, fully three-quarters of the whole surface of the body were injured. In all the hands were the parts most affected. In the three eldest children, both arms were drawn up across the chest, the hands being doubled up, the fingers clenched, with the nails close to the chest, as though they were trying to open the chest with the fingers. All the children were in precisely the same position. He opened Edward, his being the body which was least injured by the fire. In cutting through the integuments covering the chest he found them deeply injected with a brilliant red colour. He found that the lungs were very much congested with an unusually bright red fluid. All the cavities of the heart were empty. The brain was found somewhat congested with bright red blood. Generally, none of the blood he met with in the course of his examination presented the ordinary character of venous blood. There was no black blood; it was all red. In the case of Edward he believed the cause of death to have been the shock from sudden and extensive burns, and not from suffocation. Judging from that one examination, and the characteristics common to all, he should pronounce the cause of death to have been the same in all the cases."—A Juror: Do you think the children were burnt while alive?—Dr. Buzzard: I cannot give an opinion on that point. I believe the burns were inflicted during vital action, but I could not tell whether consciousness existed. There cannot be any possible evidence whether the children were asleep or not at the time the fire reached them.—The Foreman: The children were burnt to death—not suffocated?—Dr. Buzzard: Burnt to death, undoubtedly. There is no evidence of suffocation.

FEVER, which has been rife in Liverpool, has filled the fever wards of the Workhouse Hospital. At a late meeting of the Workhouse Committee, certain reports which had found their way into the local papers concerning the sanitary condition of the house, were thus disposed of by the chairman:—"Few—none, comparatively speaking—of the fever cases treated in the Hospital were generated in the Workhouse. They were brought from the courts and alleys of the town. Stop this source of supply, and the Hospital might be closed in a month. It was certain that no defects in the management or arrangement could be responsible for the present state of the Hospital, either in respect to the number of cases or the intensity of the disease. The Medical Officers who attended to the poorest classes of the inhabitants did not, in fact, as a rule, treat typhus fever in their district. The worst, and indeed all practicable, cases were removed to the Hospital, although, from the unwillingness of many poor people to enter a workhouse, the removal was in many cases delayed until, except for the sake of those untouched by the disease, removal was useless. At the present moment there were in the Hospital four members of one family from one house in Rose-place. The District Medical Officers made weekly reports to the Committee, and they had instructions to call attention to defective sanitary arrangements in their several districts. Copies of such reports as they made were regularly forwarded to the Medical Officer of Health under the Health Committee. In regard to the Fever Hospital of the Workhouse itself, it should be stated that it contained ample accommodation for 64 fever patients, with separate wards for the reception of patients suffering from other malignant disorders, such as small-pox, etc. These wards contain beds for 32 patients in addition to the number of fever cases. The ground floor of the Hospital was not included in the foregoing, and there was there accommodation for 24 beds. On an average of the last five years there had been 37 patients in the Hospital—the average of the year 1860 being only 20, while the average for the last two months was 78. In consequence of the great increase it had become necessary to make increased provision for the reception of cases, not, as appeared to have been supposed, by crowding more beds into the several rooms, but by appropriating more rooms to fever cases. Thus, the small-pox cases had been removed to the Hospital for Infectious Diseases in Everton, and the ground-floor of the Fever Hospital had been appropriated to fever cases, thereby adding 56 beds to the accommodation, and providing for the reception of 120 cases. It thus appeared that, while the Hospital, under the ordinary management, was calculated to accommodate 96 patients, there had rarely been more than 37 in it. During the last five years there had passed though the Hospital 4243 patients, of whom 662 had died. When it was considered that many of the cases were brought to the Hospital in an almost dying state, the proportion of deaths did not appear to be excessive. With regard to the alleged mortality amongst the Roman Catholic priests of the town, it might be observed that, although, unfortunately, two who had been in the habit of visiting the Hospital had fallen victims to this disease within the last six months, these had been the only deaths under similar circumstances during the last fifteen years. In the case of Dr. Roskell, whatever might have been the general state of his health, he was certainly not a man of robust constitution. There could be no doubt that the duties which these gentlemen performed were more than usually hazardous. Being, from the nature of their duties, brought into immediate contact with the sick, without, it was to be feared, taking any special precaution against contagion, and remaining in the ward, as had been done, for four or five hours a-day, it was certainly not to be wondered at that deaths should, under such circumstances, sometimes occur. In conclusion, he (the chairman) asked to be allowed to say that the article they had to complain of was calculated to do great injury, by working upon the prejudices of the sick. It was also to some extent a reflection upon the Medical staff of the workhouse, for these gentlemen had never expressed themselves dissatisfied with the accommodation the Hospital afforded. The senior Medical attendant of the Hospital, Dr. Gee, was a gentleman of high position in his Profession, and had probably had as much, if not more, experience in the treatment of Typhus than any Medical man in the country; and his recommendations had always been acted upon by the select vestry. (Hear, hear.) That was what he (the chairman) had to say in regard to the observations contained in the article to which he had alluded."

SINGULAR DEATH OF A CHILD IN LEEDS.—THE PRACTICE OF MEDICAL MEN.—At the Town Hall, yesterday, Mr. Blackburn, coroner, held an inquest on the body of Emily, the daughter of Henry Tate, bookkeeper, Sheepscar-fields. The deceased was two years and eight months old, and had enjoyed good health up to the time of her death, which occurred soon after midnight on Friday last. On the evening of that day the child was sitting near the table playing with a needle, and, as it is supposed, broke the needle by pressing it against the edge of the table. She complained of having been pricked, and a red spot, about the size of a pin's head, was found on her chest, just over the heart. The child did not scream or cry, and it was not supposed that anything very serious had occurred. A poultice was applied to the child's chest, and the family retired to rest about ten o'clock. At that time only half the needle could be found. In about twenty minutes the child began to retch and vomit seriously,

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and the parents, unable to account for the sudden illness, gave the child some brandy and water. She became no better, however, and in about two hours and a half the father went for Mr. Turner, Surgeon, Camp-road, but before he arrived the child was dead. On the day after, Mr. Turner gave the following certificate:—"I was called up to visit the child of Mr. Tate in the night, death having taken place a few minutes before I reached there. It is my opinion that the child's death was caused from shock to the nervous system and collapse, the result of excessive attempts at vomiting." This certificate was taken by the father of the child to the registrar, and that officer was not satisfied with it. On Sunday, Mr. James Braithwaite, Surgeon, and Mr. Turner, called together to see the child, and they gave a joint certificate to the same effect as the above. Still the registrar was not satisfied, and he applied to the coroner. After hearing all the circumstances, the coroner ordered that an inquest should be held, and a post-mortem examination of the body made, and the result of this proceeding was the discovery of the missing half of the needle, firmly embedded in the cartilage of the chest, the point of the needle piercing the bag of the heart. The interior of the bag was full of blood, and that led to the death of the child. The evidence given at the inquest was of a rather contradictory character. Mr. Tate stated that when he arrived at home his wife's sister told him that the child had been playing with a needle, that she had broken it, and that only one half of it could be found; but, on being called, the lady denied having made any such statement to him, or having seen the child playing with a needle at all. The Medical men admitted having been informed about the breaking of the needle and the missing of half of it; and the coroner expressed his surprise that, in the face of the almost irresistible conclusion that the missing half of the needle was in the body of the child, the Surgeons should have given the certificates they had. He then called the attention of the jury to the improper practice of Surgeons who had never seen persons during life, giving certificates of the probable cause of death, with the view of trying to prevent the holding of inquests. He (the coroner) was anxious to avoid holding unnecessary inquests, but in practice he found that many of the certificates of Medical men were not to be relied upon. There were grades in the Medical, as well as in the legal and other Professions, and the certificates of some men he could with confidence believe; but he knew that in many cases the Medical man constituted himself coroner, and himself decided whether there should be an inquest or not. It was a very improper proceeding, and was done by Medical men who had good patients, to avoid the holding of inquests. Mr. Braithwaite admitted that the practice complained of was adopted. The jury expressed their disapproval of the practice, and also expressed surprise that in the case of the above child a Medical man was not sent for earlier. A verdict of "Accidental death" was returned.—*Leeds Mercury*, Dec. 24, 1862.

A NICE RESIDENCE.—Mr. Richard Burton, in a letter to the *Times*, advocates the formation of a new convict settlement in Africa. "The Cameroons Mountain, rising in the depths of the Bight of Biafra, and within 4·25 degrees, or about 300 miles, of the Equator, is not, as has been supposed, an isolated mass breaking the continuity of the level and mangrove growing coast. I believe it to be the abutment of a great *sierra*, which, connected by the 'Rumbi' and 'Qua' hills, extends in a north-easterly direction to Mount Alantika. The Cameroons buttress may contain 500 square miles of successive bush and jungle, wood and forest, grass and barren ground. If connected, however, with Alantika, the number might be multiplied by 50. The first work to be expected from convicts located at Amboise Bay, at the foot of the Cameroons, would be a sanitarium. This poisonous coast calls aloud for some such establishment. During the last year, her Majesty's ship *Promethens*, Captain Bedingfield, stationed at Lagos, lost, by death and invaliding, 84 out of 100 whites. In the Bonny River, it is calculated that, of 280, some five died in seventy-eight days. One ship, the *Osprey*, lost all her crew of 17 men except the master. The disease was yellow fever, which still continues in the New Calabar River, while in the Bonny it has been succeeded by a no less deadly typhus. At Fernando Po, 76 men died in two months, out of a total of 231 whites. I, therefore, conclude that we do want a sanitarium. It is vain to assert that a change to England is sufficient. Returning by the African steamship *Athenian*, Captain Lowry, I remarked that, despite the care of our excellent Doctor, every passenger from the coast fell ill; one officer, who never had had fever in Africa, suffered from it on board. The first establishment at Amboise Bay would be on Mondori Island, an oval rock some 200 feet high at the entrance of the bay, and catching the pure Atlantic breezes, which at Clarence Town, Fernando Po, must pass over a long tract of jungly swamp backing the settlement. The second station—it is unwise to transport fever patients suddenly from low ground to high altitudes—would be on Mount Henry, an eminence about 150 miles from the mission station on the beach, and upwards of 1500 feet above sea level. The third would be a ledge of ground, grass-grown, but not wholly out of the wooded region, 7000 feet high, and sheltered from the north-east wind by a formation which my companions and I called the "Black Crater." A stream of degraded lava leads to this, the highest point where European invalids might be settled, and cutting and zigzagging would easily render it practicable for four-footed animals. Above the Black Crater all is grass and clover, lava and clinker. In places the land is level enough for pleasant riding; snow could be stored for the whole year, and those who enjoy cold can pass a night or two at "Saker's Camp," where at dawn the mercury stands below zero, the blankets are stiff, and the noble peak is hoar with frost. Being unprepared to assert in England that felony would justify divorce, and not unacquainted with the horrors of Norfolk Island, I agree with Mr. Laird in thinking it no small advantage that the convicts who prove themselves orderly and industrious should be able to intermarry with the women of the country. With respect to the chances of escape, a bottle of rum given to the natives would bring in any fugitive; and as the lowlands are deadly, as the highlands are healthy, as all the craft upon this coast is so frail that even the half-amphibious negroes often lose their lives—and, finally, as the mountain, though thinly populated, and wholly desert above an altitude of 3000 feet, is almost surrounded by populous regions, full of well-armed men, commanded by "General Tazo," *alias* swamp fever—it is not to be expected that a convict station in Western Africa will ever breed a race of bushrangers.

SAN FRANCISCO AS A HEALTH RESORT FOR THE PHTHISICAL.—Dr. Blake, of San Francisco, says: "As regards temperature, our Coast Range, during the summer months, affords one of the most desirable localities for the treatment of phthisical patients. The temperature for July is, perhaps, that which is the most agreeable for living out in the open air—the thermometer never below 57°, and never higher than 82°, and with a variation, during the twenty-four hours, never greater than 20°. But it is not only in the advantages as regards temperature that the Coast Range affords a most suitable climate for phthisical patients, as in this respect it might be equalled, and perhaps surpassed, by many other localities, as, for instance, the Sandwich Islands, Madeira, and other sea climates; but in this State, and probably in this State alone, are to be found combined all those climatic influences which are even of greater importance than mere temperature in the treatment of the disease. Together with this agreeable temperature, the atmosphere is dry and bracing—almost always calm, and the sky is unclouded for months together. The last summer, there was no rain from the beginning of May until the end of November, so that my patients were not driven in by the weather until November. Towards the middle of September, they left their summer camp for a lower point on the mountains, gradually descending as the season advanced. The climate of the lower ranges is analogous to that at greater elevations, and affords one of the most desirable localities for our patients during the early summer and late autumn months. Another important advantage that the Coast Range of mountains possesses is in the abundance of game; so that a good hunter can always keep the camp supplied. With the return of winter, however, our patients necessarily have to seek other quarters, and, being obliged to change from the free mountain breezes for the badly ventilated, sunless rooms of our habitations, a great deal of the good that has been done during the summer is apt to be lost. Should the case be not very far advanced, our patients can hold their ground, during an average winter, in our coast valleys, or on the lower hills of the Sierra. But they can, by going a few hundred miles down the coast, again enjoy all the advantages afforded by their summer residence in the mountains. In the northern parts of Mexico, the rainy season, which corresponds to our winter, sets in in June and July, and is over by the

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end of October or the beginning of November; after which time, no rain falls until May or June. There are many points on the coast where the mountain range of the Sierra commences at a slight distance from the sea, and, although the low land is unhealthy, being subject to malarious diseases, yet, as soon as a moderate elevation is attained, the climate becomes dry and bracing, and very analogous to that of our own Coast Range during the summer. Fortunately, these localities are now easily reached, as the communication between San Francisco and Mazatlan is taking place, either by steamer or sailing vessels, three or four times a month. The country is well settled; and as large mining operations, conducted by our countrymen, are being carried on there, all sorts of supplies can be procured. About eighty miles back from the coast, the mountains already have an elevation of some thousand feet; and, although I have no accurate meteorological observations of the climate, yet, from the description of it by those who have passed the winter there, I am confident that it must be very analogous to that of our Coast Range. Our patients may thus enjoy a perpetual summer, or, at least, a climate in which they can pass the whole of the year in the open air. I believe, in no other part of the civilised world can such favourable conditions be found for treating phthisis as on this coast. That the disease cannot be cured by drugs is a fact becoming generally admitted by the Profession. That it can be cured by out-door life in the mountain air, is a fact of which I have seen abundant proofs, and which others, who have crossed the plains, have had opportunities of verifying. My own opinion is, that a large proportion of the cases of phthisis will be found to yield to one or two years' open-air treatment; and where the circumstances of the patient enable him fully to carry out such a plan, this coast offers, I think, by far the most favourable locality of any yet resorted to by phthisical patients."—*Pacific Medical and Surgical Journal.*

BOOKS RECEIVED.

Life in Nature. By James Hinton, author of "Man and his Dwelling-place," &c. London: Smith, Elder, and Co., 65, Cornhill. Pp. 258.

Handbuch der Praktischen Medicin. Von Dr. Hermann Lebert, Professor der Medicinischen Klinik und der Specifien Pathologie und Therapie in Breslau. 3te Verbesserte Auflage. 2 vols.

The Renewal of Life: Clinical Lectures Illustrative of the Restorative System of Medicine. By Thomas K. Chambers, M.D. Lond. London. 1862. Pp. 425.

On Diseases of the Chest, including Diseases of the Heart and Great Vessels: their Pathology, Physical Diagnosis, Symptoms, and Treatment. By Henry William Fuller, M.D. Cantab. London. 1862. Pp. 703.

Health in the Tropics; or, Sanitary Art applied to Europeans in India. By W. J. Moore. London. 1862. Pp. 319.

Mentone, the Riviera, Corsica, and Biarritz as Winter Climates. By J. Henry Bennet, M.D. London. 1862. Pp. 288.

Deaconesses; or, the Official Help of Women in Parochial Work and in Charitable Institutions. By the Rev. J. S. Howson, D.D. London. 1862. Pp. 258.

Guy's Hospital Reports. Third Series. Vol. VIII. London. 1862. Pp. 312.

Dublin Quarterly Journal of Medical Science. No. LXVIII. November, 1862.

Englishwoman's Journal.

Social Science Review.

NOTES, QUERIES, AND REPLIES.

Be that questionetb much shall learn much.—*Bacon.*

THE First lecture of Professor Simpson on "Fibroid Diseases of the Uterus," is in type, but the proof had not been received from the author at the time of publication of our present Number.

The Profession will learn with pleasure that a subscription has been set on foot to indemnify Dr. Semple and his family in the legal expenses of the late action of Hall *v.* Semple. On inquiry, it has been found that the sum required to obtain a new trial was far beyond the means at Dr. Semple's disposal, and the project has been, therefore, reluctantly abandoned, although it had received high legal approval. Dr. Waller Lewis, of the Medical Department of the Post-office, and Dr. Forbes Winslow, 23, Cavendish-square, have consented to act as the Honorary Treasurers of the fund which is now being raised. We are sure it is only necessary that it should be publicly known that such a subscription has been set a-foot, for it to receive a generous response on the part of the Profession. Cheques or Post-office orders may be sent to either of the Honorary Treasurers. The former should be crossed to Messrs. Coutts and Co.

Dermis.—Mr. Furneaux Jordan's case of "Fibro-cellular Annulus of the Leg" were published in the *Medical Times and Gazette* for March 1, 1862, p. 208.

We regret that our arrangements do not permit us to insert births and marriages, neither the deaths of any other than members of the Medical Profession.

That indefatigable philanthropist, Mrs. Baines, of Brighton, has written to us on the subject of the prevention of accidents by fire. The following is the formula she proposes for rendering ladies' dresses non-inflammable:—

"Tungstate of soda, prepared expressly for rendering fabrics non-inflammable, can be obtained, by order of any chemist, about 1s. per lb. Directions for use:—To three parts of good (dry) starch, add one part of tungstate of soda, and use the starch in the ordinary way. If the material does not require starching, mix in the proportion of one pound of tungstate of soda to two gallons of water; well saturate the fabric with this solution, and dry it. The heat of the iron in no way affects the non-inflammability of the fabric."

Dr. Leigh, of St. Helier, Jersey, sends us the following hint on the treatment of incontinence of urine:—

"In a corner of an India-rubber sponge bag, fasten a tube with a yard of India-rubber tubing, which will conduct the urine into a vessel on the floor. The same apparatus can be used for the irrigation of stumps, or for refrigeration, etc.

"St. Helier, Jersey, December 20."

The following is a list of the late Dr. Knox's published works:—

Bacclard's General Anatomy.
Cloquet's Anatomy.
Manual of Human Anatomy.
Translation of Milne-Edwards' Zoology.
Knox's Artistic Anatomy.
Fan's Anatomy for Artists.
Anatomist's Instructor.
Engraving of the Arteries after Tiedemann.
" " Bones after Sue and Albinus
" " Ligaments after Caldinis.
" " Muscles after Cloquet.
" " Nerves after Scarpa.
Man: his Structure and Physiology Popularly Explained and Demonstrated.
The Races of Men.

Parkgular, or Impermeable Silk for Surgical Purposes. (Prepared by the Patent Waterproofing Company.)—It is claimed for this impermeable silk, by the inventors, that—

"It is free from smell; it is not rendered adhesive by tropical heat, warm rooms, etc.; it may be boiled in water without injury; it is not irritating to the skin, or otherwise injurious when in use; and that it may be packed for exportation in large quantities, as it is not liable to spontaneous combustion."

It certainly appears to us to be the pleasantest specimen of its sort that we ever examined; light and not sticky; and we do not hesitate to recommend it to our readers.

Buckle's Pure Bottled Beef-Tea. (Prepared by C. F. Buckle, Culinary and Pharmaceutical Chemist, 3, North-place, Gray's-inn-lane, London, W.C.)—Good beef-tea often makes the difference between a quick and a slow recovery, if not absolutely between life and death. There are many families in which, from want of skill in the servants, or from want of servants, good beef-tea cannot be had. Under such circumstances, Mr. Buckle's bottled beef-tea well deserves trial. We have submitted it, not only to our own experienced palate, but have caused it to be tasted by persons of all ages, including one invalid, whose comfort greatly depends on a supply of good beef-tea. All pronounce it remarkably good, with a rich *meaty* flavour. It is not in the least gelatinous or sticky; neither is it *clear;* but it contains fibrinous and other elements, which are extracted by cold water and curdled by heat.

THE LAST PASS-LIST OF THE COLLEGE OF PHYSICIANS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—You will oblige by changing the address of Morris Tonge to 5, Bolton-row, in the list of names admitted Members of the College.

I am, &c. W. COPNEY.

LEGALITY OF MIDWIFERY PRACTICE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—If your correspondent, "L., M.D.," will refer to the Medical Act, he will discover that he is mistaken in supposing a midwifery licence to be unrecognised by, and incapable of, being registered under that Act. The fact is, the Medical Act distinctly states that the licence in midwifery of the College of Surgeons entitles the holder to be registered as such.

December 27. I am, &c. M.D.

SCARLATINA CO-EXISTENT WITH MEASLES?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Dr. Richardson having named, in your journal of November 29, that he had seen scarlatina existing with rheumatism, I shall feel obliged if any of your correspondents will inform me whether they have ever seen it existing with measles; and whether the following case can have been scarlatina?

C. R., aged 5, after being in company with a little girl who broke out with measles on the following day, had the usual symptoms and eruption ten days after. On the third day, the eruption disappeared, and, on the third day after that, an eruption, resembling scarlatina, made its appearance, with fever and slight sore throat. This terminated on the fifth day, with desquamation of cuticle. Three of her brothers and sisters were kept away from her on the first appearance of the measles, but in the same house, and none of them took either of the diseases. I am, &c.

December. R. C. B.

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QUESTIONS OF QUALIFICATION AND PRECEDENCE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—(1.) I wish to know if the licence of the Royal College of Physicians of London qualifies you to practise Surgery with the degree of M.D? (2.) Will the licence with the M.D. enable its possessor to hold a Union practice in England? (3.) Would an M.R.C.S. Eng. and L.A.C. have precedence to the above qualifications? I am, &c.

Glasgow, December 19. RUD., M.D.

1.) An open question. (2.) We believe not. (3.) Precedence would depend on age, character, and social position. Whilst M.D.'s keep chemists' shops, L.A.C.'s may drive a pair of horses and dine with a duke.—ED.

SMELLIE'S WORKS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The New Sydenham Society, some time since, promised a new edition. Little has hitherto been known of this celebrated man, who, in his day, rendered such important service to Obstetric Practice. It is to be hoped, therefore, that the learned editor of the new edition will enrich his work with a more ample biography of his author than has yet appeared in print. There is one very interesting point with respect to Smellie it would be desirable to hear something more about, namely, "He confesses that he submitted his various publications to the revision and correction of a friend, who is known to have been the celebrated Dr. Smollett."

I am, &c.

A FELLOW OF THE OBSTETRICAL SOCIETY OF LONDON.

t Warwick.

SCARLATINA AND RHEUMATISM.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you allow me to ask a question as to the cases of scarlet fever complicated with acute rheumatism and heart disease, reported in the *Medical Times and Gazette* of November 29? I have been taught, as a recognised fact, that scarlatina is not unfrequently accompanied by inflammation of the joints, sometimes going on to suppuration, and by pericarditis, or pleurisy, also by peritonitis, as seen in a case lately under Dr. Gull's care, but have never heard that true rheumatism has been observed in such cases before. What was there in the cases reported, in the perspiration, urine, tongue, pulse, or other symptoms, to lead to the supposition of two poisons co-existing in the blood? There was a case lately under Dr. Barlow, in which a mild case of scarlet fever was accompanied by pain in several of the joints, and the presence for a time of a systolic murmur, heard over the base of the heart; but these symptoms were not regarded as at all anomalous, and were certainly not accompanied by any others observed in rheumatism.

Hoping some one of your correspondents may explain the matter to me,

I am, &c.

Guy's Hospital. A MEDICAL STUDENT.

DIGITALIS IN DELIRIUM TREMENS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The effect of large doses of digitalis in a case of "delirium tremens," which occurred in my practice a short time since, tends powerfully to corroborate the theory of its action, as held by Dr. Handfield Jones in his communication in your last Number. The case was briefly this:—

E. F., 28, a prostitute and confirmed drunkard, first seen in her own house at 7 p.m. She has taken no food, except a little milk, for three days; has been drinking beer and spirits; fancies herself dead; surface of body is cold; pulse 90, soft and small; secretions, as well as can be ascertained, normal. To take ℥ss. tinct. digitalis immediately; the same to be repeated in four hours; and subsequently ℥ij. until the desired effect be induced.

9 a.m.—Has slept six hours and taken two quarts of milk; pulse 84, full and natural; surface warm; is thirsty; quite sensible, and willing to take beef-tea and continue the milk; has had three doses of the digitalis; excretions natural.

On the following day, there was some little nausea and slight delirium, but these yielded readily to ordinary remedies and slight stimulation. There was no relapse, and the case ended most favourably.

There can, I think, be no doubt that digitalis acted here the part of a "cardiac tonic" in a case of decidedly "asthenic" delirium, etc.

I am, &c.

Ivy-house, Woodford, December 16. ROBERT DUCHESNE, M.D.

EPILEPSY—RENAL HAEMORRHAGE—IRREGULAR MENSTRUATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you kindly insert the following, as I am anxious to avail myself of the experience of others who may have met with a similar case?—

Sarah L., aged 30, single, of fair complexion, florid, and of full habit, had good health until 17 years of age, when she first experienced an epileptic seizure, which have since recurred, at intervals of a few months, till the last two years. These fits were unaccompanied by aura, nor did they appear materially to injure her general health, although she has been unable to pursue any active employment in consequence of occipital headaches, which sometimes were very severe, and which she has relieved by setons and cupping at the back of the neck: menstruation has always been irregular, but never suppressed for any lengthened period. Nearly two years since she commenced, without assignable cause, to pass bright blood intimately mixed with the urine, which at first contained numerous small clots, apparently moulded by small ducts in the kidneys, and accompanied by slight lumbar pain; the clots soon disappeared, but for some months, with one or two short intermissions, the hæmorrhagic symptoms continued until the spring of the present year, when the kidneys resumed their usual healthy functions.

At first the case was considered as one of vicarious menstruation, partly from the almost inappreciable amount of constitutional disturbance, and partly from the absence of the normal menstrual flux. This view was, however, soon dispelled by the return of the courses, which continued with tolerable regularity for several months, and more than once took place whilst the urine was mixed with much blood. In spring last, from a bright florid colour, it gradually became of a dark hue, and then perfectly clear and free from albuminous traces. Since these symptoms commenced, the epileptic seizures have given place to fainting fits, whilst the head symptoms have been much relieved; but strange to say, during the absence of hæmorrhage for four months this summer, the catamenial flow, which had occurred with tolerable regularity, was entirely suppressed.

In September last the old symptoms recurred, with suppression and much lumbar pain; no sickness; tongue clean, and pulse soft and regular. On several occasions nothing has been passed from the bladder for seven or eight days, and then little else than pure blood, and even this has only followed the application to the loins of the cupping-glasses. The practical value of this remedy as a powerful therapeutical agent is here most strikingly demonstrated. At first a few ounces were taken weekly, giving slight relief; but for the last ten weeks, at intervals of a few days, the cupping-glasses have been applied (dry), and allowed to remain on about twenty minutes. This plan has, without exception, resulted in the passage of blood mixed with two or three ounces of urine within an hour of the removal of the glasses. In about twenty-four hours the material effect appears to subside, and no further relief ensues until the re-employment of this remedy. I am, &c.

Walton, near Ipswich, December 23. JOHN RAND.

COMMUNICATIONS have been received from:—

Dr. MURCHISON; Dr. MARTYN; Dr. A. SIMPSON; Mr. PAKER; Mr. W. COPNEY; Dr. R. D. THOMSON; Dr. MCCALL ANDERSON; Mr. J. HUTCHINSON; Mr. J. H. LANE; Mr. MANIFOLD; Mr. C. HEATH; Dr. BIRNIE; R. C. B.; A MEDICAL STUDENT; MATER; Dr. DUCHESNE; Dr. RUDD; Dr. EVANS; Dr. J. W. BLACK; Dr. BARNINGTON; M. L. BIDENKAP; Dr. H. WEBER; Dr. PAGE; Dr. OGLE; Dr. W. LEWIS; Dr. WHITEHEAD.

VITAL STATISTICS OF LONDON.

Week ending Saturday, December 27, 1862.

BIRTHS.

Births of Boys, 829; Girls, 781; Total, 1610.
Average of 10 corresponding weeks, 1852-61, 1692·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	657	635	1292
Average of the ten years 1852-61	727·3	691·0	1418·3
Average corrected to increased population	..	..	1560
Deaths of people above 90	..	..	6

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	2	10	11	4	11	7	1
North ..	618,210	13	15	24	2	11	9	2
Central ..	378,658	1	6	12	3	8	6	..
East ..	571,158	9	7	12	1	7	8	1
South ..	173,175	3	24	18	8	20	11	5
Total.. ..	2,803,989	28	61	77	18	57	47	9

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·094 in.
Mean temperature	42·2
Highest point of thermometer	50
Lowest point of thermometer	33·4
Mean dew-point temperature	38·6
General direction of wind	S.W.
Whole amount of rain in the week	0·08 in.

APPOINTMENTS FOR THE WEEK.

January 3. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

5. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

ODONTOLOGICAL SOCIETY OF LONDON, 8 p.m. Anniversary Meeting.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Mr. Hancock, "On the Superiority of Chopart's Operation and Excision of the Ankle over any other Method in all Cases admitting their Performance."

6. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

7. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

OBSTETRICAL SOCIETY OF LONDON, 8 p.m. Anniversary Meeting. Address by the President, Dr. Tyler Smith. Paper by Dr. Aveling, of Sheffield.

8. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

9. Friday.

Operations, Westminster Ophthalmic, 1½ p.m.

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ORIGINAL LECTURES.

CLINICAL TEACHING AND CLINICAL STUDY.

A LECTURE ADDRESSED TO THE STUDENTS OF THE WESTMINSTER HOSPITAL.

By GEORGE T. FINCHAM, M.D.
Physician to the Hospital.

GENTLEMEN,—Before bringing before your notice any of the cases we have now the opportunity of studying in the wards, I wish to say a few words, especially to those who are attending clinical lectures for the first time, as to the scope and object of such lectures generally. The great end of clinical teaching is to bring before the student's mind the appearances and treatment of disease in connexion with the individual—as it actually occurs in the living patient. And in this consists the great difference between clinical lectures and those on the principles and practice of Medicine and Surgery, as given systematically by your teachers on those subjects.

In the latter you have disease, as it were, in the abstract brought before you; all peculiarities are eliminated; the symptoms most commonly present in any given malady are carefully grouped together, so as to produce a complete picture—a perfect typical image. Now this sort of description stands pretty much in the same relation to disease as it exists in the living patient, as an anatomical diagram stands to an actual dissection of the subject. Both are very clear, very intelligible, the colours bright, the outlines sharp; but, then, on the other hand, they are too distinct, too neatly drawn; so that, if taken alone as a guide, they are apt to mislead, by making the student expect that the reality will be as well defined as the representation. Do not, however, imagine that these highly-coloured descriptions of disease, any more than anatomical diagrams, are without their use. Up to a certain point they are of the greatest service. They tend to fix in your minds the main outlines of the subjects you are engaged upon. They tell you what to look for. But, then, you must not stop there. In both cases the study of the actual object must come in, if you would know with anything like accuracy how things really are. Most of you have realised this in the case of anatomy. You are well aware how impossible it is for the man who does no more than pore over books and plates to be anything like a good anatomist. You know how poor a figure he makes when a scalpel is put into his hands, and he is told to cut down upon this vessel, or separate that fascia. And so you will find it to be the case with medicine, when you come into actual practice for yourselves. You will find yourselves terribly at a loss if you have contented yourselves with dwelling exclusively on the typical portraits of diseases, as drawn in systematic works and lectures. These will give you, comparatively, but scanty help, unless you have studied on the living subject. And why is this? Because you will not always find the well-marked picture of any disease with which you have familiarised yourselves, reproduced in all its exactness in every individual case of the disease which you come across. The result will be that you will be puzzled and confused; then, it may be, disheartened and discouraged. But this is not all: instead of beginning practice, knowing what you profess, you will have to learn your experience; in other words, to experiment upon the first patients who are unfortunate enough to fall into your hands.

Now, it is to save you from this state of things, so humiliating to yourselves, and so injurious to the public, that clinical lectures are given, and an attendance upon them so properly insisted upon by the licensing bodies; their object being to introduce you to actual practice—to help you to recognise disease as it occurs in the individual patient. I say *help* advisedly, because, unless you yourselves take a full part in the matter, lectures are of but scanty use. It follows, therefore, that, unless you yourselves come regularly into the wards of the Hospital, and watch the cases on which comments are made in the lectures, these will avail you but little. In other words, clinical *study* must accompany clinical teaching.

And now, what is clinical study? Surely, it is something more than making an occasional visit to the wards, lounging in a listless fashion from bed to bed, coming one day, staying away the next, utterly indifferent to all that is going on around you. This is not clinical study; yet I am afraid it is what passes for such with not a few. I am sure I do not exaggerate when I say that scores of pupils pass through their period of study without ever having watched carefully one case of disease from its beginning to its end: they may have skimmed the living book open before them; as for reading and marking its contents, this they have never dreamed of doing. Clinical study, then, is something more than this. It is the watching and noting disease as it occurs in the individual; it is the acquainting yourselves with it as modified by age, sex, and habits—by the complication of previous or intercurrent disease—by, in short, the numberless circumstances which make, or ought to make, each separate case a special object of study. This, then, is clinical study, and its first great use is to help you in diagnosis, in ascertaining what disease you actually have to treat. And this help is very needful, for the modifications I have alluded to constantly throw a sort of haze over the case, dulling its sharp outline, and necessitating trained eyes to separate off the essential disease from its accidental complications, and so to recognise its real character. But if clinical study be all important to help you to form a correct diagnosis, still more is it necessary in order that you may treat your patients properly. The more you see of practice, the more you will learn to know that there is no such thing as typical treatment of disease—that disease in the abstract cannot be laid hold of—that there can be no plan which holds good independently of the individual. No; each case has its own special indications of treatment; and it is the power of ascertaining what these are that constitutes the skilful practitioner. It is the ignorance of this truth that makes people so fond of asking, "What is good for this or that disease?" "What is good for a pleurisy,—what for a fever?" Such questions must be met in the way you expect. The proper answer is, "Show me the person suffering from this or that disease or symptom, and then I may be able to tell you what may do them good; otherwise, I may rather harm them." And here it is that homœopathists, and their followers, catch the ear of the ignorant, and seem to triumph over us. They profess to have a specific remedy not only for each disease, but for every symptom. They will tell you what "is good" for every thing—from an itching of the skin to an inflammation, it may be, of the brain. No malady is so small, none so great, but that some drug will hit and extinguish it completely; and all this is laid down in books with such pretended accuracy, that old women of both sexes practise domestic homœopathy with the greatest confidence, and, of course, with the most complete success. The practitioner of rational medicine, however, does not talk quite so big; he does not profess to have found an exact remedy which, under all circumstances, is, as it were, to kill the disease. We profess to have few so-called specifics. With the exception of quina, for ague and its allied affections; mercury, in some forms of syphilis; iron for anæmia; fresh vegetables for scurvy; and, possibly, the alkalies for rheumatic fever, we have scarcely any remedy capable either of neutralising, in an antidotal fashion, a morbid element, or of directly adding to the system something absolutely wanting. We do not, then, profess to cure disease, in the vulgar sense of the term, by meeting it in direct antagonism. We trust, in the main, to nature to repair her own work. We believe that the same processes by which the functions of the body are carried on in health, have a direct tendency to restore them when diseased; and we hold, that the true office of the Physician is to put the patient as much as possible in such a condition as will most favour the free working of these processes. But, to do this properly, he must well observe disease, not only in the abstract, but as it occurs in the individual patient, and so learn to discriminate the special need of each; for, although it may be quite true that a certain plan of treatment has been found advantageous in five cases of the same malady, there may be something in the sixth which necessitates a very different plan, in order that the patient may be brought into a state in which nature will best employ her restoring power. Thus, for example, in typhoid fever, you may have several cases in which exposure to fresh air, and a full supply of easily digested food, given at short intervals, with little or no wine, are sufficient to sustain the patient until the balance between the supply and waste of tissue is restored. But, in the next case, you may find far more required. You see your patient with wandering intellect, dry and tremulous tongue, twitching muscles, and a stream-like pulse—here the waste

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has been so great, that both nerve and muscle are failing. You give alcohol with unstinting hand, because you know that this agent will alike retard further waste, and stimulate and sustain the flagging heart. To take another acute disease, pneumonia. Here, in a large majority of cases, the application of turpentine stupes to the chest, after previous local blood-letting, should there have been much pain, diaphoretics, and a nutritious diet, will be the remedies best adapted to restore your patient to health. On the other hand, wine and brandy, with ammonia—in short, a stimulating plan of treatment is absolutely necessary, when the flagging pulse, and cold, wet skin show that the circulation is failing. You must then, gentlemen, if you would know anything of the healing art, study both disease and its treatment in the wards, in the persons of individual patients; and, to this end, I should like to see you, with your note-books in your hands, really busying yourselves with the phenomena of disease, and accurately recording them. Do not, however, take too lengthy notes; do not burden your pages with a number of unimportant trifles which very likely you will never read again; but take only the main points of each case, and, of course, the treatment adopted. Moreover, when you return home in the evening, re-write these notes in a book, to be kept for future use, and, at the same time, read up in your text books the account of the malady of which you are studying the particular example. I am addressing myself now to those students who have completed at least one year of study at a Medical School, and who are not quite unfamiliar with the appearances of the more common diseases. I do not recommend the same plan to be adopted at once by those who find themselves in the wards for the first time. These I should not advise at first to take notes, but rather to acquaint themselves generally with the more palpable and prominent features of disease, before they proceed to study it more deeply. They should learn to recognise its physiognomy, so to speak, and much information may be gained in this way. Thus, the profuse sour sweat, the bright complexion, and the clear intelligence of a patient point at once to rheumatic fever; whilst from the dusky flush, dulled perceptions, and supine posture of the sufferer from typhus, you learn at a glance with what malady you probably have to deal. So, too, with more chronic diseases. Who that has once realised the salient phenomena of Bright's disease—the soft, silky skin, the puffy face, and swollen limbs, the very

"Aqnosus albo
Corpore languet"

of the Latin poet—could fail to recognise it again? It is, then, to the study of these palpable objective phenomena that I strongly advise those of you who are beginning clinical medicine, at first to confine yourselves. Pass two or three months in this way, and then begin to take notes in the manner I have suggested; and I should further recommend you, if you have the opportunity, to take, at the same time, notes of several cases of the same disease. You will thus be able to compare them together, and to ascertain how far they fall short of, or come up to, the typical picture of the malady as drawn in books.

As to the exact mode in which to take your notes, I strongly advise you to adopt the plan, which has been drawn up for your use, in the little work entitled "Hints for Clinical Clerks in Medical Cases." This you can have on application; it will not, therefore, be necessary for me to speak to you more fully on this subject. By taking notes in this way, even of a comparatively few cases, systematically and regularly, besides forming habits of attention and observation, you will acquire a knowledge of disease and its treatment which you will never forget, and which will be of incalculable use to you in after life.

ORIGINAL COMMUNICATIONS.

ON VESICO-UTERINE FISTULA (a).

By JAMES R. LANE, F.R.C.S.,
Surgeon to St. Mary's Hospital.

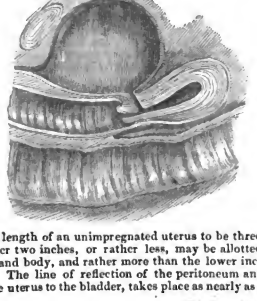
A VESICO-UTERINE fistula is an abnormal communication between the bladder and uterus, which communication, in the cases hitherto observed, has always been situated between the base of the bladder and some part of the canal of the cervix uteri. Such a condition, of course, implies a complete incontinence of urine, just as in the more common case of a vesico-vaginal communication, since the urine, after passing through the fistulous channel into the uterus, immediately flows away, through the os uteri, into the vagina.

Vesico-uterine fistulæ are of very rare occurrence. Very few cases have been recorded or noticed by British writers; and abroad I know of only one Surgeon, M. Jobert de Lamballe, who has paid much attention to the subject. To this gentleman's researches, and to other recorded cases, I shall presently recur; but I prefer to commence by describing an example of this accident, which I have recently treated, and which is the only one in which, in this country, as far as I am aware, any remedial measures of an operative character have been resorted to.

C. R., a spare Irishwoman, aged 45, was admitted into St. Mary's Hospital, on May 9, 1862, under the care of Dr. Tyler Smith, who afterwards requested me to take charge of her. The following is the history she gave of herself:—She had been married four years. Four months after marriage she miscarried. Two years afterwards she was confined of a child at the full period. The labour was protracted, and she suffered severely, being finally delivered with instruments, but no bad results followed on this occasion. In January of the present year, four months previous to her admission into the Hospital, she was again delivered of a child at the full period. On this occasion she was in labour twenty-four hours, and again suffered greatly; but she was not aware whether or not instruments were again used. The child did not live. Immediately afterwards she found herself unable to retain her urine, and the whole of it had since escaped involuntarily, so that her clothing by day, and her bedding at night, had been constantly saturated with it. The labia and inside of the thighs were much excoriated by the continual irritation.

On examination with the speculum, there appeared to be nothing the matter with the vagina or urethra; the vesico-vaginal septum was perfectly sound throughout; but when the os uteri came into view, a small quantity of fluid was observed to flow from it into the cavity of the speculum. By digital examination, the os uteri was found to be somewhat larger than natural; it would just admit the tip of the finger, with which, about half an inch above the os, and in the canal of the cervix uteri, an opening could be felt on the anterior surface, leading towards the bladder. A sound introduced into the bladder by the urethra could, with a little manipulation, be brought into contact with the finger in the cervix uteri. The opening appeared to be rounded, and to be about the size of a pea, as if a small piece of the uterus had been punched out.

The accompanying diagram will show clearly the exact position of the aperture of communication, and will also serve to illustrate the normal anatomical relations of the implicated parts, of which, especially as regards the arrangement of the peritoneum between the bladder and the uterus, it may not be waste of time to say a few words. Supposing, then, the



average length of an unimpregnated uterus to be three inches, the upper two inches, or rather less, may be allotted to the fundus and body, and rather more than the lower inch to the cervix. The line of reflection of the peritoneum anteriorly, from the uterus to the bladder, takes place as nearly as possible

(a) Read at the Western Medical Society, November 21, 1862.

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opposite the junction of the cervix with the body, and is, therefore, at least an inch above the lower end of the organ. The neck of the uterus has been divided, anatomically, into the vaginal and supra-vaginal portions, the former being that small part which may be seen from the vagina; the latter, the larger portion situated above the insertion of the vagina, and between that point and the junction of the neck with the body. The whole of this latter part of the cervix is in immediate relation, anteriorly, with the base of the bladder, without the intervention of peritoneum; and it is here that vesico-uterine fistulæ have, in every instance, been found

The reflection of the peritoneum posteriorly is widely different, the whole posterior surface of the uterine neck, and also the upper three-quarters of an inch of the vagina, being covered by that membrane.

From this brief anatomical digression I will return to the case in question, the nature of which I had accurately ascertained in the manner above described. It remained to determine if any, and what remedial measures should be attempted.

Two plans of operation, essentially different in their nature, had been suggested by Jobert, the only authority I know of who has paid special attention to the subject. The first plan which he suggests consists in making free lateral incisions through the os uteri and through the upper end of the vagina, so as to convert the lower part of the cervix uteri into two flaps, anterior and posterior, by separating which, the fistulous aperture might be brought into view, so as to admit of its edges being pared and sutures being applied. He suggests that these incisions should pass completely through the lower end of the uterus, and be continued into the upper end of the vagina, until they penetrate into the loose areolar tissue of the broad ligament. These incisions, he says, render it easy to get at the aperture of communication, and enable the Surgeon to perform his manipulations with facility, and without any obstacle whatever.

This plan of procedure I must say I felt considerable hesitation in adopting. Free incisions into the uterine tissue are not, perhaps, attended with much risk—as modern practice has pretty abundantly demonstrated—but to penetrate into the loose cellular tissue of the broad ligament, seemed to me to be a rather serious matter. No one would, I think, be much surprised to find such incisions followed by peritoneal inflammation, or by diffuse suppuration in the pelvic and sub-peritoneal cellular tissue. Neither could I, from my experience in plastic operations high up in the vagina, accept without some reservation M. Jobert's statement as to the extreme facility of a similar proceeding in the interior of the uterus. He, however, records a case in which he operated in this way in the year 1849, and in which he ultimately succeeded in curing his patient, though a rather serious train of symptoms followed the operation, and the treatment was protracted over a period of several months. Three months after the operation an escape of urine took place through a small opening in the track of one of the sutures which had not been removed, but this was closed under the application of the nitrate of silver. Though the progress of this patient was, in many respects, tedious and unsatisfactory, and her life appears to have been in considerable danger, still, to have succeeded at all in so difficult a case, especially before metallic sutures had been introduced, was, undoubtedly, a great triumph in Surgery.

I, however, thought it better, for the reasons above stated, to reject this mode of operation; and the idea which suggested itself to me to reach the fistula was to enlarge the opening, in the downward direction, by dividing that portion of the uterus which was situated below the fistula, and by continuing this incision into the upper end of the vagina in the longitudinal direction. I should thus have obtained a large longitudinal opening, the upper angle of which would have corresponded to, and have been formed by, the fistula itself. I believe that this would have enabled me to get at its upper end, where the fistula was placed, and which was the only difficult part to deal with, so as to apply the necessary sutures. If, however, I did not find sufficient space, I could have obtained more by making lateral incisions in the cervix uteri, in the direction indicated by Jobert, but of less extent. This plan would, doubtless, have been attended with considerable difficulty, still, I believe, it was not impracticable—the danger would not have been great; and, if I could have succeeded in closing the uterine portion of the wound in a first operation, there would have been comparatively little difficulty in dealing with the vaginal portion on a subsequent occasion. But there was the alternative of the second operation, suggested by Jobert in his treatise, but which I did not then know that he had ever put in practice. It consisted in closing the os uteri by suture, thus shutting off the communication between the uterus and the vagina, but leaving the fistula itself uninterfered with. When this was done, the urine would still, of course, get into the uterus, but it could not pass further; and the remedy, so far as the escape of urine externally was concerned, would be practically as perfect as if the fistula itself had been closed. Future pregnancy would, of course, be impossible, and menstruation must be performed through the bladder, by means of the fistulous opening; but these disabilities appeared, to my mind, to be more than compensated for (especially taking into consideration that the patient was 45 years of age) by the avoidance of all risk from the operation itself, by the greater certainty of success, and also by the fact, that should it not succeed, or should any difficulty in the matter of menstruation be subsequently met with, a slight incision through the new line of union would at once restore the parts to the same condition as before the operation, and either of the other procedures to which I have before alluded would have been as applicable to the case as ever; whereas, if I had commenced with either of the other plans, their failure would not have left the parts in nearly so favourable a condition for this more simple method.

Accordingly, I decided in favour of this operation, and on May 14 proceeded to put it in practice. The patient being placed in the lithotomy position, Bozeman's speculum was introduced, and held so as to depress the posterior wall of the vagina, and bring the anterior wall and the os uteri into view. The anterior wall of the vagina, just below the os uteri, was then seized with one vulsellum, and the posterior lip of the os uteri with another. By these means, with a little traction, the parts were drawn down within convenient reach, and were held in the required position by assistants. I then, with a narrow knife, freely denuded the edges of the os uteri, and brought the raw surfaces together with four silver-wire sutures, passed by means of the tubular needle. I brought the ends of the wires through the holes in a thin leaden plate, and fastened them with perforated shot, after Bozeman's method. I greatly prefer, in this and all similar cases, the use of the leaden plate to the fastening the wires by simply twisting their ends. The slight pressure which the plate exercises is of great service in keeping the part steady and motionless; and it also acts most advantageously in keeping the sutures throughout at a proper distance from each other, thus preventing that gaping apart of the wound in the intervals between the sutures which is so likely to take place if they become unduly approximated to each other. After the operation, a double curved silver catheter was retained in the bladder, and was connected by a piece of elastic tube to an India-rubber bag to receive the urine.

For three days after the operation, she suffered no pain whatever; her pulse was natural, and there was no sign of constitutional disturbance. No escape of urine took place, except through the catheter.

On the fourth day, she complained of pain in the back and lower part of the abdomen, her pulse was quickened, and there was slight thirst and feverishness. This was followed during the night by an escape of blood with the urine through the catheter, and the next day the feverish symptoms had disappeared. The discharge of blood with the urine continued for three days, and gradually ceased on the fourth. It was evidently the re-establishment of menstruation, which had not occurred since her confinement in January, four months previously. No discharge of blood took place per vaginum, nor was there any escape of urine, except through the catheter.

On May 21, seven days after the operation, I removed the plate. The os uteri seemed firmly closed. There was no escape of urine. The catheter was retained for two days longer, when it was discontinued by degrees, at first for a short time only, afterwards for a longer period. At the end of a fortnight after the operation, she was able to dispense with it altogether, and had perfect control over her urine.

On June 4, three weeks from the operation, she left the Hospital perfectly well. I saw her occasionally for three months after she left the Hospital; she remained quite well, menstruating regularly through the bladder at intervals of about three weeks. The passage of the menstrual secretion through the bladder was attended with no pain or difficulty whatever; on the contrary, she seems to consider it a very convenient arrangement.

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On looking into the literature of this subject, the first recorded instance of a vesico-uterine fistula appears to be one given by Madame Lachapelle in her "*Pratique de l'Art des Accouchemens*," published in 1825. This patient was delivered after a natural labour, but not till three days after the loss of the liquor amnii. Eight days after delivery incontinence of urine set in, and she was ultimately discovered to have a fistula four lines in diameter in the neck of the uterus. She was considered incurable. Another case which occurred in 1828 is given by Professor Stoltz, of Strasbourg. This patient died forty-one days after delivery, and a vesico-uterine fistula was found about the middle of the cervix; but there was also a communication posteriorly between the neck of the uterus and the peritoneal cavity, directly opposite the vesico-uterine communication. This patient appears to have died from peritonitis, caused by the escape of urine through this last-mentioned opening. A third case is that given by M. Jobert, to which I have already alluded, and which I believe is the first in which any operation was performed. It occurred in 1849, and will be found in his "*Traité des Fistules Vésico-Utérines*," &c., published in 1852.

A very singular case is given by Dr. Simpson, of Edinburgh, in which an abscess formed between the bladder and the neck of the uterus, and opened a communication between the two cavities. Dr. Simpson dilated the os uteri, and applied nitrate of silver to the opening, under which treatment it gradually contracted and closed. (See Simpson's "Obstetric Memoirs," vol. i. p. 232.

Dr. Leishman, Physician to the Lying-in Hospital, Glasgow, published an account of a case of vesico-uterine fistula in October, 1861, in the *Glasgow Medical Journal*. This patient had a lingering labour, and the liquor amnii was evacuated two days before the delivery was completed. Incontinence of urine did not commence till some days after delivery. In this case the incontinence gradually diminished. A year afterwards she was able to hold her water for four or five hours; and when the urethra was compressed, and she was directed to make an expulsive effort, no urine escaped through the uterus. The os uteri was healthy in appearance, and "firmly closed." It was remarkable that this patient, as the incontinence disappeared, had ceased to menstruate in the ordinary way, but had regularly, at monthly periods, passed blood with her urine. From this circumstance, together with the apparent closure of the os uteri, I should infer that the incontinence ceased, not because the fistula itself had closed, but because some spontaneous obliteration of the cervical canal had taken place below the abnormal communication; that nature had, in fact, performed the very operation which I practised myself in the case which forms the basis of this paper.

These were all the facts relating to this subject that I could at first meet with, and they were all that Dr. Leishman also, in his paper published in 1861, was able to collect. I, however, wrote to M. Jobert, asking him whether he himself had performed any other operations in similar cases, besides the one recorded in his book; and I was somewhat surprised to hear from him, in reply, that he had operated in thirteen cases, of which eleven were cured. They are all recorded, he informed me, in the *Lancette Médicale* and the *Union Médicale*. I have not been able to meet with any journal going by the first of these two titles, but I have searched the *Gazette* (or *Lancette*) *des Hôpitaux* and the *Union Médicale*, and in them I have found very circumstantial and elaborate accounts of seven cases, besides the one to which I have already alluded. (See *Gazette des Hôpitaux* for July 19 and August 20, 1853; also *L'Union Médicale*, November 22, 1856, January 6, 1859, three cases, and October 18, 1860.) After his first case, M. Jobert appears to have given up the attempt to get at the fistula itself by making extensive lateral incisions in the uterus and vagina; and to have resorted, as I did, to the easier and safer, though physiologically less perfect, operation of closure of the os uteri.

One of his patients died from peritonitis. In this case the os uteri had been much injured, and its lips were puckered and irregular. Free lateral incisions were made in this case to relieve cicatricial tension, and to these incisions most probably the fatal peritonitis owed its origin. All his other cases appear to have terminated satisfactorily, and the patients obtained perfect control over their urine, while menstruation took place regularly and without difficulty through the bladder.

It is very remarkable, that in the majority of these menstruation took place, precisely as it did in my case, within a few days of the performance of the operation, whereas, from the time of the formation of the fistula to the time of the operation nothing of the kind had been noticed. It appears as if the continual stream of urine passing through the cervix uteri in some way or other interfered with the re-establishment of that function, but that the mere entrance of a small quantity of that fluid into the uterine cavity did not produce the same effect.

In one particular, the case observed by me differed from all the others, if the history given by the patient is to be relied on. She passed her urine involuntarily immediately after delivery; whereas, in all the others, the incontinence was not established till some days afterwards, and in several was preceded by the separation and discharge of a slough. The immediate escape would seem to indicate a laceration of the uterine tissue, rather than a sloughing from protracted pressure, which is the most common and most probable cause of vesico-uterine, as well as of vesico-vaginal, fistulæ. It might be, however, that, in this case, the incontinence for the first few days was of a temporary nature, and depended upon debility and loss of power in the sphincter of the bladder following the labour, which power might not have been regained till after the separation of a slough, and the establishment of a permanent incontinence as the result of the fistula.

In conclusion, I have only a few words further to add. There may, possibly, be some who think it an almost unwarrantable proceeding, even though it may not be a dangerous one, to produce occlusion of the os uteri; and, by so doing, not only to divert the menstrual secretion, but to produce an absolute barrier to future child-bearing. No doubt, it is a thing which should not be undertaken lightly, or on insufficient grounds; but I hold that there was ample justification for it in such a case as that which I have related. The condition of the patient, while unrelieved, was such as to render her existence loathsome to herself and to all around her, and utterly to preclude her from gaining her living by any employment which would bring her in contact with strangers. Furthermore, even if child-bearing were held to be the principal end and aim of female existence, it is next to impossible that impregnation should take place with a continual stream of urine flowing through the os uteri, mixing with and intercepting the seminal secretion. It should also be remembered, that those in whom such a lesion has occurred have almost always passed through the ordeal of parturition, once at least, at imminent risk of their lives, and that they will gladly consent to any operation, which will not only relieve them from their present misery, but will have the further merit (as they will most probably consider it) of preserving them in the future from dangers such as they have already gone through.

HISTORY OF A CASE
IN WHICH
INTESTINAL MATTER WAS VOIDED FOR MANY YEARS BY THE URETHRA.
WITH REMARKS.

By A. M. McWHINNIE, F.R.C.S.

Mr. E. C., an old attached Medical friend, a country Practitioner of a healthy family, himself of good constitution, informed me, as far back as the summer of 1840 (he being then about 35 years of age), whilst driving with him in his neighbourhood, that air passed through the urethra during and after micturition. Feeling himself otherwise quite well, this occurrence gave him no great concern; he regarded it as singularly strange, but did not attach the importance to the case which evidently belonged to it. This passage of flatus had suddenly attracted his attention a short time previously; no pain or inconvenience had preceded it, nor was there any other accompanying feature observable.

Without giving Mr. C. more ground for serious apprehension of his case, than was necessary to secure a careful management of himself, I recommended him to abstain from over exertion, to take simple food, and to keep the large intestine habitually free, either by gentle aperients, or, if necessary, to prevent its distension by enemata—an advice which he afterwards constantly followed, and to which his comparatively comfortable condition for many years was, in

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all probability, mainly due. From my notes I find that I enjoined especially that the injections should be used in the evening, so that the lower bowel might be empty and tranquil during the night, taking care that the ivory or elastic tube should be introduced gently, and be directed towards the hollow of the sacrum, and that it should not be passed in with violence, or far beyond the sphincter. On causing him to empty the bladder under water, it was evident that the bubbles of air were produced by intestinal gas. I could discover nothing wrong by examination of the abdomen, nor did the patient feel any pain or inconvenience. The urine was voided freely, and was uniformly clear.

For several years after that time I visited him occasionally with my colleague and friend, the late Dr. Roupell; the same symptoms continued, but no new feature had presented itself. His professional duties were not interfered with. Sometimes I accompanied him in a drive, or for a day's shooting, without any allusion being made to the infirmity, of which none others were aware, except some members of his family.

In the winter of the year 1849, however, one of his brothers, now a Surgeon in London, came to inform me that my patient's case had assumed now a more serious aspect,—a partridge bone had passed through the urethra, and, besides air, there was occasionally fæcal matter, which then caused some little impediment to the flow of urine. In this condition he came to London, on November 21, 1849, and I met Sir B. Brodie, Mr. Stanley, and Dr. Roupell in consultation; our patient suffering both in mind and body, much pulled down and depressed, as I had been informed by his family, but was buoyed up by the hope—and in which he was encouraged by the gentleman to whose house he came, formerly in the Profession—that some operative proceeding might be suggested for his relief; and, indeed, it was his own impression that the seat of the disease was not remote from the prostate.

A circumstance had always struck him as well as myself, that, whilst intestinal matter had found its way freely, and often, through the urethra, no urine was ever discovered to flow into the rectum. The urine voided was, on this occasion, wholly mixed with fæcal matter, dispersed through it. A most careful examination by the rectum revealed nothing abnormal at or near the prostate. No unnatural condition of parts could be detected by the finger passed beyond the gland; nor was there anything wrong discoverable by external manipulation of the abdomen. The exact seat of the mischief remained a matter of conjecture. From the circumstance of no urine flowing into the bowel, we concluded that the fistulous track of communication with the bladder must be in a more elevated part of this viscus. Sir B. Brodie even hinted that it might be between the fundus of the organ and the transverse arch of the colon,—adhesions having previously been formed between the two.

The urine, when voided, was usually clear at first, but afterwards became mixed, more or less, with feculant matter; still, none of the urine escaped by the rectum,—a circumstance, Sir B. Brodie remarked, that he had also observed in all similar cases that had come under his notice. No positive light was, therefore, thrown upon the exact nature of the case by our examination. All that we could advise was, to follow up the simple rules of treatment that common sense would dictate. We recommended simple diet; to continue to keep the lower part of the bowel free by mild aperients, or by enemata, if necessary, in the evening; and to sleep as much as possible on the back (upon this point I had written to him); to avoid exertion and abstain from night work, as I had always strongly enjoined.

The prognosis of my friend's case was, of course, very unfavourable, and gave us much uneasiness. Sir B. Brodie, who had always seen a fatal termination to these cases, considered that he could not long bear the irritation and inflammation of the bladder, arising from the introduction, constantly repeated, of foreign matter into it, and believed that he would not long survive.

Mr. C., however, returned home, and, with care, was enabled to resume most of his duties. In the January following, his brother informed me that he could go through all excepting his night work. Dr. Roupell shortly afterwards received a summons to visit him, on account of distension of the abdomen, accompanied with hiccup. Aperients were given, and leeches applied to the iliac fossæ. Under this treatment relief was afforded.

From this period we had reason to congratulate ourselves that a favourable turn in the history of the case was dated; and it is remarkable that the aperture of communication between the two viscera, wherever it may have been situate, seemed to have become so far diminished or closed, that intestinal matter had ceased to make its way into the bladder; and he now continued in comparative comfort for many years, troubled, however, at intervals, by attacks of bowel obstruction, due, we imagined, to the existence of some constriction near the seat of the original mischief.

I select a note of Mr. C.'s condition when I visited him in June, 1851. He has lately been much disturbed by flatus collecting, as he imagined, in a large pouch connected with the sigmoid flexure of the colon, and situate, he thought, below some constricted point of the canal. It formed a temporary swelling in the left lumbar region. This swelling disappeared when the air had ascended through the constricted part, and which it would do with a very audible noise. Of this occurrence he complained as being very annoying and troublesome. Of late much less air has entered the bladder. He looks well, but is occasionally very irritable. He still fancied that when air did pass into the bladder it was near to the neck of the viscus. From the symptoms I always considered that the aperture was above the ureters; and, as he would unreservedly discuss the point with me, I made a sketch of where I supposed was the seat of the mischief, and which, I daresay, would be found amongst his papers.

Mr. C. wrote to me occasionally to say that he had attacks of obstruction—relying chiefly on the enemata and mild purgatives for relief. An obstruction of this kind would confine him to his bed, and might be followed by twenty or thirty evacuations. In this way life was prolonged several years, his professional duties, however, being interrupted by these attacks—sometimes very alarming, occurring at intervals of a few weeks, but yielding to simple means; the seat of such obstruction being, we thought, in all probability, at or near the part of the bowel which had communicated more or less directly with the bladder. In other respects there seemed a permanent change for the better; and, with the exception of occasional irritability of temper, and a rather anxious expression of countenance, he looked like one in rude health,—his physiognomy contrasting, as was often remarked at the spring meetings of our club, with the less healthy complexions of the metropolitan members; and about three months before his death last year, when he came to introduce to me his two sons, who had entered our Profession, I complimented him on his healthy appearance.

On Friday, August 23, he drove over to visit one of his brothers in practice in the same county, and seemed to be in his usual state of improved health. On his return home at night, however, he felt unwell, and complained still more the next day. On Sunday his brother was sent for, and found him very unwell, but left him next morning, after employing the usual remedies, believing that he would be "all right again," the distension being, apparently, not greater, or so great, as in many former attacks. His condition did not improve, and on Tuesday afternoon (August 27) the family were alarmed, and sent for his brother again. He prescribed and left him, still not apprehending any immediate danger. "At night," as his son writes, "one of the younger children, who always slept in the same room with the sufferer, came and awoke us all up in a great fright, saying he was dying. We found him quite black in the face, gasping for breath. We gave him brandy, under which he rallied. We immediately sent for a neighbouring Medical friend, who did everything possible, but to no effect. At 7 a.m., our poor father, whilst in the act of turning round, became quite black in the face, and gasped for breath, until life became extinct an hour afterwards. It was an awful sight." He adds,—"We have often seen him quite as ill as he at first appeared in this attack. It was from his old complaint—the bowels. Very little passed from the bowels, and he became swollen to the size of a barrel. No doubt the cause of his death was the wind pressing upwards on the lungs."

The sad and appalling termination of this protracted case in a very hot season of the year, did not permit the thought of a post-mortem examination until it seemed too late for it to be undertaken, when I proposed it to the family, knowing, as one of the relatives remarked, that the poor fellow himself would have wished it.

Interesting as would have been such an examination, we

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should doubtless, however, have found, as in the records of similar instances, that this case would have been quite out of the reach of operative Surgery. On forwarding to Sir B. Brodie the result of this case, in which I knew he was particularly interested, I was favoured with the following reply:—

"Broome Park, Betchworth, Surrey,
September 3, 1862.

"My dear Sir,—I thank you very much for your kindness in communicating to me the result of poor Mr. C.'s case. Such cases are not of very common occurrence, but every now and then they have come under my observation, but in no case that I have seen did nature do so much towards the accomplishment of a cure as in the present instance. I conclude with you that the immediate cause of death was a constriction of the bowel. It seems to me very desirable that the case should be put on record, and I am glad to find that you contemplate a publication of it.

"I remain, dear Sir, yours truly,
"B. C. Brodie."

The extraordinary amount of distension of the abdomen induces me to think, with others, that it may have been partly produced by the giving way of some of the surrounding adhesions, and the consequent effusion into the cavity of the peritoneum. I had postponed the publication of these interesting particulars, until I had an opportunity of seeing the friend who was called in at the time of the fatal termination, to learn if any more light had been thrown upon the case. He considered that the immediate cause of death was the asphyxia arising from the pressure upwards of the diaphragm.

This gentleman found some impediment to the introduction of the elastic tube, which he in vain employed per anum for his relief, but was not clear as to its nature. I never heard my patient complain of any difficulty in introducing the ordinary tube; and we know, as I observed to this gentleman, that an obstacle to the introduction of a long elastic tube for the purpose of relieving the large intestine of its contents, may arise from the varying course of the bowel above the rectum, and which may give rise to the supposition of the existence of stricture. Of this there is an illustration in the museum of St. Bartholomew's Hospital, which I have been in the habit of exhibiting, in which the sigmoid flexure was so long, tortuous, and loose, that it might have been protruded through the inguinal canal of the right side.

Preparations will be found in our collections which not only exhibit the different points at which the intestinal canal may communicate more or less directly with the urinary bladder, but also explain the original causes of such communication.

My attention was directed by Mr. Stanley, during our attendance on our late friend, to illustrative specimens of this kind preserved in the pathological museum of Fort Pitt, Chatham.

Dr. Longmore has obligingly refreshed my memory by sending me the catalogue descriptions of these specimens, and from which I select the two following instructive ones:—

"*Preparation* 1766.—A large sac, situate at the posterior and superior fundus of the bladder, external to its walls, containing a small irregular shaped piece of bone, with sharp points and edges, and of a greenish-black colour. The sac communicated with the bladder by two openings, situate a little to the inner side of the entrance of the right ureter; one of a size to admit a common quill, and the other, capable of receiving a probe. The sigmoid flexure of the colon adhered to the sac, and communicated with it by an ulcerated opening about the size of a crown-piece, with ragged, irregular edges; the piece of bone had probably been swallowed, become entangled in the folds of the intestine, and produced ulceration.

"*Preparation* 1767.—Sac of a large abscess, situate to the left side, between the bladder and rectum, communicating with the former by an opening capable of admitting a common quill above and between the entrance to the ureters; the surface of the rectum is very irregular—much ulcerated, and communicates with the sac by five large openings, the consequence of dysentery of four months' standing."

It is stated that in the present instance no urine was ever observed to enter the rectum. This circumstance may afford some clue as to the part of the bladder implicated, the aperture being probably higher up in its posterior wall than in the specimen preserved in the museum of St. George's Hospital, where urine had passed freely into the bowel. Here a communication, situate at the lower part of the posterior wall, of the diameter of a goose-quill, communicates with the sigmoid flexure of the colon.

The case is described by Mr. Charles Hawkins, in vols. xli. and xlii. of the *Med. Chir. Transactions*, and derives additional interest from the fact of fæcal matter having formed the nucleus of a large stone, which was removed by lithotrity by that gentleman. Hence, the importance sometimes of washing out the bladder, and which the patient may be instructed to do. In my case this treatment did not seem necessary from the easy exit of the foreign matter. The patient whose case was complicated by stone, which Mr. Hawkins successfully crushed, continued afterwards to pass fæcal matter with his urine, and, until within a few weeks of his death, he daily washed out his bladder with warm water by means of a syringe and catheter.

We cannot for a moment entertain the idea that Surgical interference could be of any avail in cases of this description, nor do we derive encouragement from recorded dissections, or from the examination of preserved specimens in our museums. What, then, are we to say to a patient thus afflicted? We must say that the fistulous passage, it is true, is beyond our reach, but we may hope to accomplish much towards his comfort by assisting the restorative powers of nature, aiding her in her instinctive tendency to heal, knowing from such a case as the foregoing that, if there be no serious complication existing, a patient so circumstanced may have his life prolonged for a very considerable period; that, in fact, so far as the aperture of communication between the two viscera is concerned, nature may effect its closure. The Surgeon acquainted with the facts of a history like this would, instead of at once giving the sufferer up to despair, be enabled to impart to him great comfort and consolation. These observations may, perhaps, be not unworthy of attention, as illustrative of the treatment of so grave an affliction, for life was here, in all probability, prolonged by attention to the rules prescribed.

5, Crescent, New Bridge-street.

A CASE OF

RUPTURE OF THE AORTA, IN A YOUNG WOMAN OF TWENTY.

Communicated by GEORGE HILL, M.D., L.R.C.S.E.

A. D., aged 20, housemaid at —— Hotel, was suddenly seized with violent pain in the left side, followed by syncope, on the evening of November 20. Shortly after having recovered consciousness, she became sick, and vomited several times. These symptoms she ascribed to "biliousness," from which, she said, she suffered occasionally. On the 21st, the patient stated that she had passed a rather restless night. Sickness continued, and the stomach rejected all ingesta. Pain, however, was not so severe, and, towards evening, the violence of the symptoms abated. On the morning of the 22nd she felt so much better that she expressed to her fellow-servant her intention of rising and resuming her work; but when the latter returned to the patient's bed-room, she found her motionless, and supposed that she was again in a state of syncope. Medical assistance being procured, it was found that life was extinct.

The patient had resided in —— Hotel for three years, and during that time enjoyed good health. The only symptom of which she complained was, throbbing in the left side of the neck; and pulsation in the left carotid was quite visible, becoming more manifest when she was nervous or excited. For some weeks previous to her death she was rather depressed in spirits.

The above imperfect history of this case was derived from the evidence, at the inquest, of the patient's fellow-servant, who had resided with her for eighteen months, and attended her during the two days of her illness. During her three years' residence at —— Hotel, she had no Medical attendant. My partner, Mr. Lingard, saw her for the first time on the morning of the 22nd, immediately after she expired.

At the post-mortem examination, on the 25th, we found nearly a quart of coagulated blood in the sac of the pericardium. The escape of blood, we discovered, was due to a laceration of the aorta, of nearly an inch in length, immediately above the origin of the artery. The coats of the vessel were preternaturally soft near the lesion, and of a whitish

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colour, but there was neither dilatation nor thickening. The semilunar valves were normal. Indeed, we could not discover any other abnormality.

Remarks.—The remarkable feature in this case was the absence of dilatation, or thickening of the arterial coats; the only apparent deviation from healthy structure being softening, with lacerability, evidently the result of morbid deposit. The question at once suggests itself—Was this preceded by an inflammatory condition of the artery? It is improbable that it was; for, although the history of the case is imperfect, yet the patient had never complained of the symptoms usually attendant on such a disease. Rokitansky and many other eminent pathologists assert, that inflammation is an essential constituent of these morbid deposits. There are many cases on record, however, which do not accord with this theory; but, on the contrary, seem to prove that these deposits are frequently adventitious, and that individuals of a certain diathesis are peculiarly liable to their occurrence. The throbbing in the carotid artery, in this case, may be explained by the loss of elasticity in the aorta, and the consequent irregular propulsion of the blood through the other arteries.

Hooton, Cheshire.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CASES OF INJURY OF THE SPINE AND OF DISEASES OF THE SPINAL CORD.

(Continued from page 465, vol. ii., 1862.)

We continue this week the series of cases commenced in this Journal November 1, 1862. It is next to impossible to arrange them in any definite order, as few will admit of any but an arbitrary classification. Indeed, the three cases about to be related are remarkable for their differences, and seem to agree only in what we may call their geography, that is, they all affected the spine or the contents of the spinal canal. One is a case of apoplexy of the cord, in a patient fifty years of age; the next, disease of the spinal cord, probably one lateral half, following rheumatism in a child; the third, necrosis of the spine, with disease of the supra-renal capsules, there being, apparently, no disease of the cord itself, and, consequently, no paralysis. We hope, in future series, to be able to furnish clinical illustration of most of the important diseases and injuries of the spine and spinal cord.

HOSPITAL FOR THE EPILEPTIC AND PARALYSED.

APOPLEXY OF THE SPINAL CORD—LOSS OF SENSATION AND MOTION IN ALL PARTS BELOW THE NECK—PARTIAL RECOVERY.

(Under the care of Dr. BROWN-SEQUARD.)

This case (Dr. Brown-Séquard said) is one of great rarity, as apoplexy of the spinal cord is much more rare than apoplexy of the brain. The suddenness of the paralysis renders it quite certain that it was due to effusion of blood. As to its precise seat, the complete loss of sensation renders it pretty certain that the grey matter was extensively affected.

To rough observation, this patient was, soon after the attack, in the same condition as a patient who had had apoplexy of the pons Varolii. (See the case related in the Hospital Reports of this Journal, April 26, 1862.) But, on closer examination, there are important differences. In both, the arms, legs, and trunk were suddenly deprived of sensation and power of motion. In the case of apoplexy of the pons Varolii, however, the disease, being much higher, the face also was paralysed, both as to sensation and motion, and the external recti muscles of the eye were also paralysed. In the case we are relating there was no paralysis of the face.

A case, related by Dr. J. W. Ogle, of "anæsthesia of almost the entire surface of the body, as well as of partial motor power," has a superficial resemblance to the cases we have just mentioned; but the cause of the extensive anæsthesia in Dr. Ogle's case was quite different. It was due to the effusion of lymph on the roots of the spinal nerves, chiefly the posterior sensory roots.

Joseph H., aged 60, was admitted July 29, 1861. This patient had suffered from paralysis for fifteen years. One day, fifteen years ago, he fell down in the street in a state of insensibility. He was picked up and taken home, and in a little time (how long is not remembered) recovered his sensibility. He then found that he had lost all feeling in his neck and in every part of the body below. He said that he had not "the least feeling in the world." He had not the slightest power of movement either in the arms or legs. His face was not affected, he says, in any way; there was no distortion, no numbness, and no alteration of temperature; and his sight was not at all affected. He could move his head and face in all directions. Hot water once fell on his thighs by accident, but he did not feel it. Directly after the accident he had retention of urine, and catheters were passed. He passed his motions involuntarily. He was about three months in this condition, and it was twelve months before he could stand alone. He recovered feeling first in the feet. When admitted, he had recovered feeling to a considerable extent; but he could not feel pinching in the neck, except very severe pinching with the nails. He could not close his hands so as to grasp the hand, but could grasp firmly anything large enough—*e g*, both hands. Although his grasp was so much impaired, it was, as the above shows, only so far as complete grasping is concerned. He could not extend his fingers completely. At his second visit to the Hospital he lifted a weight of 112 lbs. He could easily walk about, but was not steady on his legs, and he was obliged to look to his feet. However, with great caution he could walk in the dark. His sight, except a little presbyopia, was very good. No alteration of pupils. He has had two children since the attack. Dr. Brown-Séquard ordered iodide of potassium with ammonia.

September 29, 1862.—The following note was made today:—

The pupils are rather small, but not abnormally so, and act by light. His sight is pretty good; but now and then, even with spectacles, it is dim. There is, however, no marked defect. With spectacles he can read No. 1 (Jager) with the right eye, and No. 2 with the left. The optic discs looked healthy. There was a large crescentic patch on one side, but he was not short-sighted. He says that his hands are in winter very cold. He does not feel that they are so, but others tell him that they are like ice. He walks badly in the dark, and cannot walk safely with his eyes shut. In cold weather he has great difficulty in getting along, until after he has got warm by a little exertion. He has improved, however, considerably, both in the power of using the arms and in walking. There is still considerable anæsthesia.

The following case seems to be some what like that related at page 465 of last volume, but in this instance the cord has been more extensively affected. There was loss of sensation in the left side and of motion on the other, symptoms indicating that the right half of the cord was extensively injured. In a series of cases of diseases of the spinal cord, p. 463, vol. ii., 1862, we remarked on the symptoms produced by such an injury. We shall return to this subject in a future Number, when we shall give the particulars of an interesting case of the kind, which occurred in the practice of Dr. Brown-Séquard.

BIRMINGHAM GENERAL HOSPITAL.

DISEASE OF THE CERVICAL SPINE, FOLLOWING RHEUMATISM — LOSS OF MOTION OF THE RIGHT ARM AND LEG, AND SENSATION OF THE LEFT.

(Communicated by Dr. RUSSELL, Physician to the Birmingham General Hospital.)

I first visited the following case at the request of my friend, Dr. Keyworth, and, by his permission, paid an occasional call subsequently.

March 29.—M. C., aged 12 years. The family history is as follows:—No evidence of inherited rheumatism, save in the instance of the father's mother. No symptom of strume, excepting that one sister has had a diseased knee, now stiff, which had "discharged matter;" nor was there any testimony in favour of congenital syphilis, the parents' history being clear, so far as inquiry without the direct question went. The patient's front teeth are well formed; the sister with the diseased knee is just cutting hers, but they appear normal. Two children lost—one at birth, the other mainly by hæmorrhage from leech bites.

On November 5 last, patient was attacked with rheumatism, and remained ill with it for two or three months, the symptoms shifting and varying in intensity. Careful inquiry seems to

establish the rheumatic character of this illness. During the rheumatic attack she suffered from pain in the neck and in the back, and, as the pain in the neck did not yield, as did the other symptoms, she walked to Dr. Keyworth's surgery, two months ago, to complain of it. A blister was then applied. For six weeks this pain has been worse, and had moved from the median line behind to the region of the sterno-mastoid muscles. The pain was chiefly present when she first rose from the recumbent posture. Of late she has been accustomed to support her head with her hands.

Three weeks ago her mother discovered by accident that the power of the right arm was impaired. The failure of power increased, and in about a week the right leg participated. Within the last week both limbs have become perfectly powerless. Yesterday morning, as the patient was being dressed, she complained of much pain in her neck, and suddenly cried out that the left arm and leg had gone to sleep. This sensation still continues. Urination and defecation have not been affected further than that the former is very unfrequent.

The child has always been healthy. Two years ago she had diphtheria. The present is the first attack of rheumatism from which she has suffered. She is well nourished, has dark hair and eyes, and is very intelligent.

I found her lying on her back, afraid of the least movement of the head or neck, and hardly venturing to use her limbs. She indicated the right sterno mastoid as the seat of pain. The right upper and lower extremities were perfectly powerless, and no reflex movement was excited by tickling the sole; but sensation seemed little, if at all, affected. On the other hand, the left lower extremity was moved as freely as her awkward position and fear of any change of posture permitted, and so was the forearm; but the shoulder muscles seemed feeble. Sensation was almost abolished in the left lower extremity, but in the upper extremity was little affected. (The state of the trunk is not noted). Ribs moved to a limited extent only in breathing; I could not discover any difference between each side; but, from her twisted position, this portion of the examination was inexact. There was, obviously, fluid secretion collected in the bronchial tubes; she had been observed to cough for three days; sounds of the heart were peculiarly ringing; a remarkable tendency to perspiration had been observed the past few days. I need not add that it was impossible to ascertain the condition of the vertebral column, excepting that, when the finger was passed to the posterior region, decided induration could be felt towards the median line.

On April 1, her state had undergone little change; she had not stirred from her posture at my last visit; sensibility of left arm dull—I thought also of the right; had not had a fæcal evacuation since I last saw her.

8th.—She was able to move the toes of the right foot, and had entirely recovered sensation in the left limbs; any movement to smooth her bed caused exquisite pain in the neck, continuing for two hours afterwards. On passing my hand to the back of the neck I could only discover rigidity of the vertebral muscles, with great tenderness in the region of the upper spinous processes.

20th.—She had recovered power to flex the right lower extremity, though, when flexed, she was unable to extend it again; the calf of the leg was between a quarter and a half an inch less in girth than that of the left leg; the left shoulder also possessed normal power in its muscle. By a great omission this is the first day on which any note is made of the pupils, which then were equally and widely dilated; she preserved her health, though she scarcely performed any movement from day to day.

May 21.—Her mother had been accustomed to raise her every Saturday for the purpose of cleaning her; the operation had always caused much pain, and the patient had not been so well for two or three days afterwards. Up to the last occasion the patient had been progressing favourably, though her arm had remained powerless. After the cleaning on the 17th she complained of unusually severe pain; this continued in frequent paroxysms ever since, producing loud cries. To-day the paroxysms have been less severe; the pain here spoken of was confined to the back of the head, in the right occipital region, and with space between the posterior cervical muscles; it did not affect the face or the limbs; she had also constant vomiting on the 18th, as she had also after the previous cleaning; she has wasted considerably; movement is effected about as at the last report; her pupils have become quite natural; she would not even allow me to lay my hand on her pillow; perfect absence of all movement was now strictly enjoined.

July 16.—She is able to move her head a little, just raising it from the bed, and rotating it slightly; respiratory movements are ample and complete; but motor power in the right side has not increased; her face is plump, but her limbs are emaciating very considerably.

On the 8th of this month (December) I found her greatly improved. For the preceding three weeks she had been able to rear herself up in bed, and to assume a half sitting posture; she could also flex and rotate her neck, though, of course, I did not venture on ascertaining to what extent. Had perfectly regained motor power in her right limbs, and could write and sew with her right hand; the nutrition of the hitherto paralysed limbs has recovered itself. Her general health continues good. My examination of the neck was still incomplete, but I could discover evident bony deposit in the region of the laminæ, I think of the second and third vertebræ, and chiefly on the left side; the spinous processes, too, are much enlarged.

I called the other day to learn the result of an experiment to adapt a splint to the head, neck, and shoulders, but found that she could not yet bear its weight.

In the former of two cases of spinal hemiplegia, detailed by Dr. Todd, in his Clinical Lectures (Case cexiv.), the disease lay in the odontoid process: the second case, which recovered, seems more nearly to resemble the one I have just detailed. I much regret that I made no examination of the urine, especially with reference to the presence or absence of sugar.

MIDDLESEX HOSPITAL.

A CASE OF CARIES AND NECROSIS OF THE LUMBAR REGION OF THE SPINE COMPLICATED WITH DISEASE OF THE SUPRA-RENAL CAPSULES—NO BRONZING OF THE SKIN.

(Under the care of Mr. HULKE.)

Mr. Hulke remarked that, in a recent article in the Guy's Hospital Reports, by Dr. Wilks, it is stated that disease of the supra-renal capsules had been found by Dr. Addison in three cases of spinal caries, and that this complication had been since observed on two or three other occasions. From the fact, that in every instance the lowest dorsal or upper lumbar vertebra, in the neighbourhood of which the capsules lie, were those affected, Dr. Wilks thinks it not improbable that the morbid process extends from the spine to the capsules. Mr. Hulke thought that this view was supported by the present case, where, from the morbid appearances noted in the examination of the parts, it is probable that the spinal preceded the capsular disease in order of time, and where that capsule which was contiguous to the older spinal abscess was most disorganised. He thought that the probably short duration of the capsular disease, inferable from the generally firm, lardaceous character of the organs, and the presence of vestiges of their proper tissues, might account for the absence of bronzing.

A mechanic, aged 30, was admitted into the Middlesex Hospital, in September last, with pain and tenderness in the lumbar region of the spine, and a deep fluctuating swelling in the left lumbar and inguinal regions, which communicated beneath Poupart's ligament with a large indolent abscess lying across the top of the thigh, between the common femoral vessels and the anterior superior spine of the ilium. These local signs were accompanied with emaciation, a degree of feebleness quite out of proportion to the loss of flesh, a very irritable stomach, and obstinate constipation. It was plainly a case of spinal caries with psoas abscess. A horizontal posture was enjoined, and small doses of strychnine were ordered. Under this treatment the stomach became less irritable, he was able to take more nourishment, and his general condition slightly improved. The abscess during this time remained nearly stationary. November 6, at 9 a.m., on rising from his bed to go to the neighbouring water-closet, he became faint, grew weaker during the day, and expired at 8 a.m. on the following morning. During this last attack his pulse was very weak and irregular, his breathing quiet, air entered the chest freely, but his lips became blue and his complexion dusky.

At the post-mortem examination, made thirty hours after death, an abscess, holding nearly a pint and a-half of pus, was found in the course of the left psoas magnus. Its source was a small cavity hollowed out in the bodies of the third and fourth lumbar vertebræ, which contained a small seques-

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trum, surrounded with thick, curdy pus. The corresponding portion of the intervertebral disc had disappeared; the walls of the cavity were uneven and friable, and the bony tissue for some distance around was solidified by a lardaceous deposit in the cancelli. The sac of the psoas abscess was very thick, particularly at its lower end, where it communicated with the portion below the groin by a small circular opening beneath the outer extremity of Poupart's ligament. The mass of the psoas had disappeared; only a small quantity of pale, muscular tissue in connexion with the twelfth dorsal and second upper lumbar vertebræ remained, and this contained several small, scattered, circumscribed abscesses. On the opposite side of the spine there was a second and smaller psoas abscess, reaching as high as the twelfth dorsal, and below, crossing beneath the anterior common ligament at the third lumbar vertebra, to communicate with the cavity in the spine and the larger psoas abscess already described. The sides of the bodies of the first and second lumbar vertebræ were denuded of periosteum, and bathed in pus; the bony surface was rough, and its vascular foramina large, but neither carious nor necrosed. The abdominal viscera were healthy, with the single exception of the supra-renal capsules, which weighed ʒij. gr. xx. and ʒiij. gr. xxxv. They were hard and knobby. A section presented a homogeneous appearance, mottled with a few small, yellowish, friable specks. In several microscopical preparations traces of the proper structure were discernible. The enlargement appeared due to infiltration of the organs with a material which, in a fresh state, is nearly translucent and structureless. The apices of both lungs contained a few scattered deposits of tubercle. The right pleural cavity was obliterated in nearly its entire extent by old adhesions. The left side of the heart was almost empty, whilst the right auricle was distended with a black, spongy, friable clot; and the right ventricle contained a tough mass of fibrin wrapped around the musculi papillares and chordæ tendineæ, and prolonged through the trunk and primary branches into the small divisions of the pulmonary artery.

PRISON EXPENDITURE.—A correspondent of the *Times*, Mr. C. P. Measor, writes:—"I find that, in the estimates laid before Parliament and passed for the year 1851-52, each convict at Portland Prison was to be clothed, fed, and safely kept for £23 15s. 3d., and the Report of the Convict Directors for 1851 shows, moreover, that this estimate was not exceeded. The discipline of that, the model Public Works Prison, was acknowledged to be as nearly as possible perfect, and, as regards industry, the Directors reported that the work executed amounted 'to £25 per man on the total daily average of 821 confined in the prison, or more than the entire cost of the establishment.' The profit is elsewhere stated to be £3800, thus ostensibly realising the aim of Mr. Charles Pearson, the lamented solicitor to the City of London,—a self-supporting penal establishment, a genuine labour prison. From this happy and successful era in prison management there seems to have been a gradual and sure decline. In that year the estimate covered the actual cost, but each year's subsequent expenditure has been in excess of the Parliamentary estimate, and the estimates again annually enlarged to meet the necessary expenditure, until at the end of ten years we have this result, that the estimate per man for 1861-62 is £35 4s., and the actual cost, by the table of expenditure annexed to the annual report, is £37 16s. 1d. at this same prison of Portland. At Chatham Prison the actual cost was £40 13s. 1d. per convict; and the entire difference between estimate and expenditure for the whole home convict prisons was this—that Parliament voted for the year 1861-62 £272,243 to maintain 8136, but that it took £275,985 6s. 1d. to maintain a daily average of 7291, being at the rate of £37 17s. per head for male and female convicts, instead of £33 9s. 2d., as voted. This immense increase of cost from £23 15s. 3d. at Portland in 1851-52 to £37 16s. 1d. in 1861-62 is to be accounted for in various ways. The cost of supervision has increased in that time from £9 17s. 4d. to £14 9s. 2d. per convict, there being a larger proportionate staff of officers now required, and, where one to eight prisoners sufficed ten years ago, there being now about one to six. Beyond this the entire increase goes in some way or other to the augmentation of the convict's personal comforts. His gratuities for 'willing industry' have been largely increased, his clothes, which then cost at Portland £2 18s. 6d., cost last year £4 2s. 1d., and his victualling, then averaging £8 5s., has advanced to £12 6s. 7d."

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Medical Times and Gazette.

SATURDAY, JANUARY 10.

VERTEBRAL PATTERNS.

BEFORE we proceed to adduce examples in detail of the relations which exist between the different parts of vertebræ, and of any ideal pattern to which they may be referable, it will be interesting to give a brief sketch of the mode by which the first idea and consequent inductive demonstration of the vertebral theory of the skull was originally conceived. Oken himself describes the mental process by which he arrived at this happy idea. Except Newton, the discoverer of the law of gravitation, few great discoverers have revealed the means by which the conception of a general law became developed to their minds. In August, 1806, whilst Oken was travelling in the Hartz Mountains, he saw the whitened skull of a deer lying on the ground. He picked up the partially dislocated bones, examined them most attentively, when suddenly the truth flashed across his mind, and he exclaimed, "It is a vertebral column!" This idea, however, was not like the sudden inspiration, or premature deduction of an uneducated man, who fancies an analogy in objects intrinsically dissimilar; none could have arrived at so philosophical a thought but a comparative anatomist who had spent his life in the practical manipulation of vertebræ and skulls. The idea, however, having once occurred to Oken, he pondered deeply thereon, testing his conclusion by comparison with the skulls of a cetacean, a chelonian, and a codfish at Bremen; and when he returned to Jéna his generalisation was published in a lecture on the "Signification of the Cranial Bones." In this work (1807), the theory was first propounded that the skull was composed of three vertebræ. A few of his antagonists, unable to demonstrate that the vertebral theory was a philosophical untruth, attempted to exhibit it as an idea which had been previously arrived at. Meanwhile, Autenrieth, Jean-Pierre Frank, Ulrich, and Kielmeyer propounded various vertebral theories, all more or less identical with those of Oken, though differing from his doctrine in many unimportant points. The idea was, however, now fairly started, and it was only necessary for some clear-headed mind to disembarrass the subject from all confusion.

Oken's generalisation was too good a discovery to escape the appropriating spirit of the poet Göthe, in whom, as Owen has remarked, "the moral element was the least developed." In the year 1820, when the vertebral theory had been generally canvassed, the ingenious poet quietly published a pamphlet to the effect, that the vertebral nature of the bones of the skull had been discovered by him in 1790. He, however, divided the skull into six vertebræ. Göthe's most philosophical biographer has defended his conduct, and regarded it as a mere accidental coincidence that the same idea should have occurred to both Oken and Göthe. It is, however, very significant

that Gothe suppressed all mention of his discovery until the year 1820, when the vertebral theory, having received from the labour of others the imprint and stamp of authority, was received into "the treasury of accepted truths."

When the theory was canvassed in France, Geoffroy St. Hilaire supported it; Cuvier, whose reticent mind towards the close of his career led him to reject any new theory, opposed it. In 1830, a dispute arose in the Paris Academy between these two master-minds, when the supporters of either theory ranged themselves under the banners of the rival anatomists. The victory was undecided; and the death of Cuvier shortly afterwards terminated the conflict.

In this manner the great philosophical dogma was promulgated, which the illustrious anatomist, Robert Knox, who has passed away within the last month, used to term "the transcendental theory of organic bodies, the greatest discovery which has ever been made, not even excepting the law of gravitation." The inductive demonstration of the relations which each vertebra bears to an ideal pattern was subsequently given by Owen in the year 1848, and belongs to a later period of history.

We must premise that in no known vertebrate animal are the whole of the contained structures developed to the same extent as in the ideal archetypal pattern, which we now insert:

Fig. 1.

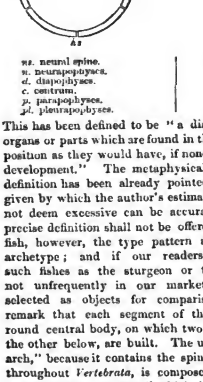
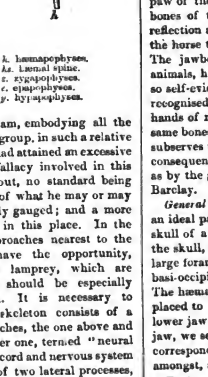


Fig. 2.



ns. neural spine.
n. neurapophyses.
d. diapophyses.
c. centrum.
p. parapophyses.
pl. pleurapophyses.
h. hæmapophyses.
hs. hæmal spine.
z. zygapophyses.
e. epapophyses.
y. hypapophyses.

This has been defined to be "a diagram, embodying all the organs or parts which are found in the group, in such a relative position as they would have, if none had attained an excessive development." The metaphysical fallacy involved in this definition has been already pointed out, no standard being given by which the author's estimate of what he may or may not deem excessive can be accurately gauged; and a more precise definition shall not be offered in this place. In the fish, however, the type pattern approaches nearest to the archetype; and if our readers have the opportunity, such fishes as the sturgeon or the lamprey, which are not unfrequently in our markets, should be especially selected as objects for comparison. It is necessary to remark that each segment of the skeleton consists of a round central body, on which two arches, the one above and the other below, are built. The upper one, termed "neural arch," because it contains the spinal cord and nervous system throughout *Vertebrata*, is composed of two lateral processes, termed "neurapophyses," which, joining at their upper ends, form a bone sometimes bifid, termed "neural spine." The lower arch, which envelops the circulatory, digestive, and respiratory systems, is termed "hæmal," and is also composed of two lateral processes, or hæmapophyses, uniting together to form a hæmal spine. Across the lower part of the neural arch run right and left two lateral buttresses, the diapophyses; beneath them, attached to the centrum, two more or less lengthened lateral buttresses, the parapophyses. When these two processes are confluent, the arbitrary term "transverse process" is often applied to them. At the end of the transverse process is often attached a bone, the pleurapophysis; backwards from the neural arch run the anapophyses; outwards and peripherally, the metapophyses. Above the centrum a small arch, internal to the neural, and beneath the centrum an physes, is sometimes developed, and beneath the centrum an analogous one, formed by the hypapophyses within the hæmal arch. From the neura- and diapophyses often diverge backwards prominences termed "zygapophyses." The anterior and posterior extremities are considered, morphologically, as diverging appendages, the fore limb, *e.g.*, being the diverging appendix to that hæmal arch, of which the shoulder-blade is the pleurapophysis. These diverging appendages are in the ideal archetypal skeleton, and in the fish, the reptile, and the bird, developed transversely, and stand outwards and backwards from the thoracic ribs (pleurapophyses) along their series. In the mammal, and in man, they are, however, suppressed, excepting in parts of the skull and the fore and hinder limbs. As may be expected, the anterior limb is of the same essential nature as the posterior. The pelvis forms the pleurapophyses and hæmapophyses, whilst the leg bones in all *Vertebrata* are diverging appendages. The demonstration of such relations forms what has been called "serial homology." This is so obvious that we apply the term "vertebra" to the homologous structure which is found in the neck (cervical), in the back (dorsal), in the loins (lumbar), or in the tail (sacro-caudal) parts of the body. The bone is seen in each of these cases to be composed of similar or homologous parts.

Special homology is a theory which almost every one will instantly appreciate. We see plainly that the wing of a bird is framed upon a structure, the whole of which is parallel in its nature to that of the forelimb of a dog; *i.e.*, that the humerus in both articulates with the scapula, and joins at the elbow with the ulna and radius, which support carpals, metacarpals, and phalanges. We also see that the bones in the paw of the cat or the monkey answer, in their nature, to the bones of the human hand, and we, by the aid of a little reflection and practical science, can recognise in the hoof of the horse the special homologue of the middle finger in man. The jawbone, which supports the teeth in all vertebrate animals, has certain common characters. Many of these are so self-evident, that the homologies of the monkey's limbs are recognised to be those which regulate the form of the feet and hands of man, which, though homologically composed of the same bones, are adapted to a different purpose than that which subserves the erect position of man. Special homology has, consequently, been readily accepted by all biologists, as well as by the general public, since the days of Vicq d'Azyr and Barclay.

General homology is the relation which each bone bears to an ideal pattern or typical vertebra. If any one will take the skull of a bird, and hold it before him, looking at the back of the skull, he will perceive half the occipital vertebra. The large foramen magnum is the neural arch; the small, round, basi-occipital bone beneath it is the centrum of the vertebra. The hæmal arch of this segment is not apparent, it being displaced to form the anterior extremity. But, if we drop the lower jaw of the bird to a line at right angles with the upper jaw, we see the hæmal arch of the frontal segment. This corresponds to its own proper neural arch, intercalated amongst, and confluent with, the other cranial bones.

Each organ may be, to another organ, either an analogue or a homologue. Thus, the pectoral member or wing of a bird is homologous in its nature with the forepaw of a lion, or the forefoot of an ox; it is also, in a certain sense, home-

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logous with the pectoral fin of a flying fish, as being developed from the fore-member of the body; but it is merely analogous with the wing of a butterfly. An analogue is, in short, a part or organ in one animal which has the same function as another part or organ in a different animal; a homologue is the same organ in different animals under every variety of form and function.

The neurapophysis is the first vertebral element which demands our attention. We see it nearly in its typical form in the dorsal vertebra of any mammal. We see it proportionally maximised in the aliphenoid of the human skull; minimised in the little ridges perceptible on the caudal vertebræ of many vertebrates; suppressed in the last caudal. The usual form of two bony plates, united at the upper extremity by a neural spine, is rarely departed from. The neural spine, or metaneuraphysis, we see maximised in the parietal bone of man, where its enormously expanded plate serves to enclose the greater portion of the brain case; usually, however, its form can be best recognised in the "spinous process" of any vertebra. In the thoracic and abdominal vertebræ of tortoises, it forms a flattened and depressed plate; while we see in the rectangular bony buttress of the cervicals of the marsupial another example of its maximisation. In the cervicals of the mole, on the other hand, it is suppressed. To give an example of the segmental constitution of any vertebra is most easy; and we shall take the occipital vertebra of man, contrasting the same with the homologous structure in the *Lepidosiren*, or mud-fish (*Protopterus*).

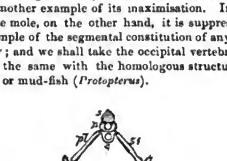

Diagram of the Occipital Segment of Mud-fish (*Protopterus*).

c. centrum, or basioccipital.
s. neurapophyses, or exoccipitals.
s. neural spine, or supraoccipital.
51. pleurapophyses, or scapulæ.
52. hæmapophyses, or coracoid.
53. } diverging appendages. humeri.
37. } phalanges.

The basilar piece of anthropotomy is the centrum. On its inferior face is seen, in the human skull, a tubercle for the attachment of the constrictor muscle of the pharynx; this, in man, is merely a tubercle; in some *Rodentia* and *Cetacea*, its place is occupied by a remarkable depression. In the crocodile and the ostrich, there is, on the contrary, a voluminous projection. This is the hypapophysis. The neurapophyses are formed by the exoccipitals, which form the lateral walls of the neural arch, or foramen magnum. Partly from the exoccipitals, and partly from the basioccipital, are developed the condyles, which are homologically zygapophyses. In the *Mammalia*, as in man, there are two condyles; in the bird, but one; in the crocodile, and in most *Reptilia*, but one; in *Batrachia*, and in the extinct labyrinthodonts, there are two condyles; in fishes, instead of a condyle projecting into the atlantal cup, there is a conical depression, filled with a gelatinous capsule, in the centre of the basioccipital bone. Above the exoccipital is the "squamous body," or supraoccipital. We see it in man enormously expanded; it is also largely exposed in the walrus, seal, mole, elephant, and monkey. As Bertrand has pointed out, sometimes it merely serves to form a portion of the flattened hinder wall of the cranium; sometimes, as in many edentates, ruminants, the horse, and some pachyderms, it is composed of two plates, united at a right angle, the upper plate belonging to the cranial chamber, the lower plate to the posterior wall of the skull. The composition of the supraoccipital, as regards the number of its ossific centres, has been much obscured, owing to the diversity of opinion between various authors on the subject. Holden, we think, correctly assigns to it but one centre of ossification. Other authors have regarded that part of the bone originating above the semicircular line as possessing a distinct centre; while some have assigned to the supraoccipital three, four, or even five centres. These opinions are partially corroborated by the very frequent presence in Peruvian and other crania of a so-called "interparietal" bone, the *os épactal* of Blasius, which is still often alleged to represent in man the interparietals of the inferior *Mammalia*. More accurate information has dispelled this illusion. In a skull of the Limbu tribe, from Nepál, Owen has pointed out an instance in which the so-called interparietal has been divided into three distinct *quasi*-symmetrical bones above the semicircular line. The edges of the exoccipital, near the jugular eminence, or point of insertion of the *rectus capitis lateralis*, a process, the parocciptal, is very often developed, which has now been observed in nearly every race of mankind, and more commonly in the "dark races." This process is sometimes as long as the true mastoid. It is the lower transverse process, or parapophysis, of the occipital vertebra. Between it and the mastoid, Professor Hyrtl has described another process, termed by him the "pneumatic process," but of which the connexion with the occipital segment is as yet undemonstrated. We are at present wholly in ignorance as to the homological relation of this singular development.

The hæmal arch of the occipital segment is displaced from its normal position, articulated to the transverse process, and will be found in man beneath and behind the cervical series. The scapula is the pleurapophysis; its coracoid process, the hæmapophysis; the humerus, ulna, radius, carpals, metacarpals, and phalanges, are segmental divisions of the diverging appendix. We shall not, however, at the present stage, enter into the question of the nature of limbs. The occipital segment, in its simplest state, can be seen in any fish, where the anterior extremity, or pectoral fin, is articulated to, and a component part of, the skull. In the cod, one branch of the suprascapula articulates with the parocciptal; another lower branch is connected with the exoccipital; and thus, the forelimb, homologous with the arm of man, is seen to be an essential part of the skull. Such a structure can scarcely be perceived by those who have made anthropotomy a special study, to the exclusion of the more catholic branches of biology; but it must again be iterated, that the study of the more simple forms of *Vertebrata* affords us a certain clue whereby to interpret the complicated forms of life, through which successive dynasties of being, existing through the vast ages of geological time, have passed. We rather prefer to believe that the archetypal vertebrate skeleton, whatever exact form it might have possessed, was once manifested in the flesh, as an objective entity, than conceive it merely as a process of the Creator's thought. Idealists may sneer at our "mystical and exceedingly delusive anatomy;" ultra-nominalists may tell us that we "seek to introduce an obsolete and scholastic realism into biology;" "practical men" will make use of the little that they do understand to depreciate the larger range of thought which they do not understand; but inductive students, seeking in the vast field of osteological science a *vera causa* for the relations which animals admittedly bear to some common type, from the assemblage of corroborative facts before them, will accept the corollary of the existence of an original supreme archetypal pattern of life, whence all forms have been derived, either by successive creation, through the fiat of an Almighty Life-giver, or by descent, with modification operating through laws analogous to those which govern the reproduction and succession of individuals.

Royal College of Surgeons of England.—For the recent Preliminary Examination for the Membership of this College, 105 candidates offered themselves, of which number 95 were successful; want of space precludes us publishing the list.

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THE WEEK.

THE ARMY MEDICAL DEPARTMENT.

In another part of our impression we publish some extracts from a letter by an Assistant-Surgeon of the Indian army, giving publicity to a strong feeling of discontent at the present position and prospects of that branch of the service. We are sorry to have again to call our readers' attention to the fact, that a similar feeling prevails in the Army Medical Department at home. It becomes every day more manifest that the Royal Warrant of October, 1858, is practically no longer in force. Not only is the obnoxious additional Warrant of March, 1861, which deprived the Army Surgeon of the rank granted him by the Queen, by placing him junior to the same rank of combatant officer—that of major—unrepealed, but complaints are daily reaching us that other provisions of the original Warrant are constantly being infringed. For instance, Surgeons of cavalry regiments are not allowed forage for the same number of horses as regimental officers of the same rank; and, on committees and mixed boards, junior combatant officers are allowed to take precedence of the Surgeon, in direct contravention of the provision of the Warrant. Again, the whole department has recently been aggrieved by the appointment of a German Physician, Dr. Emil Becher, whose age is considerably in advance of the specified time, to an Assistant-Surgeoncy, his commission being antedated February 13, 1855, and he being thus promoted over the heads of more than four hundred and fifty Assistant Surgeons. Dr. Becher, at the date of his commission, was not only, as a German graduate, unqualified by the rules of the service, but was not a naturalised British subject. True, his acquirements and talents as a pathologist are undoubted. We believe that he rendered valuable assistance to the late Dr. Tice in the Hospitals at Scutari, and that since the Crimean war he has acted as pathologist in China and at Fort Pitt. But, during all that time, he has received liberal payment for his services. We do not, however, for one moment, grudge Dr. Becher any reward the Government may think fit to give him; but we do complain of the injustice done to every Assistant-Surgeon who has been thus placed below him. Promotion is now excessively slow. We believe that scarcely an Assistant-Surgeon has been promoted in the last four months. It is, therefore, no slight injury that has been inflicted on these gentlemen. As might be expected, this treatment of the Medical branch of the service is beginning to tell outside. Candidates do not come forward in sufficient numbers to fill the vacancies. This was the case at the last examination, and will certainly be the case again, if the authorities do not keep better faith with those who have already been induced to enter the service by the baits held out in the Warrant of 1858.

THE ANNUAL ELECTION OF OFFICERS AT THE PATHOLOGICAL SOCIETY.

At the last meeting of the Pathological Society, held on Tuesday, there was a larger attendance than we have seen for several years. Mr. Erichsen, in proposing a vote of thanks to the retiring President, alluded, we suppose sarcastically, to this attendance, as evidence of the great prosperity of the Society. It was well known that the election of Mr. Prescott Hewett to the Presidency, the candidate proposed by the Council, would be opposed, and it was this election spirit, rather than love of pathology, which crowded the rooms of the Society. Whilst the ballot was open there was a long discussion as to a supposed informality in the manner of voting. It appeared that some of the members had received two voting papers quite alike as regards the list of names, but with little differences of printing, showing that they were not both issued by the Society. After a great deal of talk on both sides of the question, the President ruled that any list might be received provided it contained the proper number of names. The two scrutineers appointed by the President were Dr. Broadbent and Mr. William Adams. The result of the voting was that the gentlemen proposed by the Council were elected. Of course we do not know the relative number of votes recorded for Mr. Prescott Hewett, but it was reported in the room that he received eighty votes, whilst another gentleman, Mr. Coulson, is said to have received half that number. We say again, that we give this merely as a report If it were correct, there must have been 120 members present, as voting by proxy is not allowed. It would indeed speak well for the Society if so many were brought together on account of zeal for pathology.

FEES TO MEDICAL WITNESSES IN POLICE-COURTS.

Mr. Greenwood, of Islington, has brought the injustice to which Medical Practitioners are subjected, who are called to give evidence in police-courts, again into public notice. He was called up on boxing-night to attend a woman who had received a severe scalp wound at the hands of a bricklayer's labourer. He gave the patient a long attendance, for which he was not paid, and was then summoned to give his evidence at the police-court, where he had to appear on two separate occasions. The case terminated in the committal of the woman's assailant for three months. Mr. Greenwood then applied for his costs of attendance. The magistrate, Mr. D'Eyncourt, said he could not allow any expenses, as he had no fund at his disposal for that purpose. Mr. Greenwood said that he thought "it was very hard that Medical men should be called up at all hours of the night to attend to cases for which they got no fee, and then be compelled to attend the police-court, and not be paid for their loss of time. If Medical men refused to get up and attend to such cases, they would be thought very hard-hearted, and public indignation would be raised against them." Mr. D'Eyncourt said that Mr. Greenwood had better write to the Home-office; he would certify that the case was one in which costs ought to be allowed. Mr. Greenwood said he would act on the magistrate's suggestion. We hope that Mr. Greenwood will in this case get his costs; but, if he do, we believe it will be an exception to the general rule. Before a higher tribunal remuneration is allowed for the attendance of the Medical witness. Certainly, the fact that a case is disposed of by a magistrate cannot lessen the claim of a Medical Practitioner to be remunerated by the public, for what involves frequently a greater expenditure of time and far more trouble and annoyance than attendance in a superior court,

THE SUSPECTED POISONINGS AT MAREHAM-LE-FEN, LINCOLNSHIRE.

An investigation has just taken place before Dr. Clegg, the coroner for Boston, which has terminated in the committal of a grocer named John Garner, of Moorhouse, in the parish of Mareham-le-Fen, near Horncastle, and his wife, on a charge of having poisoned the mother of the male prisoner, Jemima Garner, by the administration of arsenic. The deceased died in December, 1861. In consequence of various reports which had reached the coroner, he ordered the exhumation of the body in November last. The post-mortem examination was made by Dr. Boulton, of Horncastle, and Mr. George, Surgeon, of Revesby, the latter of whom had attended deceased during her life. According to the evidence of Mr. George, she had suffered from the symptoms of irritant poisoning—vomiting and purging: he had treated her accordingly, and had certified that her death took place "after six days' diarrhœa." The examination of the body showed that the external parts were much decomposed, that the coats of the stomach and muscles of the abdomen were covered with yellow stains, and that the tissues in the neighbourhood of the spine were deeply tinged and saturated with a bright yellow colouring-matter. The organs of the chest and

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abdomen were sent for analysis to Professor Taylor. The following is Dr. Taylor's evidence :—

"On Saturday, November 29, I received, at the chemical laboratory, Guy's Hospital, from Sergeant Lampton, three jars well secured and sealed. These were kept locked up until the analysis was made. I have embodied the results in the following report :—

"*Small Jar.*— Seven ounces of bloody liquid in a putrescent state. It was tested for mineral poison, but none could be found in it. *Large Jar* (containing viscera of deceased).—On opening this jar there were found in it the liver, heart, lungs, spleen, kidneys, stomach, and intestines, with a portion of the bones of the spinal column (lumbar vertebræ). These organs were in a good state of preservation, so that all the structures would be easily recognised. The heart and intestines were so preserved that they appeared as if they had been taken from a person recently dead. The liver was shrunk, small, and of a dark slate colour. It weighed about 1 lb. Its structure appeared healthy. The heart was of the usual size, scarcely altered by putrefaction. Its cavities were examined as well as the valves. There was no appearance of disease in any part. The lungs were more decomposed than the other organs. They presented no unusual appearance. The stomach and intestines presented, on the external coat or membrane, patches of a deep yellow colour. The most extensive patches were on the stomach, and chiefly on its under or posterior surface (that part which is nearest the spinal column); one of these, covering about five square inches, was found in the fat of the mesentery, surrounding the intestines. The stomach was more decomposed than the intestines. The stained portion was firm, but other portions had given way in one or two places. The interior was then laid open. There were no fluid contents in it, but the inner coat or lining membrane was covered with a thin dark substance, in which were numerous small particles of a bright yellow colour. This substance, when placed in water, gave to the liquid a reddish-brown colour resembling that of decomposed blood. It was examined by the microscope, but presented no other appearance calling for remark. The coats of the stomach were thinner than natural. This is the usual condition when bodies have been buried for many months. The coats of the intestines were thinner than natural (a result of changes in the dead body). In addition to the yellow stains, they presented a well-marked redness in the upper portion, such as would be caused by inflammation, &c., taking place during life. They were quite empty, and entirely decomposed at the lower part, but at the upper part they were fresh and firm. The portion of the spinal column in the jar presented a remarkable appearance. There were, in the soft parts which covered the bones in front, several patches of a deep yellow colour, resembling those found in the stomach and intestines. These stains were firmly incorporated with the membrane and ligaments covering the bones of the spine, and some were found dyeing the flesh still attached to the vertebræ. This flesh was red and firm, and had undergone but very little change from putrefaction.

"*Analysis.*—The first was to determine the chemical nature of the yellow stains or patches of colour on the stomach, intestines, and spine. Portions of the colouring matter were removed from these different structures, and separately examined. They did not contain any bile or biliary matter, but consisted of orpiment or yellow sulphide of arsenic, mixed with arsenic in a soluble form. This is a mineral poison. All the stains examined were due to this substance, which had penetrated into and had become incorporated with the soft structures of the body. A small portion of the yellow colouring matter was removed from the front of the spine and reserved. An unstained portion of the coats of the stomach was submitted to chemical analysis, and was found to contain arsenic in a form in which it was soluble in water—that is, white arsenic. All parts of the stomach examined contained arsenic. Portions of the intestines were examined, and were found to contain arsenic. The quantity of orpiment found in or upon the stomach, intestines, and spine was estimated at from six to eight grains, corresponding to five or six grains of white arsenic of the shops. Two analyses were made of portions of the liver, and arsenic was found in each case. It was present in corresponding large proportions. The conclusions, the results of the analyses, are :—1. That arsenic was present in the stomach, intestines, liver, and heart of the deceased, in all the parts of these organs submitted for examination. 2. That the arsenic was contained in the stomach, intestines, and in the flesh and ligaments of the spine, partly in a soluble and partly in an insoluble form—that is, as orpiment or yellow arsenic. 3. That the orpiment or yellow arsenic which, causes the patches of colour in the stomach, bowels, and in the spine, has probably been produced by a chemical change in the white arsenic contained in the stomach and bowels at time of death. 4. That the yellow stains found on the spine were produced by arsenic escaping through the coats of the stomach after death, and the yellow stains on the mesentery were caused by arsenic escaping through the coats of the intestines. 5. That the quantity of yellow arsenic altogether was probably not less than six to eight grains, equivalent to from five to six grains of white arsenic. 6. That the discovery of arsenic in the substance of the liver and heart renders it probable that the deceased had taken the poison some time—that is, one or two days before death. 7. That the quantity found in the body would be fatal to a human being, and, in the absence of any other apparent cause, would be quite sufficient to account for death. The third jar contained earth from the grave, and in this a small quantity of arsenic was found; but the arsenic here was in a form perfectly insoluble in water, and it could not in any way account for the arsenic found in the body of deceased. It was not in the state of orpiment or yellow arsenic. The symptoms described by Mr. George would be those of poisoning by arsenic. I should say that deceased must have had arsenic in several doses for two days or more prior to death."

Evidence was also given to prove that the accused persons, who at the time were not married, had both frequently illused the deceased, and that they had together mixed the arrowroot which was administered to her in her last illness. The female prisoner, who, before the marriage, had acted as servant to Garner, had been heard to say that she would be "out of the old woman." Garner, after he had been arrested, gave a curious diagnosis of poisoning to the superintendent of police.—"Professor Taylor may say what he likes; I do not believe granny was poisoned. Poison makes things struggle when they die—the same as my three horses did last year—but she died like a lamb." A considerable quantity of arsenic was found on the prisoner's premises. The motive appears to have been simply that the old woman was dependant on her son, and a burden. Suspicion has also arisen that Garner's former wife was disposed of in the same way. The body has been exhumed by order of the Secretary of State. Drs. Boulton, of Horncastle, and Clegg, of Boston, conducted the examination, and the viscera have been forwarded to Dr. Taylor. It is asserted that a considerable quantity of arsenic was found in the stomach, although not so much as in the body of Jemima Garner. Arsenic was also detected by Dr. Boulton.

PRISON LIFE.

The history of prison discipline in this country has yet to be written. We know of few subjects which, in skilful hands, would make a better theme for a Medico-historical essay. Even if the comparatively short period be taken which commences with the appearance of Howard's great work, and ends with the Earl of Carnarvon's address at Winchester, on Monday last, we should find abundance of matter to fill a volume of surpassing interest. The sentiments and measures of men collectively, and often, too, of men individually, seem to obey a property analogous to elasticity. The further a force or impulse carries them in one direction, the greater will be the rebound in the other. We all remember Lord Macaulay's celebrated apothegm, in which he sums up the history of the saintly *régime* of the Commonwealth, and the licence of the succeeding period. Amongst individuals, many a good Tory, like Southey, begins life with a devout faith in liberty, equality, and fraternity; and, on the other hand, a Robespierre first courts public favour as the author of a treatise advocating the abolition of capital punishment. The history of Medicine is full of

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parallel antagonisms, which have succeeded each other as though necessitated by law. As remarkable a revulsion of opinion and action has taken place in this country on the subject of the treatment of criminals. Sixty years ago prisons in England were the blackest stain on our civilisation. Thanks mainly to the efforts of Howard and Lettsom, that blot was wiped out. But now they are comfortable abodes, to which persons, unfortunate enough to offend the laws, retire for a short time at the expense of society, expiate their crimes by sleeping ten hours per diem, working two; reading travels, novels, and, if they choose, light religious books; taking moderate exercise in the open air, conversing with each other, and breakfasting, dining, and supping in a way which would be envied by a Devonshire or Dorsetshire peasant, who supports himself and family on ten or twelve shillings a-week. The result everybody knows. Public opinion is setting strongly against the regimen of the philanthropists and doctrinaires. It is not impossible that the necessary rebound may even carry us again too far in the opposite direction. However, the present state of things in our gaols is as absurd as it is pernicious, and incompatible, not only with the punishment or reformation of the prisoner, but with the safety of other people. We extract from Lord Carnarvon's speech some passages on the present state of prison discipline in the Hants County Gaol:—

"The committee, appointed fifteen years ago, laid down most distinctly, that, while all proper means of moral reformation ought to be tried, yet that it was essential that every prisoner should undergo a certain amount of penal discipline before those moral means of reformation were to be used. For this purpose, the prisoners were divided into four classes—those serving their first month, to whom was allotted a minimum of eight hours' hard labour a-day, it being provided, that over and above that they were to receive what instruction they could obtain from the schoolmaster and chaplain; the second class, those serving the second month, were to be employed six hours a-day in hard labour; the third class, serving their third month, were to be employed four hours a-day in hard labour; and the fourth class, who had served three months, were to be so employed three hours in each day. What is the case now? The first class, instead of receiving a minimum of eight hours' hard labour a-day, receive a maximum of three and a-half hours; the second, the third, and fourth classes, instead of receiving respectively a minimum of six, four, and three hours, receive a maximum of about two hours a-day. Well, then, I ask, is it not idle to talk of sentencing a prisoner to hard labour, if this is to be the state of things in the prison? As respects the prisoners, you must remember, that just as you diminish the amount of hard labour you must find some substitute for it, because you cannot take a man in the prime of life, as the majority of the prisoners are, possessing full bodily vigour, and clap him into a cell, however warm and comfortable, for the best part of twenty-four hours every day, without absolutely endangering his life; consequently, it has been found necessary to give the prisoners open air exercise to such an extent, that not only is it no punishment at all, but it tends greatly to aggravate the difficulties of carrying on the prison discipline. Let me now say a few words upon the diet, which is, as I have said, just as much a part of the sentence as the hard labour. I am not one of those who are in favour of harsh and cruel measures towards criminals. I am not in favour of a starvation diet; but I think that what has hitherto been forgotten or practically ignored hitherto, in these discussions, is the consideration that there is a medium between a starvation and an excessive diet. While I would give such a dietary as would sustain fairly the bodily vigour of prisoners, I would studiously refrain from giving anything like a luxurious diet. I certainly think that the scale of dietary laid down in 1848 did not err on the side of starvation, but even if it did that dietary has been revised, and you will find that all the changes have been on the side of relaxation, and there has been a considerable increase in the amount of the meat given to the prisoners, who now have meat five days out of the seven. But that is not all, for there exists a system of extra diet, and that has grown to such an extent that, out of 300 or 320 prisoners, the number on extra diet is no less than 59. I do not say that the extra diet is wrongly given, but I do say that we ought thoroughly to understand the principle upon which it is given; for I assure this court, that if they compare the prison diet with the workhouse diet it will be found that the comparison is far from being in favour of the workhouse diet; and I must say, that when a poor man, without a blot on his reputation, who has, perhaps, lived a long life without the slightest shadow of suspicion attaching to him, is at last obliged, either through misfortune or through old age, to resort to the workhouse, and receives hardly sufficient to keep body and soul together, while the sturdy felon, who has been committed and recommitted over and over again, is well fed and comfortably cared for, it is dealing with guilt and innocence in a most unsatisfactory manner. (Hear.) I now come to the general changes affecting prison discipline, and I am sorry to say that I can number several cases in which the relaxation of prison discipline has led to increased evils. In the first place, the extension of the open-air exercise has been unsatisfactory. As I have said, where open-air exercise is permitted to excess, imprisonment is no longer a punishment; but you have stripped it of the very semblance of punishment by removing those restraints which prevented large numbers of prisoners being brought together for open-air exercise, because by enlarging the space you have rendered it almost impossible for the warders to prevent that which is subversive of all prison discipline—namely, a free communication between the prisoners. You allow the prisoners now to be employed in agricultural operations, especially in spade labour. If your prison system had been one of the soundest, I should not have been disposed to complain of that; but, in fact, your prison system is almost entirely made up of recreation and relaxation, not only out of doors, but in doors. Quite recently there has been an extra allowance of pudding. By the old rules a prisoner was allowed a rug, a sheet, and a blanket, which latter, being large, could be doubled down. He is placed, remember, in a cell only 12ft. by 8ft. in width, which is warmed by hot air, and which he himself has the power of ventilating as much as he pleases. You have now allowed him in the daytime an additional waistcoat, and at night an additional blanket, and not only that, but in order to keep his feet off the asphalt floor, and save him from any draughts that may creep through the exceedingly well-fitting door of his cell, I perceived, on a recent visit to the gaol, that you have actually accommodated him with a footstool. (Laughter.) Then, again, in order to provide for his amusement and instruction, I observe you have a very admirable library, one-half of which is composed of works of purely religious instruction and of a serious character, and the other half is made up of works of fiction and works of entertaining, interesting, instructive, and amusing knowledge—(laughter)—such books, certainly, as are far beyond the reach of the poor. I do not wish to throw any slight at all on the system of having a prison library; on the contrary, I think there ought to be one, but I certainly did not expect to find such books in it as those I saw in the county gaol. I find works on history, on ancient Egypt and Greece, treatises on modern astronomy and astro-theology (laughter); books of fiction, such as 'Frank Leverton' and the 'Dairyman's Daughter;' books of travels, such as Dr. Livingstone's 'Travels in Africa;' and, lastly, popular poems and prize essays. Now, I do not want to cut off from these unfortunate persons anything which I think might be fairly allowed them, or to make their existence more miserable than crime has made it, but I think it very questionable how far you should allow prisoners to withdraw from the library works of the description I have named for the purpose of relieving the tedium of the prison, which, with the single exception of restraint on their personal liberty, now remains the only part of their punishment left, and thus to render their condition far better than the poor, but honest labourer."

UNIVERSITY OF OXFORD NATURAL SCIENCE EXAMINATION.

FIRST EXAMINATION FOR THE DEGREE OF BACHELOR OF MEDICINE.

Mechanical Philosophy.

1. Explain the terms inertia, resultant, centre of gravity, centre of oscillation, centrifugal force, moment of inertia, centre of pressure, metacentre.

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2. Define the metre, gramme, and litre. Reduce the centigrade temperature 16·5 to Fahrenheit's scale.

3. Explain the methods of determining the specific gravity of a liquid. How may bodies be accurately weighed in a balance whose arms are of unequal length?

4. State the law of expansion of air by heat. Explain the methods of determining the specific heats of solids Describe the phenomena of latent heat. How is the dew point determined? What are the methods of producing cold artificially?

5. State the facts which prove the existence of two electricities, and explain how the law of attraction has been discovered. Enumerate the best insulators and the best conductors Explain the action of a Leyden jar.

6. Describe the voltaic combinations of Daniell, Smee, and Grove. How is it proved that a circulation of electricity takes place in an active battery? Describe apparatus for giving a shock with a single cell when (1) two coils of wire are used, (2) when a single coil of wire is used.

7. State the law of ordinary refraction of light; and describe its analysis by a prism. What is meant by the interference and fluorescence of light? Explain the construction of the camera lucida, and of the Galilean and astronomical telescopes.

8. Specify the various means of procuring a beam of polarized light. Draw the appearances presented by thin plates of calc spar and nitre when viewed between polarising and analysing plates. State the phenomena of circular polarisation exhibited by certain liquids. Describe Haidinger's brushes.

9. How are electro-magnets constructed; and what discoveries have been made by their use? What force does a straight conducting wire exert on a magnetic needle?

10. Give on account of Du Bois-Reymonds' discoveries in animal electricity. Give his explanation of the so-called induced or secondary contractions.

Chemistry and Botany.

1. Mention the acids which agree with those of arsenic in their physical and chemical properties, and relate what you know of the principle to which this agreement is referred.

2. Into what parts of the body does phosphorus enter; and how may its presence be determined?

3. State Davy's theory with respect to chlorine and the bodies related to it; and explain why it is preferred to the one previously introduced by Berthollet.

4. Account for the effect of nitrate of silver in blackening the skin; and explain why it may be administered internally without giving rise to those corrosive effects which it produces on the surface of the body.

5. State the chemical composition of urea, the bodies isomeric with it, and the methods of detecting its presence.

6. How far can animal heat be explained on chemical principles; and what facts might be alleged in support of the idea, that it is in some degree a vital phenomenon?

7. State the nature of vinous fermentation; and explain the differences between an alcohol and an ether, regarded as generic terms.

8. Give an account of the different sorts of urinary calculi, of the modes of detecting them, and of the treatment pursued in each kind, so far as it is founded on chemical principles.

9. State the differences between animal and vegetable respiration.

10. Explain so much of the physiology of plants as may furnish you with a reason why, as in the cinchona tribe, medicinal properties principally reside in the bark; or, in other cases which may be enumerated, in the root.

11. What is the supposed use of the Stomata; and where do they generally reside? State the exceptions to this rule.

12. State the characters of the Umbelliferæ; and mention in what organs their medicinal properties reside. Name some of the plants of this tribe which act injuriously or otherwise on the animal economy.

PRACTICAL EXAMINATION.

Chemistry and Botany.

1. Name the substances present in the solutions contained in phials 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12; and mention the tests by which you have determined their presence.

2 State the natural families to which belong the plants ticketed A, B, etc.; describe the general characters of each family, as well as its medicinal qualities, and enumerate some of the plants belonging to it which are admitted into the Materia Medica.

1. Enumerate and describe the several varieties of epithelium which are found lining the digestive and genito-urinary tracts.

2. How is it that in hemiplegia the intercostal and abdominal muscles, together with the diaphragm, retain their physiological functions?

3. What are the different nerves which have been shown experimentally to exercise an influence on the secretion of the saliva?

4. What do you know of pigmentary deposit as a physiological occurrence?

5. Give an account of the natural history and of the structure of the trichina spiralis.

6. What are the characteristics of the human fœtus at six months?

7. Give an account of the course and relations of the subclavian arteries.

8. Describe the intrinsic muscles of the human larynx; and give an account of the nerves and bloodvessels of that organ.

9. In what way, and to what extent, do the several conditions of food, age, sex, and labour act upon the constituent elements of healthy urine.

10. Give an account of the microscopic structure of arteries, veins, and capillaries.

PRACTICAL EXAMINATION.

Anatomy.

1. Give a detailed account of the different structures exposed by dissection in the subject placed before you.

2. Make such a dissection of the heart put before you as will expose its mitral and aortic valves and the commencement of its coronary arteries.

3. Place under the microscope some of the inner coat of the aorta, and describe in full the appearances it presents.

4. Describe Prep. No.

NOTICES OF THE

SURGICAL, MEDICAL, AND OBSTETRICAL INSTRUMENTS IN THE INTERNATIONAL EXHIBITION OF 1862.

By JAMES REEVES TRAER, Esq., F.R.C.S., etc.

Superintendent of Class 17.

If I had not already occupied so much valuable space in this journal, I would willingly prolong my series of notices; but I feel obliged to bring them to a close, with the following remarks, although I shall have left undescribed many objects of considerable interest. Mr. Matthews (to the contents of whose case I have already alluded) exhibited his improved tracheotomy canula. This instrument (Fig. 1) is deficient

Fig. 1.

above and below, and consists of two blades, fixed to an ordinary guard-plate, which are capable of being pressed together, so as to form a wedge, the point of which is not thicker than the back of an ordinary scalpel. Compressed in this way the canula is easily introduced; the blades then spring apart, and retain the tube *in situ*. The inner, a complete tube, is now introduced, and the instrument tied as usual. There is an opening on the laryngeal aspect of the inner tube, so that there is no obstacle to the respiration, when it assumes its natural direction. This canula has been frequently used with success; and the only objection to its employment which suggests itself to me, is the possibility of any evil resulting from the pressure of the external elastic tube on the mucous membrane of the trachea. Aluminium and silver are the metals employed in its manufacture.

The same maker exhibited some excellent lithotrites, in

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which the bulk of the stem and handle was considerably reduced. One of them was of the size of a No. 4 catheter.

Fig. 2 represents the forceps sponge-holder, and Fig. 3 the caustic holder, for application to the interior of the larynx, as made by Mr. Matthews. These instruments, which can be easily used in connexion with the laryngoscope, are very ingeniously contrived, and practically answer the purposes for which they are constructed.

Mr. Matthews also showed the instruments ordinarily employed in ovariotomy. This operation, despite the scepticism of a few men, who, notwithstanding the gradual and sure advance of its claims to be considered of much less danger than some of the so-called "capital operations," has now most deservedly earned for itself a position among those proceedings which not only *may*, but *ought* to be carried out by the Surgeon. The same maker exhibited the different instruments employed in the operations for the various vaginal fistulæ, and a variety of specula for the ear, vagina, uterus, and rectum—those for the vagina being of a very low price. In his case were many splints of useful form; among which were to be noticed Mr. F. Mason's ingenious appliance for employment after resection of the elbow-joint, which combines the four movements of extension, flexion, pronation, and supination; and Mr. George Parkinson's splint for the treatment of cases of resection of the knee-joint.

The catheters made of steel, tinned inside, and covered with a coating of vulcanite, which Mr. Matthews exhibited, combine the three advantages of strength, cleanliness, and cheapness, and must have commended themselves to the favourable notice of all who saw them.

As might have been expected, Mr. Matthews' case contained a good array of his well-known saws for aiding in the extirpation of the upper jaw, and in operations on other parts of the caseous system; his bone-nippers are also of excellent construction; and an improvement which he has added to some of the varieties of forceps, merits a special description. The teeth (see Fig. 4) resemble those of a shark, inasmuch as they are directed backwards, and, as a consequence of this peculiarity, the hold of the instrument is so strong as to preclude the possibility of any tissue slipping from its grasp, when it has once been fairly seized. This principle (which is entirely the invention of Mr. Matthews, and for which he deserves great credit), is peculiarly applicable to the construction of sequestrum forceps, as well as those employed for dissection, for the extraction of polypi, and for all other purposes where great prehensile power is required.

Messrs. Ferguson, of Giltspur-street, exhibited a case, the contents of which were remarkable for excellence of manufacture, and, in many instances, for considerable ingenuity. Among them I may notice Ferguson's fissure needle, which was devised in order to facilitate the application of a ligature in a confined and limited space. It consists of a handle and staff; to the extremity of the latter, a needle, of ellipsoid curve, is attached by means of a hinge-joint (see Fig. 5). When pressure is made on the compound lever (seen in the illustration) which is placed at the side of the instrument, and is connected with the needle, the latter moves in a direction indicated by the dotted line. When the edges of a fissure have been pared in the usual manner, the Surgeon is enabled to pass his silk or wire ligature through both sides with ease; this is accomplished by thrusting the needle bearing the silk, so as to perforate one of the edges of the wound, and by subsequently pressing the handle of the lever so as to carry it through the other. The silk or wire being seized by a pair of forceps, the removal of the pressure exerted on the lever allows the needle to resume its former position, leaving the silk in the desired situation. The needle may then be withdrawn, re-threaded, and, if necessary, reapplied.

The same makers also showed Mr. Hutchinson's large trocar for emptying ovarian cysts, and also his clamp for securing the pedicle. This latter (Fig 6) consists of two bars of steel, gilt, in order to prevent them from becoming rusty, and united by a hinge at one extremity. Their inner surfaces are jagged, in order that they may retain the divided tissues with security, and prevent the pedicle from slipping. When brought together, the two bars may be secured and retained in position by the small screw, and the handles of the instrument removed by pressing the side-springs. The smaller illustration represents the clamp when applied.

In order to diminish the injurious results of the entrance of air into the cavity of the pleura during paracentesis thoracis, Mr. Thompson, of Westerham, has devised a trocar of peculiar construction. By referring to Fig. 7, it will be seen to consist of a cylindrical (silver) canula, of about four inches in length, and of the diameter generally used for this operation; into this opens a short silver tube, to which is attached, by means of a screw, an India rubber tube, about a foot in length. A solid steel piston, with a trocar-point, plays on the canula, and is of such a length that, when pushed forwards, its extremity protrudes sufficiently from the surrounding tube, and of such a diameter as to close the canula completely and occlude the lateral tube. By means of the screw at the extremity of the handle, the piston can be withdrawn (after the puncture has been made), so that the lateral opening becomes patent, when the pus or other liquid will readily flow into a conveniently placed receptacle, without any risk of any air being admitted into the pleural cavity. That this instrument is ingenious, no one can doubt, and I am very far from being inclined to deprecate its use; but I have a strong conviction that British Surgeons have an exaggerated fear of the bad effects of the entrance of air into the pleural cavity; it being always understood that I refer to such a quantity of air as is likely to gain admission during the performance of paracentesis thoracis with the ordinary trocar and canula.

Messrs. Ferguson also exhibited the simple instrument, suggested by Mr. Luke, for the ablation of the tonsil. It consists, as shown in Fig. 8, of a steel plate, attached at one end to a handle, and perforated at the other to receive the tonsil. On the surface of this plate, in two lateral grooves, a cutting edge plays, so that, by simple pressure of the thumb, any requisite quantity of the tonsil can be removed, if it be previously drawn through the opening in the instrument by means of an ordinary pair of forceps.

In the same case, Mr. Hutchinson's modification of Dr. Buchanan's staff (described in my last "Notice") was to be seen. This alteration consists of the addition of a central canal, so that the instrument can be employed as a catheter, and clearly increases the value of the instrument. Messrs. Ferguson also showed an ingeniously-constructed instrument devised by Mr. Coleman, for the administration of chloroform through the nostrils. It is ingenious, and likely to be very useful in certain operations on the jaws and teeth. Mr. Arming Todd's inhaler was also exhibited by the same makers; this instrument, like that of Dr. Sansom (shown in Mr. Matthews' case), has been devised with the intention of procuring the gradual inhalation of an atmosphere charged with a limited amount of chloroform vapour.

The class stethoscope of Dr. Davies was among the instruments shown by Messrs. Ferguson. It is intended to facilitate the practical study of auscultation in clinical classes. By means of a flexible tube (see Fig. 9), attached to the side of an ordinary stethoscope, two persons can simultaneously listen to the same sounds, and the Physician can practically instruct the student as to their precise nature and meaning.

There were many more Surgical instruments and appliances of great interest and importance in the late Exhibition, to which I am sorry to be unable to refer; indeed, I have been furnished with many illustrations which I have not had an opportunity of using. Before I quite conclude, however, there is one subject on which I wish to say a few words, which at some time or other must come under the notice of the Surgeon. I allude to the form and mode of construction of the majority of boots and shoes that are worn in the present day. Were young children carefully attended to in this matter, there would be less distortion of the foot and ankle than there is at present; and, although a painful corn or bunion may seem to be a trifling ailment, it is quite severe enough now and then to prevent anything like active locomotion, and may produce discomfort for days, or weeks, or even months. As this kind of annoyance can usually be remedied by discarding a badly-made boot, and wearing one manufactured on a sensible plan, I was pleased to observe that one boot-maker, out of the many who talk of "scientific principles," had succeeded in producing what I consider to be the proper covering for the foot. Mr. Lanagan, of Brownlow-street (to whose productions I now refer) has invented an instrument for measuring distorted feet. It enables the boot-maker to read off from a graduated plate the extent of the different curves of the foot; it also marks the precise distance from the heel to the most prominent point of the instep; and, should there be any enlargement at the metatarso-phalangeal joint of the great toe, its precise position can be indicated by sliding rules. By the aid of such measurements as these, a much more accurately

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Fig. 2.

Fig. 3.

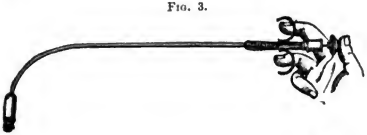

Fig. 6.

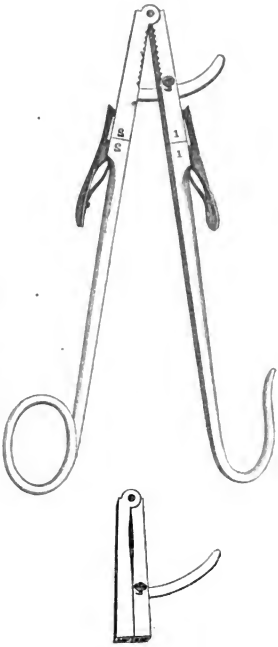

Fig. 7.

Fig. 5.

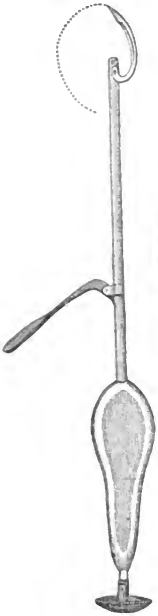

Fig. 4.

Fig. 8.

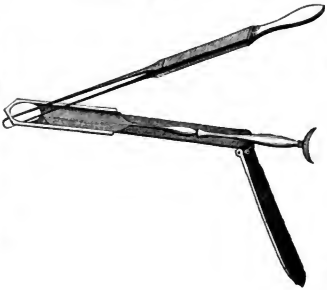

Fig. 9.

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fitting, and hence more comfortable boot, can, undoubtedly, be produced. The least reflection must convince any one of the truth of the statement, that boots and shoes, as now worn, must inevitably tend to distort the foot,—indeed, an adult foot of natural form is now rarely to be found. Mr. Lanagan exhibited many varieties of boots and shoes made on his principle; and I think he deserves great praise for introducing to the notice of Medical men, and the public generally, so valuable an improvement.

In conclusion, I wish to express my thanks to the exhibitors for the wood-blocks they have furnished me; for I have been able to illustrate my series of "Notices" very fully, and to render many points clear, which, I fear, my verbal descriptions might have otherwise left in confusion.

47, Hans-place, S W.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

Paris, December 19, 1862.

ON DRINKING-WATER.

On Tuesday last, M. Bouchardat read a very interesting paper on the above subject before the Academy of Medicine, and a short abstract of which will probably be acceptable to the readers of your journal. He commenced by stating that the best method of studying the different kinds of drinking-water was not by chemical analysis, but by rigorous Medical observation; for, if chemistry had done much to instruct us as regards the composition of the anorganic substances contained in drinking-water, it had done very little indeed to enlighten us as to the causes of the injurious effects of certain waters upon the system. He then entered into the question of the quantity of water necessary to man within the twenty-four hours, which varied very much according to age, exercise, temperature, the degree of moisture of the atmosphere, etc. The mean quantity, however, necessary for the adult might be taken at four pounds per diem. It was much better for the preservation of health to ingest habitually this quantity, which was required for the normal functions of the body, than to take more or less. Although the inconveniences produced by taking too much or too little might be often feeble or none, or remain unperceived, or become only manifest in the long run, and by close observation of the state of health of the person concerned, it was, nevertheless, advisable to keep the *juste-milieu* in this as in other points.

M. Bouchardat then discussed the influence of the principal substances of which the drinking-water is composed on the health of man, and considered successively oxygen, nitrogen, carbonic acid, and ammonia. He said that the presence of air in drinking-water was generally admitted by the writers on this subject to be necessary for health; but this point ought not to be exaggerated. Water containing air had, no doubt, a more pleasant taste than that which did not contain any, and that was certainly of importance; but we were scarcely justified in believing that this air played a great part in the system. The Chinese did not take any water but such as had been previously boiled, without any trouble resulting from this habit. The air contained in the water of rivers was generally richer in oxygen than the atmosphere; and Humboldt and Gay-Lussac had found in Seine water 33 per cent. of oxygen. It was generally believed that water containing air was more digestible and palatable than distilled water; but M. Bouchardat believed that the taste of ordinary water was more due to the salines contained in it than to air, and that the greater digestibility of water containing oxygen was a mere assertion which had constantly been repeated, but for which no satisfactory proofs had ever been advanced. He was, however, glad of finding oxygen in drinking-water, not on account of some special action on digestion, but because the presence of oxygen, in any considerable quantity, was incompatible with that of certain noxious organic substances. The presence of carbonic acid gas in water was a desirable circumstance; it gave the water sapidity, promoted the appetite, and seemed to favour digestion. All flowing waters, and, in fact, every drinking-water, contained a very small quantity of compounds of ammonia; the ammonia was collected from the atmosphere by the rain, or proceeded from spontaneous decomposition of nitrogenous matter undergoing putrefaction in the water. The presence of ammonia in drinking-water was, therefore, frequently the sign of unfinished putrid fermentation; but although we must attribute a decided part in the injurious effects of water to organic substances, yet it would be hasty to conclude that a water was insalubrious from the presence of a few milligrammes of ammonia in a litre of fluid. When the decomposition of the organic substances was finished, or when these substances had indifferent effects, which was most frequently the case, the water might be quite healthy in spite of its containing a little ammonia.

With regard to the influence of the fixed constituents upon the quality of drinking-water, M. Bouchardat remarked, that the water of rivers and rivulets generally contained from $\frac{1}{1000}$th to $\frac{1}{2000}$ths of fixed matter. A water might contain even $\frac{1}{1000}$ths of solid constituents, and yet be considered not only a good drinking-water, but also suitable for most other purposes. Water which contained a higher per-centage of salines was a medicinal mineral, and no drinking-water. Amongst the several solid constituents of ordinary water, silica was of importance. In a litre of river-water, one-half to three centigrammes of this substance were generally contained. It was not improbable that water containing a large amount of silica might give rise to caries and loss of teeth, so very common in certain districts, as the excess of silica determined a rapid formation of tartar, by which the teeth were rendered friable and carious. Phosphates were found in all flowing waters, although they were seldom mentioned in analyses. The same was the case with carbonates; and the presence of a moderate quantity of earthy carbonates was always useful. Chlorides were likewise "good salts," but their quantity was very insignificant, if compared to that daily ingested by us with the food. A very small quantity of iodine and bromine in drinking-water was desirable; but if their quantity should amount to one centigramme in a litre, the water would no longer be suitable for habitual use, but be a mineral water. Fluorine was found in the mineral substance of the bones and the enamel of the teeth. M. Bouchardat had discovered traces of hydrofluoric acid, or of fluorides, in the gastric juice of fowls. Fluoride of calcium, which was necessary to the system, was found in the usual articles of food, and also in drinking-water. Nitrates seemed to exist in every drinking-water, but generally in such a small quantity, that they could not exert any appreciable influence on man. But if nitrates were not directly noxious, they might indirectly serve to excite some suspicion, as they ordinarily accompanied dangerous organic substances. Moreover, water containing nitrates might, if kept in leaden cisterns, attack this metal, and become impregnated with it.

Amongst sulphates, it was chiefly the sulphate of lime which was met with in drinking-water; and it seemed to play quite a different part from that attributed to the bicarbonate of lime. It had not, as this latter saline, the property of giving off a gas favourable to digestion, and very little liable to decomposition; moreover, it could not, by its decomposition, furnish a basic element useful for acidity of the stomach. At the same time, water might dissolve a sufficiently considerable quantity of it to acquire a sweetish and exceedingly unpleasant taste. Finally, it was, as all other sulphates, prone to decomposition under the influence of organic substances. Sulphuretted hydrogen was, thereby, set free, and this was a bad element for such water as was, on account of an impediment to its course, exposed to a prolonged sojourn upon the soil. If we added to this, that it decomposed soap, and had incrustating properties, we were bound to admit that the presence of a somewhat considerable quantity of sulphate of lime in drinking-water was an unsatisfactory circumstance. If water contained more than $\frac{1}{1000}$th of compounds of lime in solution, it was considered unfit for the ordinary purposes of life; it was then called "hard." Nevertheless, water might still be drinkable, even if containing $\frac{1}{600}$th to $\frac{1}{1000}$ths of compounds of lime, provided that no other noxious substances were found in it, and that its taste was pleasant. One ten-thousandth of bicarbonate of lime was not only not unfavourable, but, on the contrary, gave a useful element to the water. Incrustating calcareous waters were generally feared, as being able to give rise to gravel, urinary calculi, etc.; but this was an error which should be combatted, as there was no single fact which would go to prove such an etiology of gravel; and, moreover, several mineral waters containing such substances were useful for preventing

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the formation of gravel, consisting of uric acid or oxalate of lime. The compounds of magnesia, if found in such quantity as not to impart any taste to the water, might, although they could scarcely be called useful, yet be considered inoffensive, in spite of the accusations of which they had been the object. Small quantities of the compounds of soda and potash might be considered useful, rather than injurious, provided that they did not impart a peculiar taste to the water. Alumina was met with in water, bound to phosphoric, sulphuric, and carbonic acid. The quantity was mostly insignificant, but in some wells much of it had been discovered. Such water had an abominable earthy taste. Of iron, only a very trifling amount was met with in drinking-water, as such waters which contained somewhat less than half-a-grain of bicarbonate of iron were considered chalybeates.

With very few exceptions, these waters which contained a notable amount of organic substances were liable to rapid putrefaction, whereby they acquired "organo-leptic" properties dangerous to health. The part played by organic substances in drinking-water was the most important, and the most difficult, question in the hygiene of water. Mineral matter was comparatively innocuous in drinking-water, while organic substances were injurious to man, although useful for the development of plants. This might be considered the general rule, which had, however, many exceptions. In studying the influence of organic substances upon the quality of drinking-water, we must distinguish those matters which were merely suspended, and those which were dissolved in it. The former acted as ferments, and rapidly putrefied the latter, in rendering them insoluble; while the latter, by themselves, might remain latent, provided that no germ or insoluble organic matter induced their decomposition.

The organic substances which were contained in drinking-water might have a different origin: they might come from spontaneous decomposition of animals and animal parts, or of vegetables and vegetable parts. Until now, the influence of *animal* matters in a state of decomposition on the quality of water had been chiefly studied, but from a mistaken notion; because, when their quantity was at all considerable, they gave organoleptic properties to the fluid by which this was made undrinkable; while water containing organic substances due to the decomposition of *vegetable* parts, might still apparently preserve the principal qualities of drinking-water, and, therefore, exert a great influence on the health of population drinking of them. It had been asserted, and M. Bouchardat was inclined to corroborate this assertion in certain cases, that water impregnated with organic matters arising from the decomposition of animal matters, might determine diarrhœa and dysentery. As regards diarrhœa, this opinion was rather based on unanimous consent, than on accurate observations. It was said that strangers newly arrived in Paris "paid their tribute to the Seine;" and this was explained by the presence of a certain amount of organic matter in the water of that river. Without denying this influence, M. Bouchardat thought that there were other circumstances which had to be taken in account, such as a changed mode of life, changed food, etc. Moreover, accidents of the kind mentioned were less frequent than they were commonly believed to be, and occurred just as well in persons who had not drunk Seine-water as in such who had. In the same manner it could not be regarded as settled that dysentery was produced by drinking water containing decomposed animal matter. M. Blondeau had stated that the apparition of dysentery at Rhodez coincided with the use of such waters, and other authors had given similar data; nevertheless, M. Bouchardat was far from being satisfied that this view was quite justified by the facts of the case. Great caution was also necessary in determining whether, as had been stated, typhoid fever was produced by the use of such waters. At the same time, it was wise not to partake of water impregnated with such substances.

M. Bouchardat then entered into the question, how we should find out that water was fit for drinking or not? Good drinking-water should be absolutely devoid of smell; its taste should be very slight, agreeable to the palate; it should be limpid, fresh, light, and contain oxygen; it should dissolve soap without forming too much curd, and should cook beans, peas, and other leguminous seeds without hardening them. Moreover, it was necessary that a long-continued use of the water, and observations continued with perseverance, should have demonstrated its innocuity.

M. Bouchardat wound up his paper by commenting on the principal methods of analysing water now-a-days adopted by chemists, and promised, on a future occasion, to enter into the diseases caused by the use of bad drinking-water.

EDINBURGH.

January 5.

The new year has come in blowing and blustering in a way unsuitable to its youth. Weary, melancholy 1862 died like a cruel giant: we are none of us sorry to part with him, and of his boisterous offspring we know so little as yet, that we can only hope he will be brighter and cheerier than his parent.

I cannot flatter myself that there is much to write about. Our Session is only tolerably well attended, but the students are as usual a gentlemanlike, steady set of young men; and, already, the dreaded preliminary examinations seem to have weeded the few tares from our autumnal harvest.

The Infirmary has not presented anything very striking in the Surgical wards. Professor Syme removed the scapula, and Mr. Spence a large tumour from the cheek, as a sensational commencement. The latter required careful dissection, but was successfully accomplished, and both operations were perfectly satisfactory in their results. Dr. Gillespie has been associated with Mr. Spence as Clinical Lecturer, and Dr. Struthers appointed one of the Acting Surgeons, so there are now three Acting and one Assistant-Surgeon, Dr. Watson. This appears a very good arrangement, as, while Mr. Spence ceasing to lecture would have been a serious loss to the Clinical Surgery department, Dr. Struthers' position as a very popular teacher made it almost an absurdity that he should continue to perform the nominal duties of Assistant-Surgeon. The only want is material. The visitor, on going through the spacious wards of the Infirmary, cannot help heaving a sigh that even railway accidents are provokingly rare, and that stones are becoming as scarce as rose-amethysts.

The societies have opened with such attendance of members as is to be expected when the wind blows a hurricane, and you leave rain in one street to meet hail in the next, where, between the wind and the water, there seems only the alternatives of swimming and flying, walking being but a euphuism for a mixture of both. The students' societies here are the Royal Medical and the Hunterian; the former, a time-honoured institution, where some of our greatest men gained their first laurels, and where now very many clever young fellows wage a wordy war every Thursday evening. There is great hero-worship there, too; and how the youngsters settle disputed questions in practice! Ah, my dear Sir, have you any doubts on the proper treatment of some disease? Come to our Royal Medical Society, and you'll go away, perhaps, a little deafer, but certainly a wiser man. The Hunterian is a good working society, and, I hear, is less burdened by laws and fines than the other, which has many of the elements of a club, including a library and excellently snug reading rooms.

I have heard a rumour, and I trust it is something more, that there is a movement towards building a students' hall and chambers here. It is a disgrace to Edinburgh that, while it derives such solid advantages from the students attending its various educational establishments, the young men are left at the mercy of persons who, with some few exceptions, are under the necessity of screwing them in every possible way, and are entirely ignorant of what a young man, sometimes delicate in health, sometimes fastidious in habits, requires. If this discomfort beget either hardihood or economy, far be it from me to object; but it is not cheap by any means, and certainly not healthy. And all this in a town where ample variety of food can be obtained very cheaply, and plenty of light and fuel! Why, then, should a student's room be dark and dingy; and why should his diet be so constantly the same that it seems almost part of the curriculum to eat down one side of a sheep and up the other, until he has consumed the academic number of chops.

So long as the student was of the traditional type, such an arrangement might do very well; but for the youths who come up now, many of them perfect gluttons for work, and priding themselves on that abnegation of self one cannot help admiring, something must, and, I trust, is about to be done. Of course, there will be a Dr. Pangloss or two, who, in his faith in "this best of all possible worlds," will "pooh! pooh!" the movement; but not many, I trust.

I happened to be in St. Andrews lately, when the M-

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examination was going on, and, as I knew some of the examiners, had the *entrée* of the Town-hall and University Library, where the boards were sitting. I am afraid to say from memory how many hundred men of all ages have taken this degree this year—all ages: the white-haired man pored over his questions, and wrote slowly and with apparent difficulty, beside the youngster fresh from the schools, whose pen danced over the paper. But each one fared alike, for Dr. Day is no respecter of persons, and seemed nervously anxious lest any should creep through, and so do injustice to abler men. Your correspondent would not have liked to try his hand at that examination, inasmuch as he believes he would have been plucked. Unlike other Universities, St. Andrews calls its examiners from all parts, and on this occasion teachers from Edinburgh and Glasgow, and elsewhere, met. Not one of them had the least interest in the passing or plucking of a candidate, but all had one common feeling—that no one unworthy of the letters "M.D." should pass. No doubt, in this condition of things, some who might have passed were rejected. Again, I say, if any one asks me to go up for that examination I must decline. Craigie is too erudite, Seller too smilingly severe, Wilson and Paterson too much impressed with possible obliquities of their fellow creatures' characters, even at birth; then Heddle is bad enough; but Penny!—he who nearly hanged Madeline Smith—fancy testing for anything except escape when under his glittering eye! Struthers, too, is "little bether nor a traythur;" and Haldane is too accurate, let alone that light-haired man, fondling some diseased bones and scribbling faces on the University's foolscap.

The above, Sir, was contributed to me by a gentleman who went to Fife lately, and returned nothing the worse apparently, and but little the better.

So Knox is dead! that sad life is ended; the die that stamped its best lines on some of our greatest men is broken. Knox is dead! You, in England, cannot see the reason why that has been so often said to even *me* within the last few days. I trust that many an unkind and undeserved word has been repented of by some who, in the natural order of things, must soon, also, go on the same journey. All allow how brilliant he was as a teacher; how true and kind a friend to his pupils; how his powers of communicating knowledge drew young men from all parts of the world to the dingy purlieus of Surgeons'-square; how he sat on but a ricketty throne, as all men do who trust only to their own powers, and how two drunken Irishmen tumbled him from it. Then it was fine times for the smaller people, and how jolly it must have been to kick the lion; but he got up again. Heigh-ho! there is no one of us but may be upset as he was, in our small way; let us try to leave behind us such living monuments of good and talent and industry as he has left, with this memorandum, which, no doubt, he, too, added in his latter years: "Except the Lord keep the city, the watchman waketh but in vain."

I was glad to read in the *Courant* newspaper a kind and gentlemanly article on the dead teacher of our greatest living teachers—on him who first led Owen to ponder over the vestiges of an earlier world, who first placed a scalpel in Fergusson's unfaltering hand, and lit that lamp which has never since been extinguished—still shining in Goodsir's student-room.

The small-pox and typhoid fever have been more than commonly met with for the last few months, and the question of re-vaccination has been much discussed. It does seem hard that, with such natural advantages as this town possesses—its total want of an excuse for not being well drained, it is the worst drained town conceivable. Go through a by-street—say a street within a stone's throw of where I am writing, and you will find heaps of human faeces; heaps of rotten fish; children doing what elsewhere is done in secret, but in modest Scotland is done in broad daylight. Children!—great girls and boys of twelve and upwards. Now, Sir, all this is within a few yards of the most important citizens' noses. But we place a great deal of responsibility on Providence here; and unless Dr. Littlejohn, in whom I have every confidence, sets to work, to use an expression I once heard in a boarding-school, "we'll catch it." It is hard to believe in this almost intentional beastliness when one walks to any elevation, whether on street or grassy hill, and looks down on the beautiful city, and away to where the storm cone is apex down on Leith Pier, and the collier ships are cowering in to their moorings, like frightened birds, behind Inch Keith. How full of health seems this sharp breeze, cutting your nose into Scotch collops! How hopeful are the rosy tints on the snowy sides of the Ochils! But still night comes, and we must descend—and where to, pray? Into a vapour-bath of poisonous vapours. Give your orders, gentlemen. We have here potted small-pox—and typhus in the next room, if you will open the window. We will not guarantee the sample, but we will do our best to give you cholera, dysentery, and anything else you please. It seems extortion to take your money, because, in a walk through the old town and some cross streets in the new, any one with moderate respiratory powers can inhale enough for himself and family.

GENERAL CORRESPONDENCE.

THE PRESENT EMPLOYMENT OF SYPHILISATION AT CHRISTIANIA.

Letter from Dr. L. Bidenkap.

To the Editor of the Medical Times and Gazette.]

Sir,—The fairness of your review of the work of M. W. Boeck, "Recherches sur la Syphilis" (published at the expense of the Norwegian Government, not of the Swedish, as you say), induces me to write a few words upon the inoculability of the syphilitic virus. In this review you have already mentioned some experiments made by me in the Hospital of Christiania, tending to prove the auto-inoculability of the infecting chancre. But there is much wanting yet before the conclusions, to which these experiments have brought me, shall be generally adopted by authors. The majority of modern syphilographers delight themselves in declaring the impossibility of this transmission. And, lately, your distinguished fellow-countryman, Mr. H. Lee, in some lectures published in the *Lancet*, has held that the inoculation of the two kinds of chancre gives rise to results essentially different. In going over the account of his experiments, we find that he has only obtained that which, according to M. Ricord, we are accustomed to call "*pustules abortives*," whilst I have nearly always succeeded in producing the "*pustule characteristique*," forming specific ulcers, which reproduce themselves in many generations. I will not attempt here to fathom the causes of these different results, but I am convinced that repeated and persevering experiments, conducted with the greatest possible care, will produce results analogous to mine. And I must say that at times there is need of great perseverance in these experiments.

It has happened to me that I have inoculated an indurated chancre from day to day without any effect, but, after persevering for a month or more, the time has arrived at which inoculability has manifested itself. I have, up to this day, repeated and varied my experiments, of which the number now is pretty great, and they invariably prove that inoculability is the rule, and failure a rare exception.

That which convinces me, however, that the truth, some time or other, and, perhaps, at no very distant date, will triumph over the common error, is, that lately a distinguished syphilographer and former pupil of M. Ricord, M. Melchior Robert, of Marseilles, has published some experiments, of which the results are similar to my own. We find these results and conclusions in his great work upon "Syphilis," and in a small tract, "Quelques Considerations sur l'Auto-inoculabilité du Chancre Infectant," etc.; Marseilles, 1861. But in admitting that which must sooner or later be acknowledged—the auto-inoculability of the infecting chancre, as well as of the non-infecting—we destroy the fundamental argument of the theory of the double virus, which has played so great a part in modern syphilography; and besides, in other respects, these facts are of great importance. Syphilisation will be cleared of the gravest charge hitherto made against it, that of being an "inoffensive playing with soft chancres." I must not omit to state that, during the last two years, the virus of the infecting chancre has been constantly used for curative syphilisation in the Hospital of Christiania. Probably from this cause the effects have been quick, the time of treatment shorter, and relapses more rare and slight.

Will you permit me to add a few words upon the actual practice of this mode of cure in Norway? At the Hospital of Christiania, in the "service" of M. W. Boeck, it is the only cure which is administered in cases of constitutional syphilis (not treated before). In the other "service" for venereal maladies, of which Dr. Hjort is the "chef," syphilisation is adminis-

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tered in the greatest number of these cases, and more particularly in those in which the first appearance manifests an obstinate and severe affection of the organism; and also as an extreme remedy in some cases treated before without success by more simple methods, as abstinence or derivation. Mercury is never employed. In the town the majority of the syphilitic cases are treated by M. Boeck, or some of his pupils—among whom I have the honour to reckon myself—by syphilisation. The Practitioners, who are not "syphilidologues," or who have not sufficient patience or zeal to administer the cure themselves, transfer the cases which come before them to M. Boeck, or to others who practise syphilisation. A very small number, I assure you, are treated by other methods more or less expectative; and there is scarcely one single Practitioner in Christiania who at this moment employs mercury against syphilis. So, you see, syphilisation is more flourishing than ever, and has gained the confidence of the public as well as of the Physicians who have taken the trouble to study it. I would add, that never in the course of the two years and a-half that I have filled the office of Assistant-Physician to the two "services" of the Hospital, has any accident or inconvenience attending syphilisation come under my observation, either in the Hospital or in my private practice.

Accept, Mr. Editor, &c. &c.

L. Bidenkap,
Assistant-Physician to the State Hospital at Christiania.

The State Hospital, Christiania.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, December 3, 1862.

Dr. Tyler Smith, President, in the Chair.

The following gentlemen were duly elected Fellows of the Society:—Dr. Charles Campbell, Kingston, Jamaica; Mr. Walter Chapman, Lower Tooting; Dr. E. Ellis, Fitzroy-street; Dr. J. Frain, South Shields; Dr. C. C. Hayman, Eastbourne; Dr. Kirkpatrick, Lying-in Hospital, Dublin; Mr. F. Prince, Sawston, Cambridgeshire; Mr. I. S. Shillingford, Peckham; Mr. G. F. Spry, Staff Assistant-Surgeon, Fort Gomer, Alverstoke; and Mr. T. Taylor, Birmingham.

Dr. Tanner, after making some preliminary remarks on the duty of recording even solitary examples of rare or complicated diseases, proceeded to give the following account of a

CASE OF MULTIPLE MEDULLARY CANCER COMPLICATED WITH PREGNANCY.

He said—"On July 29, 1862, I was requested by Dr. Thane, of Hart-street, Bloomsbury, to see with him Mrs. C. L., aged 39, residing in Drury-lane. The poor woman was the wife of a very respectable working man, and was in comfortable circumstances for her station in life. She had always enjoyed remarkably good health. None of her relatives had ever suffered from cancer; but there was probably a slight family tendency to phthisis—that is to say, all her half-brother's children had died from pulmonary consumption. She had been married ten years; and was about five calendar months advanced in her third pregnancy. The first child had been born on October 12, 1854. While suckling this infant pregnancy again took place, and on weaning the child at the beginning of 1856, she aborted, being three months advanced in gestation. After this accident the general health continued very good until May 2, 1861, when her child died from an attack of croup; and she was rendered so miserable by the loss that she may be said to have been neither happy nor well since. The catamenia had been quite regular until February 25, 1862; but this was the last day of their appearance. At the commencement of the present year (1862) a small swelling, about the size of a hazel-nut, was first discovered in the abdominal walls, just to the right of the umbilicus. There was no other symptom of disease appreciable to her husband or herself at this time. The growth gave rise to no annoyance until a few weeks ago, when it commenced enlarging, and became the seat of lancinating pains. Similar swellings also then began to form in other parts. On July 29, at my first visit, I found her much reduced in flesh and strength. The appetite was good; but, as she suffered much from indigestion and flatulence, she was afraid to eat, although the remedies prescribed by Dr. Thane had given great relief. The sleep at night was very disturbed. In the abdominal parietes, just to the right of the umbilicus, there was a well-defined tumour, about the size of a large walnut. Adjoining the lower part of the ensiform cartilage of the sternum, there was a more extensive mass, also seated in the abdominal wall. In the left groin there was likewise a flattened growth, about two inches and a-half in diameter. On examining per vaginum, a very firm growth was discovered projecting into the canal, feeling as if it had its origin from the lower part of the sacrum, though, in reality, it was entirely seated in the recto-vaginal septum. It was clear that this mass would soon block up the vagina, and Dr. Thane assured me that it had much increased in size during the last fortnight. As before mentioned, she was five months advanced in pregnancy, and both the uterine souffle and the foetal heart could be plainly distinguished. The liver was much enlarged, and this enlargement, combined with the size of the uterus, occasioned a wearying feeling of distension, as well as some dyspnœa. Taking all the foregoing circumstances into consideration, it seemed certain that the poor woman's comfort would be increased, even if life were not prolonged, by inducing premature labour—a proceeding which did not appear contra-indicated by any feeling for the child, as it was certain that a live infant could not be given birth to through the natural passages. The propriety of waiting, and ultimately effecting delivery by the Cæsarean section was discussed; but such a plan of treatment was regarded as not applicable to the present instance. Consequently, on July 30, the membranes were punctured, and about half-a-pint of liquor amnii withdrawn. On August 1, labour pains of fair severity set in; but the os uteri was still very rigid on the following afternoon; and, as the patient was getting tired and exhausted, and, moreover, as the mass of cancer in the recto-vaginal septum reached to within almost an inch of the pubes, it was evident that nothing could be gained by further delay. I, therefore, slowly tried to dilate the os uteri; and, this being partially effected, the fœtus was bored up with a pair of forceps, and removed piecemeal. No difficulty was experienced with the placenta; the discharge of blood was very slight; no injury was done to the uterus or vaginal walls, and the poor woman was left tolerably comfortable. For some few days she continued to progress favourably; but on August 10 a severe attack of diarrhœa set in, aphthæ formed on the tongue and gums, and for the first time in her life she became jaundiced. It would only be tedious to give an account of the way in which she daily lost ground; suffice it to say that matters gradually progressed from bad to worse until the morning of August 26, when death took place from exhaustion. At the autopsy, fourteen hours afterwards, the body was found greatly emaciated. In the abdominal parietes, to the right of the umbilicus, there was a deposit of firm medullary cancer the size of a walnut, together with a larger growth just below the ensiform cartilage. These were separate tumours, and not infiltrations. The liver was enlarged to about three times its natural size, and studded with medullary masses, varying in size from a pea to a small orange. There was likewise several deposits of cancer in both the great omentum, in the spleen, in the walls of the colon, and one large mass binding the sigmoid flexure of the colon to the tissues of the pelvis. In the pelvic cavity there was a separate deposit, extending chiefly down the recto-vaginal septum, and completely blocking up the vagina. The inguinal glands on both sides were enlarged and infiltrated with medullary cancer. The uterus, considering the time which had elapsed since delivery, was of its normal size, and healthy. At the apex of the left lung there was a small deposit of tubercle, which had undergone calcareous degeneration, while at the same part of the right lung there were several small tubercles. The heart was healthy, but its walls were flabby. The kidneys were healthy." The paper concluded with observations as to the different modes of treatment which might be resorted to in such a case as that detailed, together with the reasons which led to the adoption of that practised.

A paper, by Mr. Walter Chapman, was read on a

CASE OF RETENTION OF THE CATAMENIA, FOR MORE THAN TWO YEARS, IN A MARRIED WOMAN.

The history of this case, prior to its coming under the care of the author, was reported as the fifth case of cure of vesico-vaginal fistula, in the *Lancet* of November 24, 1860, by Mr. I. B. Brown. This lady, in her third confinement, was

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delivered with instruments of a still-born child, and soon afterwards was found to be the subject of a vesico-vaginal fistula. She was operated on twice, and was cured; the last operation being in the middle of June, 1860. This patient was first seen by Mr. Chapman on September 26, 1862. She was sitting up, able to superintend her domestic affairs and walk about, and presented the aspect of health. She was of robust stature, rather short, with a superabundance of fat, and forty years old. She complained of great irritability of the bladder and stomach, and of severe pain in the lumbar and sacral regions. When in bed, on external examination of her abdomen, no difficulty was experienced in determining the existence of a large tumour, resembling the gravid uterus at about the sixth month. She had no reason for supposing herself to be pregnant, but said she had not menstruated since the operation. On a vaginal examination, it was found that the cervix was lost in a general enlargement of the uterus, the mouth of which could not be detected. The speculum revealed the spot where the os uteri had existed, but it was now hermetically sealed. Mr. Chapman stated his opinion that the symptoms resulted from a retention of the catamenia. Dr. Tyler Smith examined the patient, and confirmed the diagnosis. It was agreed that an opening should be made into the uterus for the evacuation of the fluid. This was done by the author, on October 5 (assisted by his friend, Mr. Thomas Harvey Trent), by passing the index finger of the right hand through the spot which could be detected by the touch as having been the site of the os uteri. Its withdrawal was instantly followed by the escape of ten or twelve ounces of a treacly fluid, of a dark claret colour, perfectly free from any unpleasant odour; and much more gradually flowed away. She was kept in bed, but became very ill on the third day, the symptoms resembling those of peritonitis. From this attack she appeared to recover, and went on tolerably well for some days; but on the morning of October 16, after a night of sickness, she became prostrated, and died at two p.m. No post-mortem inspection could be obtained.

Dr. Tyler Smith thought the case must be considered either as one of pyæmia, abscess bursting into the peritoneum, or the passage of some of the retained menstrual fluid into the peritoneal cavity. The latter was the most probable, because it was an accident known to occur in such cases, and to produce similar symptoms to those which had been detailed. It was remarkable that, when the uterus was distended with the menstrual secretion, no escape through the tubes occurred; but this sometimes took place when the uterus was partially emptied, and a free exit had been obtained through the os. The regurgitation of fluid through the Fallopian tubes sometimes happened after labour, during abortion, and in some cases of menorrhagia. It was evident that the treatment of cases of retained menstruation required great care and circumspection.

Mr. Owen thought that the cause of death might be attributed to the admission of air into the uterus in its relaxed and enlarged condition. After the gravid uterus is emptied of the fœtus and secundines, it immediately contracts to nearly its natural size; but here that reaction was not likely to follow, whilst the daily injection of water which had been employed exposed the organ afresh to contact with the air through the artificial opening, which latter presented no obstruction like that of the os and cervix uteri.

Dr. Graily Hewitt remarked that the chief question to be determined was the cause of the fatal result in this interesting case. He considered that it was probably due, as suggested by Mr. Owen, to pyæmia. At the last meeting of the Society, he had alluded to the occasional circumstance of a fatal result following the evacuation of the uterine contents in cases of menstrual retention by subsequent passage of some of the blood into the peritoneal cavity. The explanation of this curious circumstance he had then attempted he still thought the most probable one, and that it was due to the contractions of the uterus becoming more forcible as its bulk diminished. However that might be, it did not seem that in the case now before the Society any such occurrence had taken place. He considered that the best course to adopt in treating such cases would be to make a minute opening, and to allow the fluid to escape as it had collected, gradually; further, that it was decidedly expedient to avoid anything, such as the use of injections of water into the uterus, likely to be the means of conveying air into the cavity of that organ.

Dr. Meadows exhibited a

CASE OF MONSTROSITY,

in which the two lower extremities were absent, and a caudal appendage about four inches long substituted; the body, gradually tapering off, ended in this pointed process; there were no external genital organs, and no anus. Dissection showed that the bowel ended abruptly at the sigmoid flexure of the colon. There were no kidneys or bladder, nor any trace whatever of any urinary apparatus. The supra-renal capsules were present, and were of large size, but there was very little proper structure in them, being chiefly two membranous sacs. An ovary and a somewhat convoluted Fallopian tube lay on either side of the pelvis, but there was no trace of a uterus or vagina. The liver, spleen, and other abdominal organs were normal, as were all the thoracic viscera.

Mr. Skipse noticed the absence of the kidneys as of more interest than the external deformity; that intra-uterine life and growth should go on to the degree here seen without those organs was very remarkable, especially as they are not inactive during the fœtal state, as was shown by the occurrence of concretions of uric acid in the kidneys before birth; and he related the case of a still-born male child that he had the opportunity of examining, where the calyces and pelvis of the kidneys were filled with numerous uric-acid calculi, some of the size of small peas. The parents of the child were known to him; the father had been operated on for stone, and was then passing uric-acid calculi by the urethra. He was a continual sufferer from marked symptoms of the uric-acid diathesis.

Mr. Owen, many years ago, delivered the wife of a respectable farmer in Essex of a well-formed female child, in which the os coccygis was prolonged into a caudal appendix about three or four inches in length, tapering off, and in every respect resembling the tail of an animal, being curled up on the back when at rest, and frequently moved in other directions. The mother attributed this growth to a strong impression made on her mind during pregnancy, for three or four months of which period she had fed a young pig, the beauty of whose tail she constantly admired. Mr. Owen, by the express desire of the mother, removed it by a ligature gradually tightened for a week. The child lived (but never walked without the aid of crutches) for nine years, when she died of hæmoptysis. The parents would not allow an examination. The tail, along with a minute description, was placed in the museum of Guy's Hospital by the late Mr. Brausby Cooper.

Dr. W. Tilbury Fox read a paper on

THE INFLUENCE OF THE MOTHER'S HEALTH IN THE PRODUCTION OF RICKETS.

The paper commenced with an analysis of the pathological changes in the rickety subject, from which it appears that the leading feature of the disease is simply a deficiency of lime-salt in the early nutrition of the child; and the object of the paper was to point out what appeared to be a tangible cause for such a deficiency—viz., the occurrence of menstruation during the greater period of lactation. A table of examples was given, as exhibiting the matter in its several details and aspects; and in most of the cases which came under the author's observation, it was noticed that, whenever mothers had freely and repeatedly menstruated during lactation, the child was rickety, unless the latter had been artificially fed with food (such as milk), and thus furnished with bone-forming material; and the degree of rachitis appeared to be in direct ratio to the amount and degree (both as regards frequency and duration) of this condition, exceptional cases being accounted for in the fact of the mother not wholly suckling her infant. The *modus operandi* of the influence of menstruation upon the composition of the milk was discussed briefly; and, though little is known upon the matter, yet it appeared, on comparing together the analyses of Simon on the one hand, and Becquerel and Vernois on the other, that the per-centage of salts is much lessened in nurses who menstruate during lactation, and hence, the child wholly fed upon the milk of the latter would probably become rachitic. The author thought it likely that rickets is produced in the majority of cases in this way. The paper then contained some remarks upon the use of certain kinds of food in very general use which conduced to the production or evolution of the disease—for example, Brown and Polson's, the Oswego, and the Maizena so-called corn-flours, these being oftentimes merely starch, contrasting them with such as the somola of Bullock and Reynolds, which was rich in gluten or flesh-forming sub-

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stance; and attention was drawn to a new preparation, the saccharated wheat-phosphates, which might take the place of sugar in the food of children, especially those who are rickety. In conclusion, the author stated that he had introduced the subject as a provocative, rather than as a certainty of opinion.

Dr. Graily Hewitt believed that there was a very general impression amongst the Profession, and he thought also amongst the public at large, as to the inadvisability of allowing lactation and menstruation to go on in the same individual. The theory now propounded by Dr. Tilbury Fox would give an explanation as to the reasonableness of this impression. The subject was so novel that it would hardly be expected that the Fellows of the Society could properly discuss the paper so as to do it justice. Each must observe and collect facts on which to decide *pro* or *con*. in reference to the matter. He would ask Dr. Fox one question: How are those cases to be explained where children, the subjects of rickets, do often, after being apparently successfully treated, relapse long after any evil connected with lactation has ceased to be in operation? Such relapses were, he had observed, by no means uncommon.

Dr. Gervis wished to ask the author of the paper how, on his theory, the occurrence of rickets in children wholly brought up by hand, or in children whose mothers did *not* menstruate during lactation, was to be explained? The fact also of the children of mothers who menstruate during lactation in many cases certainly not proving rickety, would appear to militate against Dr. Fox's view. Dr. Gervis was inclined to consider that the occurrence of menstruation during lactation was not, *par excellence*, the cause of rickets, though possibly influential in its production just so far as it proved injurious to the mother's health.

Dr. Fox, in reply, begged the Society to remember that the matter had been brought before them, not because the observations were conclusive, but for the purpose of courting inquiry. The mode of causation pointed out was not the *sole* one; for, as Dr. Graily Hewitt had observed, rickets might ensue after the weaning of the child. In this case the disease was due to, or the tendency to it worked out by, the use of foods deficient in certain constituents. So far, however, as his (Dr. Fox's) observation went, it appeared that most rickety children belonged to mothers who had menstruated during lactation; and if the paper should appear in print, the Fellows would find, in the list of cases, instances of rickets affecting one member only of a family, all the consomitants of the rearing of the children being the same, with the exception that the mother menstruated regularly and freely when nursing the rickety child, and then only. In reference to Dr. Druitt's remarks, it might be observed that the leading pathologists held that all that is necessary to the production of rickets is a deficiency of lime; and this conclusion seems inevitable if we glance at the intimate structure of the rickety bone, in in which all the cellular components are fully developed, and in which the only unusual condition is an absence of calcareous matter. Dr. Gervis may possibly find in the exceptional cases mentioned by him, where children are not rickety, though nursed by mothers menstruating, that some such cause as artificial feeding explains the apparent contradiction. In reply to a question from the President, as to how rickets occurring during intra-uterine life could be accounted for, Dr. Fox remarked that the worst case he had met with was that of a child whose mother menstruated during pregnancy.

MEDICAL NEWS.

ARMY MEDICAL DEPARTMENT IN INDIA.

The following extracts are from a letter by an Assistant-Surgeon of the Indian army, published in the *Delhi Gazette* of November 25, 1862. They represent feelings of discontent, not confined to India, but common in the whole Medical department of the army, and which, we regret to add, are only too well founded:—

"It can be shown, that under the Royal Warrant of 1858, and the act of the annexation of India to the Imperial Government, we must look upon service in India as a loss and a hardship.

"In consequence of India coming under the Home Government, the valuable and acceptable allowance of head-money for the Medical charge of troops, landed in India, was stopped without giving the slightest equivalent.

"The stoppage of this allowance has indeed been a sad loss; and when to this deprivation we reflect on the improved rates of pay of Medical officers serving at home, service in India must be considered, especially by Assistant-Surgeons, unsatisfactory in the extreme.

"To be obliged to linger on on the pay of a subaltern (256 rupees), (minus company allowance, which most lieutenants of any standing draw), at the mature age of an Assistant-Surgeon of six years' service, and yet withal pay entrance and regimental subscriptions at the rate of pay of a higher relative rank, is, I conceive, an unbearable injustice, and one under which wretchedly paid Assistant-Surgeons have had to contend for the last three years without the slightest prospect of amendment.

"Allow me here to ask, who sits between the Government and the Pension List, on Invaliding Boards, Condemning Boards, and committees of all kinds, where honour, knowledge, and ability are of paramount importance to the Government? And yet the men who are called on to perform these, and a thousand other duties of even greater moment, are openly and continuously wronged, and their utmost efforts to gain redress are useless.

"The memorialists should state, that the Medical officers of her Majesty's army consider they are fairly entitled to increased pay, and to the pay of their relative rank, from the date of the grant of such increase to the Medical officers serving at home; from the date when the head money for the Medical charge of troops landed in India was discontinued, under the plea that we then came under the rules of home service; and from the date when we had entrance and regimental subscriptions charged according to the rates of pay of a warrant in all other ways ignored in India. The application for this pay will, I firmly believe, be honourably met. There is not a combatant officer, from the Himalayas to Cape Comorin, who will not freely admit that we are fairly entitled to this just remuneration. I have frequently heard the question discussed, and I think I am right in saying, that this honourable feeling is universal amongst the regimental officers serving in India.

"It would be well also to ask for a discontinuance of the gazetting of Assistant-Surgeons to regiments in India, as such merely entails on the Medical officer an expenditure of nearly £50 (for entrance fee, subscriptions, and uniform), for, on theregiment being ordered out of India, the third Assistant-Surgeon is, on being marched to the ship, which is to take home his regiment, hurriedly bid 'good-bye,' and directed to purchase a new uniform, and to join a new regiment.

"This treatment is not received by the other supernumerary officers of the regiment, all of whom are fairly carried home.

"It is said, that the Medical officer receives this treatment, because his services cannot be dispensed with; if, then, he is so valuable, why mulct him of £50 for having served with a regiment for a short period?

"It is for such reasons, as this indicates, that the circumstances of Assistant-Surgeons are indeed slender. Most officers are glad to see their names in the *Gazette*, as it brings promotion, without loss of regiment, uniform, or entrance fee; not so with the Medical officer, who loses all, even without promotion.

"Of the effects of the painfully manifest apathy on the part of the Indian Government towards acting justly by its Medical officers, is the distrust with which Royal Warrants, although published under the sacred name of Majesty, are now viewed by the students of the Medical Schools of the United Kingdom—a distrust which will tell sadly on the army when in urgent need of a supply of Medical officers.

"This want will, on the outbreak of a war, be still more trying and evident, in consequence of the reduced number of Assistant-Surgeons now with regiments out of India. Should the Government not be wise in time, this crisis will, I doubt not, be taken advantage of (as in the Crimea) to represent the many acts of injustice under which we serve, with the view to their redress."

University of St. Andrews.—List of gentlemen on whom the Degree of Doctor of Medicine was conferred on December 20th, 24th, and 31st, 1862:—

Joseph Dixon Adams, M.R.C.S., L.S.A., Martock, Somerset; Patrick M. Allan, L.R.C.S. Ed., Arbroath; Henry George Allanson, M.R.C.S., L.S.A., Sheffield; John Anderson, M.R.C.S., L.A.C., Grantham; George A. Angier, M.R.C.S., L.S.A., Ipswich; George Morris Ashforth, M.R.C.S., L.S.A., Westmill, Herts; Charles Owen Aspray, L.S.A., London; Thomas John Aubin, M.R.C.S., St. Clement's, Jersey; Mackenzie Bacon, M.R.C.S.

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L.S.A., Norfolk; John J. Ball, Dublin; William W. Ballard, M.R.C.S., L.A.C., Tunbridge; Richard Bangay, M.R.C.S., Corbridge; Alfred J. H. Banks, M.R.C.S., L.A.C., Stafford; Edward R. Barker, M.R.C.S., Denbigh; Thomas H. Barnes, M.R.C.S., L.M., Clare, Suffolk; Barnabas Barrett, M.R.C.S., L.A.C., Liverpool; John T. Barrie, L.F.P.S. Glasg., Newarthill, Lanark; Thomas Samuel Barrow, London; Joseph Barwise, L.A.C., Wigan, Lancashire; Abraham Bate, L.R.C.S.I., L.M., Donegal, Ireland; Henry Beattie, M.R.C.S., L.A.C., Waltham Abbey; Walter Thomas Beeby, London; Joseph S. Belcher, M.R.C.S., L.A.C., London; James Edward Bennett, M.R.C.S., L.S.A., London; Henry Benson, L.R.C.S.I., Dublin; Charles Beviss, London; Charles Henry Biddle, M.R.C.S., L.S.A., Leeds; Rowland Blennerhassett, L.R.C.S.I., L.R.C.P.E., Co. Kerry, Ireland; William Bloxam, M.R.C.S., L.S.A., London; Andrew Bolton, M.R.C.S., L.S.A., Newcastle-on-Tyne; Lionel Booth, M.R.C.S., L.S.A., Greenwich; Samuel Booth, M.R.C.S., L.S.A., Huddersfield; Josiah A. Bowen, L.F.P.S. Glasg., Bretherton, Lancashire; William Philip Brabazon, L.R.C.S.I., L.K.Q.C.P., Liverpool; William S. Bramley, M.R.C.S., L.A.C., St. John, Wakefield; J. Brecknell, M.R.C.S., L.S.A., Durham; John M. Bright, M.R.C.S., L.A.C., Forest-hill, Kent; Augustus Brown, M.R.C.S., L.A.C., Islington; John R. Brumwell, M.R.C.S., L.A.C., Burnley; William Henry Fleetwood Puckle, L.S.A., Royal Mint; Ebenezer Bucknill, M.R.C.S., L.S.A., London; Edward C. Bury, M.R.C.S., L.A.C., Wisbeach; Robert Lyons Campbell, F.R.C.S. Lond., L.R.C.P. Lond., Inverness; John Candy, M.R.C.S., L.A.C., Alstonefield, near Ashbourne; John Cannell, Peel, Isle of Man; George L. Carrick, Edinburgh; J. F. Chittenden, M.R.C.S., L.S.A., London; A. G. Clarke, Calcutta; James Cleghorn, Caithness; William Cooper, M.R.C.S., L.R.C.P. Ed., L.S.A., Bury St. Edmunds; David Dunlop Costine, Liverpool; Henry Joseph Coulton, L.R.C.S.I., L.M., Dublin; Robert Cowan, L.F.P.S. Glasg., Glasgow; Thomas Creed, M.R.C.S., L.A.C., Greenwich; Nathaniel E. Cresswell, M.R.C.S., L.A.C., Canterbury; Samuel Crompton, M.R.C.S., L.A.C., Manchester; William Cross, Liverpool; William G. Curgenven, Plymouth; George C. Dale, F.R.C.S. Eng., L.S.A., London; Robert Alexander Davis, L.R.C.P. Ed., L.S.A., Stafford; David Davies, M.R.C.S., L.A.C., London; Horace Day, M.R.C.S., H.M. Bombay Army; James Bathgate Dickinson, M.R.C.S., L.S.A., Howden-on-Tyne; Patrick William Dillon, M.R.C.S., L.S.A., Ennis, Ireland; Ebenezer Diver, London; George Douglas, M.R.C.S., L.A.C., Gateshead-on-Tyne; William B. Dow, L.R.C.P. Ed., L.F.P.S. Glasg., Fifeshire; Thomas Downie, L.R.C.P. Ed., L.F.P.S. Glasg., Blantyre; Edward Dowson, M.R.C.S., London; William Dunderdale, M.R.C.S., L.S.A., L.M., Boulton-le-Fylde, Lancashire; John Edwards, M.R.C.S., Birmingham; Daniel Elias, L.S.A., Southport, Lancashire; John Ellerton, M.R.C.S., L.S.A., Wakefield, Yorkshire; George Stokoe Elliot, Southwell, Notts; William Alfred Elliston, M.R.C.S., L.S.A., London; William Erskine, L.F.P.S. Glasg., Dunfermline; Charles Evers, M.R.C.S., L.A.C., London; James Ewing, L.R.C.P. Ed., L.F.P.S. Glasg., New Lanark; Henry R. Fawcus, M.R.C.S., L.A.C., S. Charlton, Northumberland; Richard Fegan, L.R.C.S.I., L.K.Q.C.P., Belfast; Alex. J. Ferguson, L.F.P.S. Glasg., Perth; John Ferguson, M.R.C.S., Cove Nigg; Edward Fernie, M.R.C.S., L.A.C., Macclesfield; Charles E. Fitzgerald, M.R.C.S., Folkestone; Charles Newth Foote, M.R.C.S., L.S.A., Conisbro', Doncaster; James Ford, M.R.C.S., Barnstaple; John Frame, L.F.P.S. Glasg., Glasgow; John D. Frankish, Guy's Hospital; John Fulham, L.R.C.S.I., L.A.C., Drogheda; Charles Furner, M.R.C.S., L.A.C., Brighton; Frederic George, M.R.C.S., Cotterham, Surrey; Hugh George, M.R.C.S., L.A.C., Revesby, Lincolnshire; John Gimblett, M.R.C.S., L.S.A., Lydney, Gloucester; William Gimson Gimson, M.R.C.S., L.S.A., Witham, Essex; Richard W. Goddard, M.R.C.S., L.A.C., London; Samuel Day D. Goss, L.R.C.S. Ed., L.S.A., London; James H. Gramshaw, M.R.C.S., L.A.C., Gravesend; Adolphus Burnell Great Rex, L.S.A., Eccleshall; Michael Greene, L.R.C.S. Ed., L.A.C., Ennis, Co. Clare; Alexander Greenlees, L.R.C.S. Ed., Glasgow; Alfred Leete Griffith, M.R.C.S., L.S.A., L.M., Swindon; Griffith H. Griffith, M.R.C.S., L.A.C., L.R.C.P. Ed. by Exam., Folkestone, Kent; James Griffith, M.R.C.S., L.A.C., Smarden, Kent; Francis P. Griffiths, M.R.C.S., L.A.C., Sheffield; Owen Grimbly, L.S.A., Banbury, Oxon; John Grove, M.R.C.S., L.A.C., London; William R. Grove, M.R.C.S., L.S.A., Huntingdon; Samuel T. Gwynn, M.R.C.S., L.A.C., Whitechurch, Salop; Charles Fincham Harding, M.R.C.S., Woolwich; Abraham Harris, L.R.C.P. Ed. by Exam., M.R.C.S., L.A.C., Camborne, Cornwall; Walter Harris, M.R.C.S., London; Arthur Robert Harrison, M.R.C.S., L.S.A., London; Henry Mortimer Hawkins, M.R.C.S., Peckham, Surrey; George Hayward, M.R.C.S., L.S.A., Leeds; Sidney Hayward, M.R.C.S., L.S.A., London; Edward Heath, M.R.C.S., Arklow, Ireland; Frederic Hetley, F.R.C.S. Eng., L.S.A., Norwood, Surrey; Edward Hibbert, M.R.C.S., L.M., Tunbridge Wells; Charles C. Hicks, M.R.C.S., L.S.A., Dunstable; John Daniel Hill, M.R.C.S., L.S.A., Market Harbro', Leicestershire; Alexander Hillyard, L.R.C.S.I., L.M., L.S.A., Falcarragh, Ireland; Caleb S. Hilton, L.S.A., Preston; Edward Rodolphus Hodgkinson, L.A.C., Umoalloch, India; Richard Holt, London; Abney C. Hopton, M.R.C.S., London; Edward Arthur Howsin, M.R.C.S., Newmark; Ebenezer Hughes, L.F.P.S. Glasg., Liverpool; James D. Hulme, M.R.C.S., L.A.C., Wigton; Henry Hume, M.R.C.S., L.S.A., London; William Hutchinson, L.F.P.S. Glasg., Loughborough; Francis Henry Wilson Iles, M.R.C.S., L.S.A., Watford, Herts; George R. Irvine, M.R.C.S., L.S.A., Portsmouth; John W. Irvine, L.R.C.S. Ed., L.A.C., Lancaster; Felix William Isherwood, L.R.C.P. Ed., M.R.C.S., L.S.A., Hayes, Middlesex; Robert Jackson, Newcastle; Thomas Jackson, M.R.C.S., L.A.C., Scarborough; Alfred James, M.R.C.S., L.A.C., Forest Hill, Kent; James M. Johnson, L.F.P.S. Glasg., Liverpool; Thomas M. Johnson, L.S.A., Salford, Lancashire; John E. Jones, M.R.C.S., L.A.C., Dolgelly, N. Wales; Edward A. Keogh, Dublin; Charles Noyce Kernot, M.R.C.S., L.S.A., L.M., Cowes, Isle of Wight; Benjamin C. Kerr, L.R.C.S., H.M. Service; Thomas William King, M.R.C.S., London; William O. Lambert, L.F.P.S. Glasg., L.R.C.P. Lond., Sunderland; John William Lane, L.R.C.S.I., Bellaghay, Ireland; Jeremiah Lawlor, L.F.P.S. Glasg., Queenstown; Matthew Lee, M.R.C.S., Bradford; Joseph Lees, L.A.C., London; John Levey, M.R.C.S. Ed., L.M.; Edwin Lloyd, M.R.C.S., L.A.C., Worksop, Notts; William Loftus, L.R.C.S., Glasgow; Charles F. Long, M.R.C.S., L.S.A., Barham, Kent; Arthur E. T. Longhurst, M.R.C.S., L.S.A., Royal Navy; Christopher C. Lynn, M.R.C.S., Newcastle-on-Tyne; James Macbirnie, L.F.P.S. Glasg., Glasgow; George V. Macdonogh, L.R.C.S.I., Sunderland; John Macgown, L.F.P.S. Glasg., Millport; Duncan Macintyre, L.R.C.S. Ed., Fort William; J. William Mackenna, L.F.P.S. Glasg., London; William J. Mackenzie, M.R.C.S., L.R.C.P., Greenwich; Christopher J. Madden, L.R.C.S. Irel., Bourton-on-Water; Martin Magill, M.R.C.S., Royal Navy; John M. Marshall, L.R.C.S. Ed., Edinburgh; Thomas E. Mason; Donald Ptolemy Masson, M.A., Edinburgh; William Matterson, M.R.C.S., L.S.A., York; James Blake Maurice, M.R.C.S., L.S.A., London; Hustor Maxwell, M.R.C.S.I., H.M.S. *Pembroke*; John Mayer, M.R.C.S., L.A.C., Macclesfield; George Mayou, M.R.C.S., L.A.C., Newport, Monmouthshire; Albert M'Diarmid, M.R.C.S., L.A.C., Rochester, Kent; Aaron George Medwin, L.S.A., London; Charles Matthias Meller, M.R.C.S., L.S.A., London; Edwin J. Miles, M.R.C.S., L.A.C., Gillingham, Dorset; Thomas Mills, M.R.C.S., Tipton, Staffordshire; William P. Mills, M.R.C.S., L.A.C., L.R.C.P. Lond., Ipswich; John Miller, L.F.P.S. Glasg., Glasgow; John R. Milsome, M.R.C.S., L.S.A., London; Robert Nathaniel Mitchell, M.R.C.S., L.S.A., New-cross, Kent; Arthur M'Kenna, L.R.C.S. Edin., H.M.S. *Hogue*; Hugh M'Lean, M.R.C.S., L.S.A., Newcastle; William Henry Moor, M.R.C.S., L.S.A., Buntington, Herts; Edwin Moore, M.R.C.S., L.S.A., Preston; Francis Moore, M.R.C.S., L.S.A., Hadham; Edward S. Morley, M.R.C.S., L.S.A., Blackburn; Peter Morrison, L.F.P.S. Glasg., Glasgow; Edward L. Moss, L.R.C.S.I., L.M., Dublin; Patrick Mulholland, L.F.P.S. Glasg., Glasgow; William L. Mumford, M.R.C.S., L.S.A., Cornard Parva, Suffolk; William Murdoch, M.R.C.S., London; Henry A. Murray, L.A.C., Evenwood, Durham; John C. Murray, L.R.C.S., Gateshead; James Neal, M.R.C.S., L.S.A., Birmingham; Frederick Needham, M.R.C.S., L.M., York; George M. Nell, M.R.C.S., L.M.; George D. Nelson, M.R.C.S., L.A.C., Bridlington Quay; George Edward Nicholas, M.R.C.S., L.S.A., L.M., Wandsworth, Surrey; Robert Thomas Nichols, L.S.A., Rotherhithe, London; Robert Salisbury Nightingall, M.R.C.S., L.S.A., London; George William Nead, M.R.C.S., L.S.A., Wokingham, Berks; Richard Norris, M.R.C.S., Birmingham; William Augustus Norton, M.R.C.S., Alderton, Suffolk; Elisha Noyce, L.S.A., London; Frederick O'Conor, L.F.P.S. Glasg., Dublin; Henry O'Flanagan, L.R.C.S., Miltoun, Ireland; Edmund O'Ryan, L.S.A., L.M., Clonakilty, Ireland; John Owen, M.R.C.S., L.A.C., Bromyard, Hereford; Henry Owens, M.R.C.S., Croydon; James Allden Owles, M.R.C.S. Eng., L.S.A., Bungay, Suffolk; Robert Paterson, L.F.P.S. Glasg., Galston, Ayrshire; Joseph Chadwick Pearson, M.R.C.S., L.F.P.S. Glasg., Manchester; Charles Howell Phillips, M.R.C.S., L.S.A., London; John Picthall, L.R.C.P. Lond., L.R.C.S., Bengal Medical Service; A. Bradford Pierpoint, M.R.C.S., L.S.A., London; Alexander Pole, M.R.C.S., L.M., Greenbank, Shetland; Robert Popham, L.F.P.S. Glasg., London; John Lewis Prichard, London; John Prythrech, M.R.C.S., L.S.A., Liverpool; Thomas Pullin, M.R.C.S., L.A.C., Sidmouth, Devon; Joseph Meredith Ramsbotham, M.R.C.S., L.S.A., London; Robert Ransom, F.R.C.S., L.A.C., L.M., Cambridge; Wynne Staton Ranson, Edinburgh; William P. Rawlins, M.R.C.S., L.A.C., Kentish town; Edward Ray, F.R.C.S. 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Simons, M.R.C.S., L.A.C., Sussex; Frederick Skae, Edinburgh; George Skrimshire, L.S.A., London; Francis W. Smartt, L.R.C.S.I., Lic. K. and Q. Coll., Kilworth, County Cork; Andrew F. Smith, Tweedmouth; Charles Smith, L.R.C.S.I., L.M., Derry, Ireland; Henry Smith, M.R.C.S., L.S.A., Rudgwick, Surrey; James A. Smith, L.F.P.S. Glasg., Glasgow; John Smith, M.R.C.S., L.A.C., Chatham; Robert C. Smith, L.F.P.S. Glasg., Manchester; Samuel Wagstaff Smith, M.R.C.S., L.S.A.; Lionel Dixon Spencer, Newcastle-on-Tyne; Robert H. S. Spicer, L.R.C.P. Ed., M.R.C.S., North Molton, Devon; Samuel Spratley, M.R.C.S., L.M., L.S.A., Rock Ferry, Cheshire; George F. Spry, M.R.C.S., L.A.C., Army; Thomas Stainthorpe, M.R.C.S., L.S.A., Hexham; Joseph H. P. Staples, M.R.C.S., London; Richard J. P. Steel, M.R.C.S., L.R.C.P. Ed., L.A.C., Blaenavon; James Steele, L.R.C.S.E., Lanarkshire; Daniel Stewart, L.R.C.S. and L.M. Ed., Auchterarder; Henry Tournay Stiles, M.R.C.S., L.M., L.S.A., Spalding, Lincolnshire; William Domett Stone, M.R.C.S., L.S.A., Fulham, London; Henry John Strong, L.R.C.P. Ed., M.R.C.S., L.S.A., L.M., Croydon; John W. Taylor, New Malton, Yorkshire; Thomas M. Teare, M.R.C.S., Ramsay, Isle of Man; Samuel Telford, L.R.C.S.I., Dublin; William H. C. Tessier, L.A.C., Dublin; Richard R. G. Thomas, L.R.C.P. Ed., L.M., Hartland, North Devon; John Thompson, M.R.C.S., L.S.A., Snaith, Yorkshire; Robert Farren Thompson, L.R.C.S., L.A.C., Jarrow, Durham; Robert Tiffen, M.R.C.S., L.S.A., Wigton, Cumberland; Henry Tofts, M.R.C.S., L.S.A., Cambridge; Henry Beesly Trimmer, M.R.C.S., Gloucester; Alexander Trotter, L.F.P.S. Glasg., Blyth, Northumberland; Chas. H. Trotter, M.R.C.S., L.A.C., Sydney; Henry E. Turnour, M.R.C.S., L.S.A., Market Rasin, Lincoln; J. E. Tuson, M.R.C.S., H.M. Bengal Army; E. C. Tyte, M.R.C.S., L.A.C., Harrow; Thos. S. Usher, M.R.C.S., L.A.C., Hull; Edward Waddington, L.K.Q.C.P., L.R.C.P. Ed., L.R.C.S., Wakefield; Frederick Waghorn, M.R.C.S., London; Edward G. Wake, M.R.C.S., L.S.A., Collingham, Notts; Robert Wallace, L.F.P.S. Glasg., Saltcoats; John Ward, Glossop, near Manchester; Alfred William Warder, M.R.C.S., L.A.C., Ottery, Devon; Francis William Warrington, M.R.C.S., L.A.C., Congleton, Cheshire; Isaac Watchhorn, London; John Watson, M.R.C.S., Manchester; Joseph Webster, M.R.C.S., L.R.C.P. Ed., Golcar, near Huddersfield; Archibald Weir, F.R.C.S. Ed., Malvern; John H. C. Whipple, Plymouth; Arthur Calcutta White, M.R.C.S., L.S.A., Rawreth, Essex; Edward White, M.R.C.S., L.S.A., L.M., Birmingham; Frederic Fachus Wilkinson, L.R.C.P. Ed., M.R.C.S., L.S.A., Sydenham, Kent; Matthew Willett, M.R.C.S., Bristol; W. Rhys Williams, L.R.C.P. Edin., Baldoch; James Williamson, M.R.C.S., L.S.A., South Shields; Thomas Willis, M.R.C.S., L.S.A., Dublin; James Wilson, M.R.C.S., L.A.C., Lancashire; John Wyse Wilson, M.R.C.S., L.M., L.S.A., London; Thomas Wilson, M.R.C.S., Lancashire; Alfred Wiltshire, London; Conrad Chris-

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topher Wimperley, M.R.C.S., Louth; William C. Wise, M.R.C.S., L.A.C., Plumstead, Kent; James Wood, L.R.C.P. Ed., L.R.C.S., Kirkby Overblows, Yorkshire; William P. Wood, M.R.C.S., L.R.C.P., L.A.C., Rochdale; Frederick Woodman, L.R.C.P. Lond., M.R.C.S., Isleworth; Henry Charles Woods, M.R.C.S., Godalming, Surrey; Edward Woolridge, M.R.C.S., L.S.A., London; John D. Wrangham, M.R.C.S., L.A.C., Wrigley, York; Henry J. Young, M.R.C.S., L.S.A., Bath.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise on Thursday, January 1, 1863.

George Pearse Sargent, Albany-road, Walworth; Edmund Pope, Eastern Dispensary; Thomas Churton, Pool, near Otley.

The following gentleman also on the same day passed his First Examination:—

Henry Stubbs, General Hospital, Birmingham.

APPOINTMENTS.

BORTHWICK, ALEXANDER, M.D. Edin., has been appointed Consulting Physician to the Crichton Royal Institute.

DICKSON, JOHN, M.D. Edin., has been appointed Physician to the Dumfries and Galloway Royal Infirmary.

USSHER, HENRY, M.B., has been appointed Medical Officer to the Dispensary, Wandsworth.

DEATHS.

BRAUN, DR. CARL, at Wiesbaden, on December 9.

BUCHANAN, GEORGE ADAM, M. and L.S.A. Lond., at 6, Northampton-park, Islington, on January 1, aged 61.

CARMICHAEL, JOHN, A.M. and M.D. Aberd., at Union-street, Aberdeen, on December 30, aged 64.

COOPER, JAMES, M.R.C.S. Eng., at St. Anne-street, Liverpool, on January 6, aged 60.

JONES, THOMAS, at Farthorwell-house, near Town Malling, Kent, on January 4, aged 94.

GRATITUDE.—Dr. Hildige, of Dublin, has just received an elaborately-chased silver salver, bearing a suitable inscription, from a lady on whom he performed the operation of iridectomy. Would that the same mind were in all patients.

TWELFTH NIGHT AT THE PHOTOGRAPHIC SOCIETY.—Mr. S. Highley, on Tuesday, the 6th inst., read a paper before this Society in the theatre of King's College. The subject was —"Photography in its Application to the Magic-lantern Educationally Considered" (with illustrations).

ANATOMY USEFUL.—Antiquaries are disputing as to the identity of a body which in the year 1828 was exhumed under the belief that it had belonged to John Hampden. According to one account the said body was that of a man; according to another, that of a woman. One party believed that some small bones found were all that remained of the shattered hand of Hampden, who is said to have died of lockjaw consequent on his hand having been severely wounded by the explosion of his pistol. The supporters of the female theory, on the other hand, came to the conclusion that the bones were those of an infant which had died *durante partu*.

INFANTICIDE.—In the course of some observations with reference to the death of two infants, Dr. Lankester, the coroner for Central Middlesex, stated, on Saturday last, that either the crime of infanticide was on the decrease in the metropolis, or more artful means were being taken to hide the bodies of newly-born infants. Of the first 72 inquests held by him after his appointment, no less than 12 were inquiries into the circumstances under which deserted infants had come by their death. He called public attention to that state of things, and his remarks were made known by the press. Of the next 72 cases that came before him, 6 were of the class to which he had just referred; of the following 72 only 4 were of that description; and since then he had held 250 inquests, only 6 or 8 of which were in cases of infanticide. Unfortunately, such cases were still numerous, but he thought there was a marked decrease in their number, and that to the press we might attribute the improvement.

ANTHROPOLOGY IN ENGLAND.—We learn that several of our best ethnologists and anthropologists, actuated by the feeling that the science which professes to treat of man, his antiquity, the physical diversities between his different races, the natural laws which regulate his distribution over the earth, and the corporeal characters which differentiate him from the inferior animals, has not received in England that attention which its importance deserves, have determined to found a new society, to be entitled "The Anthropological Society of London," in which the modern phases of ethnology and anthropology will be discussed. The promises of support which the new society is receiving from all shades of ethnological party appear to be certain guarantees of its success. At a meeting on Tuesday last, the officers of the new society were elected, consisting of—*President*, Dr. Hunt; *Vice-President*, Captain Burton; *Hon. Secretary*, C. Carter Blake, Esq.; *Hon. Foreign Secretary*, E. Tylor, Esq.; *Council*, A. C. Blackstone, W. Bollaert, Luke Burke, Dr. Gibb, A. Higgins, Dr. Hughlings Jackson, S. J. Mackie, R. S. Poole, T. S. Prideaux, W. S. W. Vaux, and others. It was also agreed that the rules should be formed on the plan of the Geological Society. Due notice will be given of the first public meeting of the members.

THE SUSPECTED POISONING AT LUDWELL.—In an able letter, by Dr. W. Bird Herapath, to the *Salisbury and Winchester Journal*, he announces the fact, that he has just discovered the arsenic in the urine of a patient in the Bristol Royal Infirmary, who has been under treatment with about eighteen grains of the impure tris-nitrate of bismuth daily during the past fortnight. He remarks, in reference to the arsenic he discovered in the viscera of Mrs. Kiddle:—"Now, I do not for one moment wish to assert that Mrs. Trowbridge or any one else knowingly gave arsenic to our patient; there are abundant sources whence she might have obtained small but constant portions of such a poisonous body quite unconsciously to all around her—even the jelly she was fed upon might have contained it. I have found arsenical impurities in some specimens of jelly sold by excellent manufacturers. The gelatine of commerce also contains arsenic occasionally, and the source of the arsenic in these cases was presumed to be muriatic acid, employed to purify the clippings of cow and other hides obtained from the tanners of leather, and which, being saturated with lime, require purification with an acid to fit them for conversion into gelatine or jelly by the wholesale confectioner or other manufacturer of these articles for the nourishment of invalids. People do not know what they eat or what they drink. Other cases have been known in which the paint on the shelves on which a baker had placed his hot loaves of bread was the source of arsenic discovered by some toxicologist."

ABSTRACT OF THE REPORT OF THE PATHOLOGICAL SOCIETY, *read January* 6, 1863.—The Council of the Pathological Society, in furnishing the Seventeenth Annual Report of its proceedings, has the gratification to announce, that its career continues to be marked by unabated prosperity. Notwithstanding circumstances, the influence of which has tended, in some degree, to limit the rapid rate of progress which the Society has maintained ever since its origin in 1846, its numerical strength has never been greater than at the present time. Furthermore, its vigour has in no respect diminished; the interest of the meetings has, if possible, rather increased than otherwise; and the supply of valuable preparations, not only from our own country, but from abroad, has never been at any previous period surpassed. The financial statement exhibits a balance in the hands of the treasurer of £180. A portion of this will be added, according to the usual custom, to the Society's funded property, which now amounts to £129 6s. 7d. The following are the Officers and Council of the Pathological Society of London, elected for the year 1863. The gentlemen whose names are marked with an asterisk (*) did not hold the same office during the preceding year:—*President.*—* Prescott G. Hewett, Esq. *Vice-Presidents.*—William Jenner, M.D.; Sir John Liddell, M.D., C.B., F.R.S.; * A. B. Garrod, M.D., F.R.S.; * Geo Johnson, M.D.; Wm. Coulson, Esq.; * John E. Erichsen, Esq.; * John Hilton, Esq.; * Geo. D. Pollock, Esq. *Treasurer.*—Richard Quain, M.D. *Council.*—Thomas A. Barker, M.D.; George Budd, M.D., F.R.S.; Andrew Clark, M.D.; William D. Chowne, M.D.; George Harley, M.D.; * Stephen J. Goodfellow, M.D.; John W. Ogle, M.D.; James E. Pollock, M.D.; * George D. Gibb, M.D.; Richard Barwell, Esq.; Bernard E. Brodhurst, Esq.; W. White Cooper, Esq.; William H. Flower, Esq.; J. Gregory Forbes, Esq.; Timothy Holmes, Esq.; John Pyle, Esq.; Samuel J. A. Salter, Esq.; * Thomas Bryant, Esq.; * John Whitaker Hulke, Esq.; * Edward Ray, Esq. *Honorary Secretaries.*—J. S. Bristowe, M.D.; Henry Thompson, Esq.

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IRISH MEDICAL ASSOCIATION.—A meeting of the members of this association was held on Tuesday night, in the dining-room, at the Limerick Junction Station, for the purpose of taking into consideration the provisions of the proposed bill for the Registration of Births and Deaths, and also to consider certain necessary amendments in the Medical Charities Act, with a view to obtaining a higher rate of salary, and also a retiring allowance, for Medical men employed under that Act and in connection with the Poor-law system. The chair was taken by Dr. Jacob, the President of the Association. Amongst those present were—Dr. Jacob, Maryborough; Dr. Mackesy, Waterford, President of College of Surgeons; Dr. Quinan, Dublin; Dr. Harvey, Cork; Dr. Bradshaw, Bansha; Dr. Armstrong, Cork; Dr. Martin, Portlaw; Dr. Bennett, Bruff; Dr. O'Brien, Ennis; Dr. Russell, Thurles; Dr. A. H. Jacob, Dublin; Dr. Brodie, Limerick; Dr. Darby, Bray; Dr. Kennedy, Thurles; Dr. Ffolliott, Askeaton; Dr. Ryan, Pallas; Dr. Hanley, Thurles; Dr. Morrissy, Tipperary; Dr. Hewett, Tipperary; Dr. Power, Cappawhite; Dr. Clarke, Mountrath; Dr. Elliott, Waterford; Dr. Stokes, Cahir; Dr. Callaghan, Cork; Dr. Reardon, Bruff; Dr. Mullaly, Templemore; Dr. Sullivan; Dr. Wycherly, Cork; and Dr. Fitzgibbon, Clonmel. After dinner, Dr. Quinan having been appointed secretary to the meeting, the chairman briefly addressed the meeting in reference to the subjects which were to be brought before them that night. With respect to the registration of births and deaths, he contended that no men could supply the necessary statistics except the members of the Medical Profession, and he expressed his regret that a measure was about to be introduced into Parliament which would not only deprive Medical men of their rights, but prevent the public from obtaining the information that was required. The bill provided that the constabulary should be employed, under the Registrar-General, as collectors and registrars of the statistics of births and deaths; and if that clause became law the necessary result would be, that members of the Medical Profession, who, from their education, the position they held, and the duties which they performed, were the only persons who could supply the required statistics, would be debarred from holding situations which seemed of right to belong to their Profession. But, in selecting the constabulary, the very worst body of men who could be entrusted with such important duties had been deliberately chosen. Already the constabulary had enough to do, and did not always perform their work satisfactorily. And yet now it was actually proposed to add to their manifold occupations another and most difficult one, that of collectors of statistics. (Hear, hear.) He had no intention of saying anything disrespectful of the police, but he was there to maintain and prove that they were quite unfit to discharge the new and onerous duties which would be imposed upon them, should the clause he complained of become law. He hoped that Medical men would set their faces against the measure, and do what they could, in a constitutional and legal manner, to prevent its becoming the law of the land. It was their duty to do so, not only for their own interest, but for the interest of the people of Ireland. (Hear, hear.) Dangerous results might be expected if the Government persisted in putting the constabulary into a position for which they were altogether unqualified; but he hoped that, if fair and straightforward opposition were offered by the members of the Profession, no government would be found to persist against such opposition. In conclusion, the chairman briefly referred to the other points to be considered by the meeting—namely, certain deficiencies in the Medical Charities Act, and in the law respecting vaccination, which required attention, and which should be brought under the consideration of the legislature. In the course of the evening, resolutions were passed advocating the employment of Medical Practitioners as registrars of births and deaths; that the minimum salary of dispensary Medical Officers should be £100 per annum; and that it was just and equitable that dispensary Medical Officers should be provided with retiring allowances.

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·607 in.
Mean temperature	43·8
Highest point of thermometer	52·8
Lowest point of thermometer	33·5
Mean dew-point temperature	40·6
General direction of wind	S.W.
Whole amount of rain in the week	0·57 in.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. W. T. Martin.—Hansard's, Great Turnstile, Holborn.

Tyro.—1. We believe the lectures are preparing for publication. 2. The Brompton and Victoria Park Hospitals.

Respirators.—Consult Dr. Richardson on the "Hygienic Treatment of Pulmonary Consumption," p. 18.

Medical Vacancy.—The office of House-Surgeon to the Lock Hospital, Dean-street, Soho, will shortly be vacant.

Arminius.—Poor-law Medical Officers must have a double qualification. We believe that the Membership of the College of Surgeons alone is not sufficient.

R. C. B.—A paper, on the "Concurrence of Measles and Scarlatina," was read by Mr. W. B. Kesteven, at the Epidemiological Society, and was published in the *Journal of Public Health*, October, 1856. An abstract also appeared in the *Association Journal*, December 13, 1856.

Rupture of the Liver.—Bradford.—We remember a paper by Mr. Prescott Hewett on "Rupture of the Liver by Violence," though we cannot lay our hands on it at a minute's notice. Mr. Prescott Hewett showed, if we recollect rightly, that patients may survive such injuries if quiet and other rational means be adopted to prevent inflammation and hæmorrhage. Hence, it is quite possible that the liver may have been ruptured by a kick on Saturday, and yet that no fatal symptom may have set in, till a state of great excitement ensued on the following Wednesday.

Jugged Hare.—The following is another instance showing how our Profession is exposed to ridicule through the exaggerations of chemists and sanitarians, who argue *à priori*, forgetting that, in all that pertains to human life, experience is the only safe guide. It is said that Dr. Hill, the food analyst for Birmingham, summoned a game dealer before the magistrates, on the ground that he had in his shop hares which were putrid and unfit for food, and which were, therefore, condemned and ordered to be destroyed. When the defendant came before the bench, fourteen days afterwards, the Doctor is said to have deposed that "all meat that had undergone any process of decomposition was very unwholesome and poisonous; he did not think fire destroyed the poison of decomposition, nor hid the taste of it." At this point, we are told, a professional cook was called in, who produced a saucepan boiling hot, filled with jugged hare, and requested Dr. Hill to taste whether it was good. Dr. Hill did so, and replied, "It appears to me very good, but rather highly seasoned. I should not object to eat it myself." Great was the laughter when it was shown that this was one of the hares which had been pronounced by this eminent chemist as unfit for food fourteen days previously. The reporters, attorneys, witnesses, and spectators hereupon adjourned to lunch off the hare, which was placed at their disposal; and, on the resumption of business, Professor W. Sands Cox, of Queen's College, deposed solemnly that "hare is not good to eat till it does smell; fire destroys the smell; hung game is wholesome." *Solvuntur risu tabulæ.* The magistrate evidently repented in his soul that he had ordered the other hares to be destroyed. Every rational stomach will feel that things are coming to an alarming pass, when a dish of jugged hare shall come under the ban of the pseudo-sanitarian.

Alleged Ill-consequences of "Diseased Meat."—There are few periodicals which we usually take up with greater satisfaction than the *Edinburgh Veterinary Review*, and we can only regret that the Editor departs, for once, from the manly, common-sense method in which scientific matters should be treated. We, for our own part, not only have never sanctioned, but most unequivocally condemn, the use of the flesh of diseased, or self-dying animals. It is an indecency, and a thing which, if permitted, would be a most dangerous precedent. Yet that does not prevent us, as scientific men, from scrutinising the facts calmly. We have, in former Numbers, specified the cases in which the ill-effects of diseased meat are clearly proved, and those in which the ill-effects are merely matters of inference or probability. As for flesh infected with parasites, that case is notorious, and beyond doubt. Secondly, there are the cases of animals in which disease has created effusions, tending, as all morbid effusions do, to putrescence, such as abscess, empyema, etc. etc., or in which disease has advanced so far as to produce wetness. Thirdly, there are some specific diseases, such as malignant pustule, and the foot and mouth disease. We believe the milk of animals affected with the latter to be unquestionably poisonous. Fourthly, there are meat sausages, etc., in certain states of decay. It must be borne in mind, moreover, that the poisonous properties—say of milk—are not disproved because a great many people escape, for it is possible that some systems resist some poisons. But, when we have allowed for all these cases, there comes to be balanced in the scientific mind this startling anomaly:—on the one side there are many acute and able men, of whom Professor Gamgee is one of the chief, tracing out cattle disease to its causes, and impressing us with its enormous prevalence. He counted, lately, in the Dublin slaughter-houses, "scores" and "dozens" of animals slaughtered whilst labouring under pleuro-pneumonia. We must accept it as a fact from Professor Gamgee, that the flesh of pleuro-pneumonic beasts is largely used as food. We have learned the same from other sources ourselves; and we believe it to be

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the fact, that most shrewd cattle-owners, the moment they observe traces of the disease, send the patient to the butcher. So far, then, we agree. But now for the other side of the question—where are the ill effects? In order to learn these, we must go—not to cattle breeders, nor to sanitary officers, nor "sensation" chemists, who tickle the public ear, but to Medical Practitioners and families. Who are the most likely purchasers of indifferent meat, such as we presume the flesh of pleuro-pneumonic beasts to be? The mistresses of boarding schools, the contractors for workhouses, gaols, and charitable institutions; the masters of shops who keep large numbers of spicene counter-skippers, and milliners' girls; the tradesmen who advertise for two apprentices, and say they shall be treated like one of the family. We want to know, then, from the Medical Practitioner—have any symptoms yet been traced to the use of pleuro-pneumonic meat? Are the young people at large shops ever seized with any peculiar symptoms after their dinner of mucookel and bloody meat? Want are the facts, facts, Mr. Professor? What are the diseases that people contract? You must be consistent. You prove so much on one side of the case, that we look for better evidence on the other.

The following is a corrected list of the late Dr. Knox's published works:—

Bichat's General Anatomy.
Cloquet's Anatomy.
Manual of Human Anatomy.
Translation of Milne-Edwards' Zoology.
Knox's Artistic Anatomy.
Fan's Anatomy for Artists.
Anatomist's Instructor.
Engraving of the Arteries after Tiedemann.
" " Bones after Sue and Albinus
" " Ligaments after Caldani.
" " Muscles after Cloquet.
" " Nerves after Scarpa.
Man: his Structure and Physiology Popularly Explained and Demonstrated.
The Races of Men.

Errata.—In the remarks appended by Dr. Ramsbotham to the last collection of cases published in this journal, *for* "Douglas and Denman thought," *read* "Denman thought." Dr. Douglas was the first to refute Denman's description of the process of the "Spontaneous Evolution." —Page 689 of our last volume, in the Rev. W. Graham's letter on the discussion as to the invention of Butcher's saw, *for* "bone saw," *read* "bow saw."

A CORRECTION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In the Index of your last number, December 27, I find, under the name of Dr. T. B. Moriarty, of Limerick, "On the Organisation of Medicine at Rome, 74." Although a matter of little importance, still I beg to inform you of the mistake, as the observations alluded to on Medicine at Rome are mine, and dated from Dieppe.

I am, &c. STEPHEN S. MORIARTY, M.D.

Dieppe, Faubourg de la Barr, January 1.

DRS. FOWLER AND MAYNE—THE CHARGE OF PLAGIARISM.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—On a suggestion, that notification should have been made in the journals of a reference to Professional gentlemen of the dispute between Dr. Robert Fowler and myself having been entered into, I beg leave to state that Dr. T. B. Peacock, 39, Finsbury-circus, has been named by Dr. Fowler as his referee, and Dr. A. Meadows, 9, Cavendish-place, Cavendish-square, has kindly consented to act as such for me.

I am, &c. R. G. MAYNE.

Leeds, January 6.

MEDICAL AND SURGICAL QUALIFICATIONS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you be good enough to answer the following in your Notices to Correspondents?—

Mr. A., Member of the College of Surgeons, and registered, attends a patient with hepatic colic. He sends in a reasonable charge for "Medical attendance" only. Is not A. entitled to recover in a court of law by virtue of being on the Register?

This is merely a hypothetical case, but opinions down here differ. Clause 31 of the Medical Act, although using the words, "according to his qualification," in one part, yet not in the other, after "recover in any court of law," and clause 32, both read to me, that, by virtue of being registered, he is entitled.

I am, &c.

Queen-street, Deal. F. T. H.

[The Act in clause 31 makes a clear distinction between Medicine and Surgery, for it uses the words, "Medicine *or* Surgery, or Medicine *and* Surgery, as the case may be." It also says that every registered person is entitled to recover "according to his qualifications." That is our opinion; but our correspondent must be aware that the effect of no Act of Parliament is ever known until it has been tested in a court of law, and determined by the judges.—ED.]

DISTRICT VACCINATORS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I am a M.R.C.S.L., registered. Can you inform me—1st. Would my having only one qualification be any objection to my being appointed a vaccinator? 2. Is it usual in country districts where the Union Medical Officer is doubly qualified, to appoint others as well as himself to act as Vaccinators? 3. To whom should I apply for the appointment?

I am, &c. DUB.

[1. No. 2. It depends on the size and populousness of the district. We know a parish in which there are 700 births per annum, to a population of 35,000, and in which the vaccinator has at times the greatest conceivable difficulty in keeping up the supply of lymph by weekly vaccination. In this parish the number of poor is estimated at 12,000. We know another parish in which there are 1500 births annually, and in which the vaccinator has also great difficulty in keeping up the succession, when any cause, such as bad weather, or Christmas intervenes to diminish the attendance of the patients. 3. The Guardians of the Poor. —ED.]

COMMUNICATIONS have been received from:—

Mr. S. HIGHLEY; TYRO; Dr. S. S. MORIARTY; Mr. JAS. BRUCE; Dr. WHITELAW; Dr. HERAPATH; Professor LAYCOCK; Dr. MERCHISON; Dr. DEVENSH; Dr. R. G. MAYNE; HUR.; Mr. F. M. HULKE; THE SECRETARIES OF THE EPIDEMIOLOGICAL SOCIETY; PARIS; Mr. KESTEVEN; Mr. R. REYSOLES; Dr. MARTIN; Dr. DAY; Dr. KIDD.

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 3, 1863.

BIRTHS.

Births of Boys, 1099; Girls, 1047; Total, 2146.
Average of 10 corresponding weeks, 1853-62, 1743.5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	775	778	1553
Average of the ten years 1853-62	657·5	664·0	1321·5
Average corrected to increased population..	..	..	1454
Deaths of people above 90	..	..	5

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	1	18	14	4	5	6	5
North ..	618,210	9	17	17	..	14	15	3
Central ..	378,658	1	4	9	..	14	10	1
East	571,158	14	8	9	2	11	15	3
South ..	773,175	10	24	24	3	13	12	4
Total.. ..	2,803,989	35	69	73	8	57	58	16

APPOINTMENTS FOR THE WEEK.

January 10. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

12. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Clinical Discussion. Mr. Bishop, "On the Artificial Stand of Seigner Gallegos;" and other Cases.

13. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Mr. John Dix, of Hull, "On the Wire Compress, a Substitute for the Ligature." Dr. A. B. Buchanan, of Glasgow, "Case of White Fibro Serous Discharge from the Thigh."

14. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

HUNTERIAN SOCIETY, 8 p.m. Mr. Hutchinson, "On Herpes Zoster—a Pathological Riddle."

15. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

16. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON, 8 p.m. Mr. Jones, "On Some Points in Connexion with Cerebral Hæmorrhage."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday (to-day) at 2 p.m.:—

By Mr. Ferguson—For Painful Cicatrix; Prolapsus Uteri; Necrosis of Tibia; Removal of Osseous Growth from Femur

By Mr. Henry Smith—Removal of Tumour from Thigh; Removal of Tumour from Lip.

Westminster Hospital.—The following Operations will be performed on Tuesday next, at 2 o'clock:—

By Mr. Hillman—Resection of Head of Humerus; Lithotomy.

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PARHYDOR, or IMPERMEABLE SILK, for Surgical Purposes, &c., &c. (Patented.)

It is free from smell and adhesiveness in Tropical climates, warm rooms, &c. Will stand the test of being boiled in water. Free from spontaneous combustion, although packed in large quantities. Not irritating to the skin, or otherwise injurious when in use.—Sold Wholesale and Retail by Messrs. SAVORY and MOORE, 143, New Bond-street, W.; 29, Chapel-street, Belgrave-square, S.W.; 1, Lancaster-terrace, Hyde-park, W.; and 220, Regent-street, W.; and Messrs. CURTIS and CO., 48, Baker-street, W., London; and Wholesale by Messrs. MAW and SON, 11, Aldersgate-street, London, E.C.; and Messrs. LANGTONS, SCOTT, and EDDEN, 226, Upper Thames-street, London, E.C. Sold Retail by the principal Chemists and Druggists and Surgical Instrument Makers.

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FRAS. NEWBERY & SONS, 45, ST. PAUL'S CHURCHYARD.

Prices for Dispensing—1 oz., 9s.; ½ oz., 3s. 4d.

CHLORODYNE.—R. FREEMAN, Pharmaceutist, Kennington-road, London, S., Informs the Profession and Trade that he has for years made and extensively supplied CHLORODYNE, in 1oz. and 4oz. Stoppered Bottles, at 1s. 6d. and 5s. each. He guarantees it to be uniformly and properly prepared and superior to any other makers', though their charge be ever so exorbitant; and he is glad to find the low price which he sells it allows the Profession to use it in common practice and public institutions, so that its extraordinary beneficial effects are enjoyed by the poorest sufferers. R. Freeman almost daily receives letters from Members of the Profession, and also the Trade, who speak highly of his Chlorodyne. He publishes the following by permission:—

"I duly received your sample of Chlorodyne, and I liked it so well that I ordered more through my Wholesale Druggist. I think it in every way as good as any I have used, and it has the recommendation of being cheaper.—" B. J. BOULTON, M.D., Surgeon Horncastle Dispensary, &c., Horncastle."

"I have administered to several of my patients your Chlorodyne, and I consider it a valuable remedy. It has succeeded perfectly in those cases in which I have used it. In its action it is uniform, and in its effects most efficacious.

"DAVID EASTON, M.D., Medical Officer Rhins of Galloway Poorhouse, &c., &c., Stranraer, Wigtonshire, Scotland."

"Having been in the habit of using Mr. Freeman's CHLORODYNE for some time past, I have much pleasure in stating that *it has never failed to have the desired effect* in whatever case it has been administered.

"C. SWABY SMITH, M.R.C.S.E., Surgeon to the Berks and Hants Extension Railway Works and Pewsey Union, &c., &c."

"I have had several parcels of your Chlorodyne, and the Medical men who have used it find it equally efficacious with that which is double the price, both having been tried on the same patients with similar results. "W. GRAHAM CARR, Pharmaceutical Chemist, Berwick."

TOWLE'S CHLORODYNE.

Presenting the advantages of KNOWN COMPOSITION and UNIFORM MIXTURE, combined with moderate price.

DOSE, 5 to 20 DROPS.

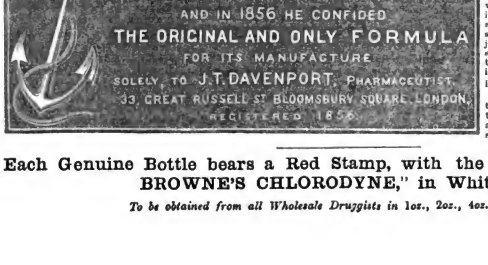
Medicinal Properties:—

Anodyne, Diaphoretic, Sedative, Anti-Spasmodic, and Astringent.

IMPORTANT LETTER, PUBLISHED BY PERMISSION.

From Dr. C. KIDD, Author of standard works on Chloroform:—"Sir,—I think if you would advertise your 'Chlorodyne' more than you do, you would help to beat the other *secret* compounds out of the market. Of the value of Chloroform given internally, I have no doubt; it appears to me in that form an anodyne *sui generis* that no other anodyne can approach. I have resolutely opposed the use of *secret* compounds of Chlorodyne, and in every way I can encourage the use of the 'Chlorodyne' (if we must have it at all) that is made by you, as you state that its composition is known. Many Medical men think with me and recommend your compound, but will never prescribe a *secret* remedy. (Signed) CHARLES KIDD, M.D., and Surgeon, Sackville-street, Piccadilly, London, April, 1862."

Sold in bottles, 1 oz. 1s. 6d., 2 oz. 2s. 6d., 4 oz. to 20 oz., 1s. per oz. Prepared, Wholesale and Retail, by A. P. TOWLE, Chemist, &c., Ardwick, Manchester. May be had from Barclay and Son, Farringdon-street; or through any Wholesale House.



NOTIFICATION.

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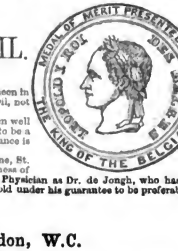

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ORIGINAL LECTURES.

CLINICAL REMARKS
ON POINTS IN
PRACTICAL THERAPEUTICS.

DELIVERED AT THE

ROYAL INFIRMARY, EDINBURGH,

AT THE CLOSE OF THE SUMMER SESSION OF 1862.

By THOMAS LAYCOCK, M.D.

Professor of the Practice of Medicine and Clinical Medicine: and Lecturer on Medical Psychology and Mental Diseases in the University of Edinburgh.

The Difficulties of Therapeutical Inquiry and Observation—Experience the Best Foundation—The Method of Analogy in Therapeutics—Difference between Pathological and Therapeutical Diagnosis—Local and General Action of Drugs apt to be Confounded. TONICS: *their Nature—General Tonics—Bitter Tonics—Tonics in "Addison's Disease," or Melasmic Anæmia.* STRYCHNINE: *its Relations to other "Bitters"—Dangers of These—Nervine Tonics in Diabetes Mellitus.* QUININE: *in Hæmoptysis—Influence on the Blood through the Spleen?* IODIDE OF POTASSIUM: *in Syphilitic Cases—Combined with Colchicum.* MERCURY: *in Syphilitic Psoriasis by Fumigation—In Iritis—In Abdominal Inflammation—And of Mucous Membranes—Salivation not Necessary.* PODOPHYLLIN: *Doses and Uses.*

GENTLEMEN,—I propose to call your attention, by way of summary, to a few of the results we have arrived at in the treatment of disease, and some of the methods and means we have adopted to that end, during the past session. Practical therapeutics being of the very essence and business of clinical Medicine, is one of its most important departments; yet it is too apt to be lost sight of in the more interesting and easy study of pathology, or the theory of disease. I say, more easy, because the difficulties which interfere with investigations into the effects of remedies and of remedial agents are so numerous, in too many instances so insuperable, and in all cases so troublesome and perplexing, that the more impatient minds in the Profession either lose all reliance on practical Medicine, and subside into what the Germans call "nihilism," or do-nothingness, or else abandon all attempts at science, and yield up their judgment to a gross empiricism.

After pointing out some of the difficulties in the way of accurate therapeutical observation, and showing that a large experience of remedies is the only safe guide in practice, Professor Laycock proceeded to say:—

When experience has enabled us to deduce general principles of therapeutics, we apply them to individual cases by the method of analogy. We inquire whether the morbid state we have to combat is like some other morbid state (or establish our nosological diagnosis) in which certain drugs or remedies have been found useful already. Now this entire process is therapeutical diagnosis. But therapeutical diagnosis is often confounded with pathological diagnosis; and hence, practical mistakes of a very gross kind arise. Thus, for example, pathological diagnosis is much the same for almost all varieties of pneumonia, in so far, at least, as physical methods are used; but the therapeutical diagnosis is as different for the varieties of pneumonia, as if they were wholly different diseases. Hence, when the treatment of "pneumonia" by various means is discussed, with the pathological diagnosis only in view, there are no true analogies to guide the inquiry, and the results are simply a mass of contradictory and conflicting statements, which practically are worse than useless. If, on the other hand, we class the varieties of pneumonia, with reference to a therapeutical diagnosis, it will be found that there is really very little difference in the experience of careful and observant Practitioners, and sound rules of treatment for each variety can be laid down. Now, it is in therapeutical diagnosis, rather than the physical or pathological, that the skill of experience is most shown. It is easy to diagnose a pneumonia, but not always so easy to decide upon the kind of treatment which experience has shown to be best; for this, indeed, experience is needed, both of the varieties of pneumonia and of the operation of remedies in each, such as tartar emetic, bleeding, chloroform, inhalation, wine, etc.

The same method of analogy can be applied to the selection of remedies. If we can determine what is the action of a class, we can, by analogy, take individual drugs of the class. Thus, terebinthinates act especially on the mucous membranes; consequently, we can select a terebinthinate drug which acts curatively on the mucous membrane of the bladder or intestine, and prescribe with a view to its action on the mucous membrane of the bronchi; or we can substitute one terebinthinate for another, as copaiva for tar, Chian turpentine for spirit of turpentine, and the like. These points I have often illustrated at the bedside. But I think it may be safely affirmed, that all drugs and remedial means act upon, not one, but several, tissues or organs; and we have, therefore, to determine, in each case, which of these are specially or predominantly, and which consecutively, affected. This is, however, one of the most difficult problems in therapeutics; and hence the chief lesson we derive from the general principle is, that we cannot be too cautious in our deductions as to the *modus operandi* of remedies, feeling sure, indeed, that these must be imperfect, however cautiously drawn from carefully-observed phenomena. For example, to take a common case, what is the influence which certain drugs exercise upon the nervous system through the stomach by local action thereon, and what on the blood, the nervous system, and the viscera in general, when carried along with the current of the circulating blood? The so-called "stomachics" are believed to act chiefly on the stomach; yet there is reason to believe that this class of bitters at least really influences the nervous system in the first instance, and the digestion through this. On the other hand, it is very probable that various stimulants, as the alcoholic, act primarily on the stomach and on the nerve-centres through the gastric nerves, and consecutively on the nerve-centres and tissues through the blood. In practice, this local action of wine and alcoholic stimuli is of importance, inasmuch as we must regulate the extent of dilution, the dose, and the frequency of repetition accordingly.

Perhaps we shall best illustrate our views by noting the influence of *tonics* of various kinds. These are drugs which strengthen the body. Now, the body may be strengthened in very various modes. If weak from want of food or of fresh air, or from over-fatigue, then nutritive food, pure air, and rest are the most certain tonics. If the blood be defective in certain ingredients necessary to health, we add these. Thus, in convalescence from fever, cholera, and other diseases, in which the salts of the blood have been wasted, chloride of sodium, the phosphates, and the nitrates are *tonics*. Digestion may be imperfect, from imperfect innervation of the digestive organs, and thus chylification is hindered. Then defective blood results, and this re-acts morbifically on the nerve-centres, intensifying the primary cause. Hence, tonics must often be compound in their nature, because intended to be multiform in their effects. When we give bitter ale or beer as a tonic, we give a very compound thing, and, *quâ* the bitters, a "tonic" not to be trifled with, from their action on the nerve-centres.

The cases treated in the Infirmary being, for the most part, asthenic and cachectic, give great scope for the observation of tonic remedies. Bitter drugs, chalybeates, "kitchen physic," and wine, have been freely used in the wards, either singly or in conjunction. A good diet ("kitchen physic") is often all that is needed in many of the cases we admit, and hence a source of fallacy when estimating the effects of drugs of this class. Of the bitters, we have chiefly used quassia, gentian, chamomile, quinine, and strychnine, and all these are, I conceive, nervine tonics; that is, stimulate digestion, and give strength by primarily acting on the nerve-centres. Quinine, strychnine, and wormwood are acknowledged nervines; and it is probable that other vegetable bitters, even such as aloes and colocynth, belong to the same category. Hence, the tonic value of aloes in non-purgative doses. These were rarely administered singly, as the blood was usually in a morbid state, as well as the nervous system; hence, we combined bitters with chalybeates and cod liver oil. When this last cannot be taken, glycerine seems to be a useful substitute. A combination of quassia, sesquichloride of iron, and glycerine (a), was found useful in various cachectic states, as anæmias, cardiac and renal dropsies, and the like. One man who came in with all the pathognomic symptoms of the anæmia or asthenia known as "Addison' disease," quickly rallied under this combination, with a gene-

(a) The formula used is as follows:—℞ Tinct. ferri sesquichlor. ℥ij; glycyrrhizæ, infusi. quassiæ, āā ℥iv.; two tablespoonfuls thrice a day.

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rous diet as an auxiliary, and went out, in six weeks, convalescent. At first he added half a stone to his weight in a week. Five years ago a similar case was under my care in the clinical wards, and, after taking good diet, wine, and chalybeates without benefit, recovered as rapidly as this man did under the same remedies. I do not pretend to say that in these cases there was structural disease of the supra-renal capsules; but most certainly there was that discoloration of the skin and mucous membrane of the mouth, that asthenia and those nervous symptoms, which Dr. Addison and others have observed to be associated with such structural disease. That the melasma occurs without structural disease of the supra-renal capsules is certain; but this observation does not exclude functional disease of them as a cause, which may, in fact, pass away altogether, leaving the melasma as a permanent thing. A more conclusive objection is, that structural disease of the capsules is found without the accompanying melasma; but, then, in physic there are no single causes at work, and it is probable that a lesion of the blood and nervous system, especially of the skin, must be superadded to the capsular disease. In the absence of a satisfactory pathology, it would, perhaps, be better to take the leading symptoms as a guide, and term the disease a melasma, anæmia—an anæmia with a sort of melanosis, in fact, in which the epithelial cells of the skin and mucous membrane are the chief seats of the melanotic deposit.

Strychnine is a valuable nervine tonic of the bitter class, and may be said to be generally available in all cases in which there is defective innervation of the pneumogastric system. I always begin with $\frac{1}{20}$th of a grain as a dose thrice a-day. We have found it useful in cases of bronchitis in which the cough is more or less spasmodic, in phthisis with much bronchorrhœa, and in the convalescent stage of febrile pneumonia. The chief objections to its use are, the danger of an overdose from careless compounding or administering, and the rapidity with which its physiological effects are sometimes manifested. I am inclined to conclude, however, from frequent observation, that it does not stand alone in this respect, and that other "bitters" exercise an analogous and often as dangerous an influence on the nervous system. I have known bitter beer excite twitchings, and urgent head symptoms result from taking the "bitters" of the dram shop; and I suspect the liqueur or "sirop" termed "absinthe" owes all its mischievous effects to the bitter drug it contains.

Strychnine and other nervines were tried in two cases of diabetes. The valuable and sedulous observations of Mr. Smart as to the progress of these cases, enable us to judge as to the effects of both drugs and diet on the production and elimination of sugar and water. The administration of strychnine, Mr. Smart reports, in doses progressively increased until the physiological effects became incipiently apparent, was followed by progressive and commensurate decrease in the amount of urine and sugar. Chloroform, and the chloric and sulphuric ethers, increased it. I think nervines are most likely to be available in diabetes, for all the most recent researches into the pathology of glycosuria point to the nervous system as the primary seat of disease. In one of our cases the glycosuria was periodic, occurring every fortnight for about ten days, the interval of four days being free. This periodicity is, I suspect, less commonly observed than it occurs.

Quinine holds its place as a powerful nervine tonic. Perhaps it is in this way that it is so serviceable in cases of splenic disease, or of blood diseases consecutive thereto. In one case, in which hæmoptysis was associated with splenic disease, in a discharged soldier, returned from India, we found the blood-corpuscles, when examined under the microscope, to be highly crenated. This appearance is very decisive of splenic disease, and is readily altered, in some cases, by quinine. In the case alluded to, the hæmoptysis ceased, and the crenation of the blood-corpuscles disappeared, after the rapid administration of two-grain doses of quinine. Perhaps it is by its action on the nervous system that quinine facilitates the action of purgatives. You have seen how much the activity of the sulphate of magnesia is increased by combination with the drug; a scruple of the salt, combined with a grain of quinine, repeated a few times, at intervals of three or four hours, acts as an efficacious laxative.

Iodide of potassium has been frequently prescribed. I have had experience of this drug in the treatment of syphilitic diseases for the last twenty-eight years, and am satisfied it is one of the most reliable of anti-syphilitic remedies. Its value was shown in two cases in which the diagnosis pointed strongly to a syphilitic cause, although absolute certainty was not attainable. The one was that of a youth with bronchitis, first acute and then persistent, who had been exposed to contagion, and confessed to a "running." He improved immediately and rapidly under the drug. The other was that of a woman, with the syphilitic physiognomy, and with a sad family history of debauchery and violence on the part of her husband. She had had attacks of hemiplegia, first of one side, then of the other, from which she recovered, except a ptosis of the left upper eyelid, from paralysis of the third nerve, but with a tendency to vertiginous attacks. She had had abortions and several deaths of infants. As the case resisted all the usual remedies, she was prescribed the iodide of potassium, and very shortly signs of improvement were observed in increased power over the paralysed eyelid, and less frequent recurrence of the vertiginous attacks. In ward I. there was the case of a man with chronic syphilitic cachexia of twenty-two years' standing; the numerous circular scars and cicatrices scattered over his face and limbs illustrated well the true character of cutaneous syphilitic ulceration. He came in with neuralgia and weakness of the left arm, which quickly yielded to full doses of the iodide. I shall not attempt a theory of the *modus operandi* of the drug, but would remark, that in syphilitic periostitis, whether of the cranium or other bones, occurring in persons of a decidedly rheumatic or gouty diathesis, I have observed that the efficacy of the remedy is much increased by the combination with it of colchicum; I usually order five minims of the tincture of the root with five grains of the salt. And this combination is also useful in chronic rheumatisms and lead neuralgiæ, especially those of the joints which simulate rheumatism. The iodide of potassium has a tendency to irritate the mucous membrane in some persons. Thus, severe coryza is sometimes quickly induced by it, or an annoying gastritis, or a sort of ptyalism, as in the case of a man in ward I. I do not think it suits such persons at all, and should, therefore, be discontinued when the results are of this kind. The bitter taste in the mouth which it causes is felt by all who take it, and is, I think, due to the direct contact of the drug with the palate, to which it is brought in the current of the circulation. This bitter taste is, therefore, a proof, both that the drug is taken, and is genuine. It should always be administered immediately after food, to prevent any irritation of the stomach; and when there is gastric irritability a grain or two should be the dose, with an equal quantity of the bromide of potassium. It may be safely increased, in some persons, to 5ss. thrice a-day.

Mercury has not been found necessary in many cases; the majority have been too cachectic, or in other respects unsuitable. We tried mercurial fumigation in a case of syphilitic psoriasis which long resisted ordinary treatment:—First, full doses of iodide of potassium were freely tried, and, failing this, arsenic; while taking this drug, however, the disease progressed rapidly, the crusts becoming both thicker and more numerous. We then reverted to the iodide, and, at the same time, adopted the method of mercurial fumigation recommended by Mr. Henry Lee. Two spirit-lamps were used, fed with methylated spirit; over the one a metallic plate was placed, upon which ten grains of calomel were laid, and over the other a small cup of water; over these was placed a cane-bottomed chair, upon which the patient sat down naked, and was then enveloped—chair and all—in a blanket, for a quarter of an hour; he was then rolled in the blanket, and went to bed. The drug acted as a tonic. In a few days, visible improvement in the health took place, and in about five weeks he was cured of the psoriasis. I have detained him a few days to show him to you. He experienced no salivation, nor any other ill effect. The bichloride of mercury is sometimes a useful tonic in these chronic syphilitic diseases of the skin, and has the advantage over other drugs of rarely causing salivation.

We tried the iodide of potassium in the case of a woman in ward XI., with syphilitic cachexia, but she did not bear it well, having very irritable mucous membranes; then she got iritis, with slight ceratitis, and, being reluctant to give mercury, I tried quinine in the first instance, but with so little good result, that, finally, calomel and opium were prescribed. The inflammation then yielded, leaving, however, a slightly irregular pupil. I think, in this kind of case, mercury is the most certain remedy, but it must be watched, so that ptyalism shall not result. Is mercury a tonic or

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stimulant in other diseases? We have tried calomel in a case of supposed gall-stones, with probably cystic inflammation; the pain was terrible, the vomiting incessant. Opium was at first tried alone, together with leeches over the right hypochondrium, where was a tumour the size and shape of a large egg projecting from the margin of the liver—midway. Only temporary relief followed. I then ordered quarter-grain doses of calomel, mixed with two grains of sugar, to be placed on the tongue every two hours; in a few hours relief of the pain was experienced, and copious bilious evacuations followed, then convalescence. In all these acute abdominal affections with incessant vomiting, especially of grass-green stuff, calomel, according to my experience, thus administered, is a valuable drug. But I must remind you of the plan that I told you, when at the bedside, should be adopted when treating these cases by calomel and opium, or by either singly, namely, so to administer them that they cannot be rejected. Thus, in spasmodic colic or ileus, with obstinate vomiting, the opium should be prescribed in one or two grain doses of the solid opium, as a small pill, and the patient should have a draught of water before the pill, that he may vomit it, and so empty the stomach; then administer the pill, and allow nothing to be drunk for half-an-hour. In this way its transit downwards should be secured. The calomel should be administered with the same precaution.

Grain doses of blue pill, combined with two or three grains of Dover's powder in pill, is a useful remedy in certain forms of acute bronchitis and other mucous inflammations. We have not, however, had any suitable case this summer for showing the value of the combination. In one case of pneumonia of a severe type, we administered calomel in combination with antimony. This is an old method of combining these two most powerful drugs, and is specially available in those acute inflammations in which you desire to bring on mercurialisation rapidly. They are of very rare occurrence here, and the case I allude to was hardly a typical example. I do not think it was of any use to the man. Mercury, like opium, antimony, arsenic, colchicum, digitalis, and the like, is one of a class of powerful and valuable drugs, which require a large experience for their safe and satisfactory administration; so that the observation of cases in which they prove to be useless, or worse than useless, is really as valuable to the student as the observation of those in which they are beneficial. Speaking generally, mercury should never be given so as to affect the mouth; and all that class of persons in whom inflammation of the mouth is readily induced by it, derive little or no benefit from it. These have already a red line on the gums, decayed teeth, etc.

We have used the new drug podophyllin with varying success. It is undoubtedly a very useful cathartic, but should not be prescribed incautiously, on account of its uncertain action. The safest and most effectual plan is to order from one-sixth to a quarter of a grain every three or four hours, guarded with a carminative, until its purgative action is shown. We have seen that this commonly takes place, at latest, by the time a grain or a grain and a-half has been thus taken. But with patients easily acted on by purgatives, an eighth or twelfth of a grain repeated at intervals is enough. There is certainly less tendency to constipation after its use than after senna, colocynth, and the like.

LECTURES ON THE

BLOOD OF VERTEBRATA.

DELIVERED AT THE

Royal College of Surgeons of England,

DURING THE SESSION 1861-62.

By GEORGE GULLIVER, F.R.S.

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LECTURE IX.—*On Animal Heat—Relation of the Red Corpuscles to the Respiratory Demand—Theory of Black, Lavoisier, and Crawford—Difference between the Heat of Arterial and Venous Blood—Rise of Temperature in Vegetables—Temperature of Fishes—Temperature of Birds—Electricity—The Oxygen conveyed by the Red Corpuscles to produce Carbonic Acid and Heat—Isomerism—Agency of the Nervous System.*

HAVING described the colour of the blood, with the causes of modifications in that colour, and the agency of the red corpuscles as carriers of oxygen to maintain the power of the contractile tissues, of the nervous tissues and brain, and of the nutritive processes, we come to consider the office of these corpuscles in connection with the generation of animal heat.

Relation of the Red Corpuscles to the Respiratory Demand.—Ever since chemistry has been capable of attempting or affording any explanation of the cause of animal heat, the red corpuscles were generally admitted as mainly concerned in the process in connection with pulmonary respiration; or rather, perhaps, we should say the red part of the blood, as the earlier observers were either ignorant of, or but little acquainted with, the corpuscles. We have already mentioned the great merit of the observations made in 1668 and 1674, by our excellent countrymen, Lower and Mayow. As explained in Lecture V., there is, *cæteris paribus*, an increase of the mass of the red corpuscles with a like tendency to an increase of the sum of their surface by minute multiplication or subdivision of them, in relation to the respiratory demands of the animal, and *vice versâ*. The exceptions may be rather apparent than real. Science is not sufficiently advanced to enable us to estimate the value of the disturbing circumstances; for the result is not comprehended under a single factor, but is influenced by others not yet known, or only so dimly seen as to require more light. We cannot, for instance, move a step without a correct knowledge of the relative proportions of the red corpuscles to the liquor sanguinis, to say nothing of those peculiarities of habits and organisation with which we are at present unacquainted. Even fishes would probably appear less exceptional were we less ignorant of their physiology; and we shall soon show, however little expected, that the abundance and smallness of the red corpuscles, and the strength of the heart, are in harmony with the relation in question in certain warm-blooded members of this most abject class of vertebrates. In the highest class again, nature might compensate for a comparative deficiency of red corpuscles, extending the sum of their surface by a suitable subdivision of them; and when that surface would otherwise be in excess, she might prevent it by keeping them larger.

You see by the diagrams how much larger the corpuscles are in man than in the horse. Now, merely to make our meaning plain, suppose the proportion of the corpuscles of these animals relatively to the rest of the blood preserved, and the size of the corpuscles exchanged. They would then probably be quite unequal in the brute to perform their functions, and in man might present such an excess of surface beyond what is required of them, as to carry too much oxygen. In the pig, one of the hottest of Apyrenæmata, the proportion of red corpuscles is immense, and their size not large; and, though the experiments of Nasse show a much smaller proportion of these corpuscles in the sheep and goat than in the dog and ox; no wonder, considering the comparative minuteness of the corpuscles in the two former animals, that Dr. Davy found their temperature even rather higher than that of the two latter. Thus, whenever we consider the corpuscles in relation to respiration and its consequences, we must connect their individual size with their aggregate proportion to the liquor sanguinis. They are larger in hot birds than in cooler Apyrenæmata, but abundant in proportion; and in cold fishes so small as would indicate a higher temperature than two or three degrees above the medium in which they live, but for their scanty proportion to the other parts of the blood.

Theory of Black, Lavoisier, and Crawford.—Soon after the discovery of oxygen by Priestly in 1774, the very time of Hewson's death, just a century after the publication at Oxford of Mayow's tract, and seventeen years subsequent to the discovery of carbonic acid by the eminent Dr. Black, a consistent, or at least plausible, theory was formed on the subject. Black observed that carbonic acid is produced during respiration and combustion, and the chemical theory of the cause of animal heat made rapid progress. In short, that respiration is essentially a combustion of carbon, which combines in the lungs with oxygen, and forms carbonic acid, and at the same time produces the animal heat, was the prevailing doctrine—indeed, the exclusive one on the subject. And no wonder, seeing that this conclusion was supported on the Continent by such eminent authorities as Lavoisier and Laplace, and in Britain by Black and Crawford. Recently, even Liebig, like some old writers (see Needham, "De Formato Fœtu," cap. vi., 12mo, London, 1667; and Ray's "Letters," by Derham, p. 294, 8vo, London, 1710),

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seems to maintain the same view when he attributes animal heat to the burning of the carbonaceous part of the food, especially fatty matter, in the lungs.

But a host of experiments and observations in our day, and before, show that the blood in the lungs cannot be the centre or furnace for the production of all the animal heat, whatever may be the importance of that blood as a carrier of support and fuel for the combustion or other chemical changes concerned in the production of that heat. Mr. Hunter, Sir Benjamin Brodie and Mr. Cæsar Hawkins, have given conclusive evidence, that respiration in the human subject may be preternaturally slow or imperfect while the body is acquiring and maintaining a preternatural heat; and it is well known to practical Surgeons, that the limb in which the artery has been tied for the cure of aneurism, may be for a while hotter than the other limb, which is still receiving its usual supply of arterial blood. That arterial blood is warmer by one or two degrees than venous blood has been clearly proved by Dr. Davy; and he has also proved that the relative capacity for heat of arterial and venous blood is really so little different as not to be deserving of the importance attached to it by Dr. Crawford. Yet, one of Davy's own experiments, in which the pyloric compartment of the stomach of the ox, containing food, was 104°·5, while the blood in the left ventricle was only 103°, gives an excess of heat in the stomach certainly not derived from the lungs. Ludwig and Spiess found the temperature of the saliva which flows when the nerves of the submaxillary gland are galvanised, 1° 8 higher than the blood of the carotid artery of the same side; and they conclude that the work of secretion produces a notable increase of temperature, with a diminution in the formation of carbonic acid, the venous blood of the gland being almost as red as arterial blood. Nay, further, we have well-attested cases of an actual rise of temperature in the human body, unconnected with putrefaction, during the first hours after death, and, therefore, quite independent of the immediate agency of the nervous and respiratory functions. Dr. Bennett Dowler, of New Orleans, has reported cases of this kind in bodies dead of cholera, yellow fever, and sunstroke; and, though Dr. Davy, in his excellent work on "Diseases of the Army," has some doubt about these results, they have been confirmed, as far as regards cholera subjects, by M. Doyère, in Paris. And now, within our own immediate knowledge, thanks to the interesting experiments conducted by Dr. Sclater and Mr. Bartlett, we have the great female python at the Zoological Gardens producing and maintaining a great increase of temperature during the act of incubation; and this, though taking no sort of food for upwards of a month. It would be curious to know how Professor Liebig would attempt to reconcile these unquestionable facts with his theory. Certain it is, that here there has been no food, no fuel put into the reservoir of the stomach to be burned up for heat in the lungs, during this remarkable elevation and maintenance of temperature in the body. Perhaps it might be suggested that the fuel was laid in before, as coal is now being collected in certain places for worse purposes, and kept unaltered in its repository, to be burned when needed for the special use in question. Yet the weight of the python should have been often noted during these observations, as there was probably increased functional activity, and waste of substance, as in a fever. In short, animal heat is certainly produced elsewhere than in the lungs, whatever heat may be generated there, and however important they may be as receptacles for the elaboration of materials, to be distributed to initiate or assist in the chemical processes for the production and maintenance of that heat throughout the body.

Difference between the Heat of Arterial and Venous Blood.—We have already seen that Dr. Davy has proved that blood acquires heat in passing through the lungs—in other words, that the blood of the left ventricle is hotter than the blood of the right ventricle in the living body, the difference of temperature being from 1° to 1°.5 of a degree, a like difference existing between the blood of the veins and arteries, though somewhat diminishing as their distance from the heart increases. He has further shown that venous blood agitated in a bottle with oxygen, acquires an increased heat of about 1°, and this by combining with the oxygen without the production, or at least evolution, of any carbonic acid. Hence, he infers that animal heat is caused by the fixation and condensation of oxygen in the blood, by its conversion from venous to arterial blood in the lungs, and by the combination of this oxygen in its course through the body in connexion with secretion and other changes.

Rise of Temperature in Vegetables.—Indeed, the facts generally at present known concerning the production of heat in organised bodies, whether animal or vegetable, tend to prove that it is more or less connected with changes or combinations in which that potent agent, oxygen, is concerned. This is certainly the case in the germination of seeds, as in the process of malting; and in some species of the Arum family, during the flowering time, the rise of temperature is a well-established fact, which De Saussure observed to be connected with the formation and evolution of carbonic acid. Thus, in these examples in vegetables, there is still a consumption of oxygen, though quite unconnected with any corpuscles of the blood; but this by no means proves that the red corpuscles, among other offices, may not be special agents, mediately or immediately, for the production and regular support of heat in the higher animals. We require some exact observations on the changes during the heating of hay, refuse tan-bark and muck, in any of which the temperature may much exceed that of animals, and maintain itself for several days. I found the heat of a hay-stack upwards of 200°, and that a tan-bed generated and kept up a temperature varying between 89° and 134° for a fortnight in February. The gardener can modify the warmth of his hotbed; and, could he further exactly suit the supply to the waste, preserving all the conditions under which a given heat is produced and maintained, he would only be imitating the perfection of organised nature in this process.

Temperature of Fishes.—And that the red corpuscles really do supply oxygen, among other purposes, for the production of animal heat, might be inferred, independently of the facts already detailed, from many others—such as the proportional quantity of these corpuscles in certain warm and cold fishes. As described in a former lecture, the red corpuscles are by far the heaviest part of the blood; hence, their proportion, relatively to the other proximate constituents of this fluid, may be, to a certain extent, deduced from its specific gravity. Accordingly, Dr. Davy instituted experiments of this kind. Certain fishes of the Scomber tribe, as the bonito and pelamys, he proved to have warm blood, varying from 7 to 19 degrees above the water in which they live; while, from very particular inquiries made of persons engaged in the tunny fishery, he believes that the tunny is also warm-blooded. The specific gravity of the blood of the tunny was 1·070, while the blood of the colder fishes with which he made the comparison, only a little exceeded the average in density, the specific gravity of the blood of the picked dog-fish (*Squalus acanthias*), for example, being but 1·030, while its serum alone was 1·027. And the contrast between these warm and colder fishes was equally remarkable when the large and powerful heart, the abundance of blood and its red corpuscles, the large gills and apparatus of branchial nerves of the warm *Scomberidæ*, were compared with the diminution or reduction of all these phenomena in the colder fishes. He also found the size of the red corpuscles to the same effect,—all much smaller in the rich blood of the tunny, of the pelamides, and of the sword-fish, than in the poorer blood of the colder fish,—a fact only of weight in connexion with the other circumstances; and it has already been explained how, *cæteris paribus*, the tendency of the corpuscles is to be smaller, so as to multiply or extend their surface in a given proportion, according to the activity of the respiratory function.

Having noticed these exceptional temperatures in fishes, it may be mentioned that these animals generally are not absolutely, but only relatively, cold-blooded. As an old angler, I have for many years taken every opportunity of ascertaining their temperature by a delicate thermometer, made for the purpose for me by Mr. Adie, and the results are confirmatory of the earlier observations of Mr. Hunter, Martin, and Dr. Davy. I have experimented thus on numerous river fish, partieularly on different species of *Salmonidæ*, *Percidæ*, *Cyprinidæ*, *Esocidæ*, *Muræniidæ*, *Petromyzidæ*, and with the result of finding them from three-quarters to three and a-half degrees warmer than the medium in which they live. I could not ascertain any marked variation in their temperature during the breeding season, nor in the different streams and lakes of England, Scotland, and Ireland. The result of thirty-one experiments on the salmon gives its mean temperature at 2°·4 above the water in which it lives.

Temperature of Birds.—The high temperature of birds, another class of the pyrenæmatous vertebrates, has never been satisfactorily accounted for; but in them we find, as we always do in connection with the development of much heat

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in the vertebrate animals, a large proportion of red corpuscles. Dr. Davy found the specific gravity of the blood of a turkey exceeding that of the human blood. There is probably, too, great activity in the organic functions of birds. Whether the nucleus of the red corpuscle has any share in the production of this increased heat, or, indeed, what may be the specific use of that nucleus, are yet subjects for inquiry. It has been thrown out as a conjecture that the vesicle and nucleus, containing and contained part, may be in the electrical relation to each other of positive and negative; and Dr. Davy has proved that the white and yolk of the egg of the common fowl are in this state. As to the objection, that cold fishes have red corpuscles containing nuclei, these corpuscles are so scanty that this constitution of them might still be required. Whether the high temperature of birds depends entirely on the carbonic acid formed and expired, is yet questionable. From the experiments of Treviranus and Müller, it would appear that birds expire more of this acid in proportion to their weight than Apyrenemata; but Allen and Pepys obtained contrary results on the guinea pig and pigeon. The peculiar clothing, the urine, and other circumstances, would have to be taken into an account of the heat of birds.

Electricity.—Whatever may be the agency of electric action in the production of animal heat, we cannot estimate or value it in the present state of science. Professor Carlo Matteucci, whose experiments on electricity in animals have been so numerous, concludes that the property of the muscles immediately connected with their electric currents, is identical with that which was long ago denominated by Haller irritability, but which is at present more usually designated by the term contractility; and he ascribes the development of this muscular electricity to the chemical actions which are attendant on the process of nutrition of the muscles, and result from the contact of arterial blood with the muscular fibre. Now, we know that MM. Bequerel and Breschet had long before demonstrated that there is actually a development of heat during muscular contraction; and whether the electricity and heat in this case are in the relation of cause and effect is a subject for further inquiry. At present we are only concerned about the red corpuscles; and this experiment might be objected against their agency in the production, mediately or immediately, of the increase of temperature during muscular contractility. But the objection would have little weight, unless it should be also proved that there is not an increased circulation of blood in, and, consequently, a greater supply of the red corpuscles to, the muscles during their contraction. We have already seen how these corpuscles, charged with oxygen, are capable of restoring the contractile power of muscles even after post-mortem rigidity, —in short, of actually reviving and re-animating these dead muscles. Dr. Davy observed that the electrical fishes are of low temperature, and the blood corpuscles of the torpedo large and few; and I found them also scanty, but smaller, in the gymnotus.

The Oxygen Conveyed Mainly by the Red Corpuscles to form Carbonic Acid.—We have shown that, while healthy serum has such a very high solvent power over carbonic acid as to be capable of absorbing even more than its own bulk of volume of this acid, oxygen is scarcely or not at all capable of absorption by the serum; and, in fact, that the oxygen is absorbed by the red corpuscles. And that the carbonic acid is not merely an excrementitious substance, results directly from Dr. Brown-Séquard's observations, that the contractive tissues of vertebrate animals can be stimulated or excited by blood charged with this acid. He relates an experiment in which the pregnant womb of a dead bitch was made to contract and expel its contents by the stimulation of carbonic acid. But now, having produced the chief points in the evidence as to the concern of the red corpuscles in the production of animal heat, conclusive of their potent agency in this respect, we must leave to chemistry the explanation of the multifarious means by which the oxygen they undoubtedly convey, may mediately or immediately act to this end. The formation of carbonic acid, and consequent evolution of heat by combination of oxygen with carbon, is a leading fact. We have already noticed the high temperature generated and maintained for a while by certain living vegetables, and by such dead things as hay, dung, and tan; and that animal heat is also simply the result of chemical agency, can scarcely be doubted.

Isomerism.—But if the chemist has not yet been able fully to explain the phenomena in these lifeless heaps, no wonder he should fail to follow and determine exactly all the steps throughout the complex organism and manifold processes of the living animal; more especially when we consider the increased difficulties arising from such relations as isomerism and polymerism, which make the transition of one compound to another depend merely on contact, as in assimilation and dissimilation. Thus, the recent and beautiful observations on amyloid substance in the liver, and many very different organs, and its relation with sugar on the one hand, and with proteic azotized compounds on the other, would appear to be intimately connected both with dissimilative and assimilative processes, as Dr. Robert M'Donnell, of Dublin, has so well observed. And, as I shall show to you in a future lecture, a membranous cyst may be produced in serum by a process of spontaneous coagulation at the temperature of the air, and some days after that serum has been kept apart from the blood in a jar, quite independently, too, of life, or of red corpuscles of the blood or cells of any kind, or of the evolution of ammonia; so that it would be difficult to reconcile this one simple fact with either the doctrine of Mr. Hunter, of Professor Schwann, of Dr. Richardson, or of Professor Grant. But the whole of this interesting branch of our subject will come under consideration when we treat of the fibrin of the blood.

Agency of the Nervous System.—Having mentioned the large size of the apparatus of branchial nerves in the warm-blooded *Scomberidæ*, reminds us of the doctrine of Sir Benjamin Brodie, that the integrity of the nervous system is in some way necessary to the production of animal heat. Undoubtedly so, as far as regards the conditions for the regular maintenance of that heat. This eminent physiologist ("in his younger days," as honest Izaak Walton said of some of Sir Walter Raleigh's best work) proved that in the most convincing manner; and though he was surely wrong in ascribing the heat mainly or fundamentally to nervous action, and some of his minor facts have been questioned, and his leading conclusion somewhat modified; we shall soon see that the chief details stand now, as ever, a model of experiments ingeniously devised and so skilfully and carefully executed, so novel and striking and true in their results, as must at once have shown the capacity of the author for the eminent career which he has subsequently pursued. We have already seen how he and Mr. Cæsar Hawkins, like Mr. Hunter, had observed that animal heat, contrary to the then universal doctrine, could not be altogether and immediately dependant on respiration. We need only, on the present occasion, allude to some of Brodie's central experiments on rabbits, as it forms no part of our design in this course of lectures to treat of the functions of the brain and nerves. It had before been shown by Cruickshank (another illustrious disciple of, and successor to Hewson in, the brilliant Windmill-street School), and by Bichat, that, when the brain is destroyed, the action of the heart only ceases because respiration is suspended; in other words, that the brain is not directly necessary to the action of the heart, though the lungs are so to that action in the higher animals. And so, the circulation of the blood may be kept up by artificial respiration, for a while, after the functions of the brain have been annihilated, either by mechanical means, or by such vegetable poisons as woorara and the essential oil of bitter almonds.

Accordingly, Brodie removed the brain of dogs or rabbits, after having duly secured the arteries of the neck, and maintained the action of the heart thereafter for two or three hours, when the bodies were found to cool even faster than the bodies of other animals killed at the commencement of the experiment, and laid in the same room for comparison. Yet the blood of these decapitated animals, thus made to breathe artificially, underwent the usual changes, just as in a living animal. The dark venous blood acquired the florid arterial hue in its passage through the lungs; as usual, too, oxygen was absorbed and carbonic acid evolved. Here, then, allowing for all possible errors in the observations and calculations, was sufficient experimental proof that the then universal doctrine, of all the animal heat being produced in the lungs, must be abandoned; that specious and beautiful theory, so beloved by its authors, so long and fondly admired and cherished by its embracers, had to be discarded; but this not without many a challenge for further proof or confirmation, —not without more than one new trial.

So the experiments were repeated, and the evidence reviewed by Dr. Chossat and M. Le Gallois on the Continent, and by Dr. Wilson Philip in England, but without the effect of disturbing essentially the original verdict. All the additional facts elicited only amounted to this:—During artificial

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respiration in the dead animal the loss of heat may not be uniform—in some instances greater, and in some less—in the animal under artificial respiration, than in the animal killed and laid by for comparison. And it is remarkable that this new inquiry amply confirmed the truthfulness of the first experiments and observations; for Dr. Wilson Philip showed that the small discrepancies in question were explicable by a calculation of the differences in the quantities of air blown by the bellows into the lungs. For example, in a rabbit in which the lungs were inflated about thirty times in a minute, the loss of heat was greater than in the dead rabbit; but when the process was repeated, only twelve times in a minute, the animal cooled somewhat slower than the dead one placed by for comparison. In short, in the earliest experiments, such an excess of air had been blown in as to produce a certain excess in the cooling process; but not a tittle of evidence was adduced to show that the regular animal heat can be kept up by artificial respiration, when the influence of the brain is removed. And so the conclusion becomes irresistible, that animal heat, whatever share the oxidation of the blood in the lungs—and some share it would appear to possess—may have in its production there, must be generated also elsewhere in the body; and this, as we have before seen, is just what all the best subsequent and independent observations have peremptorily proved. And, indeed, with these observations, and especially the experimental researches of Dr. Davy, which attribute the generation of a large share of the animal heat to the consumption or agency of oxygen, and different chemical processes in other parts of the body besides the lungs, Sir Benjamin Brodie's experimental results have always appeared to me to be in concord; and Mr. Hodgson's conclusion is to the same effect. Chemical changes, so far as they are dependant on the organic functions, in vertebrate animals, are under the presidency of the nervous system, or at least some part of that system; and as by these changes the heat is generated, the immediate or exciting agent of which is the oxygen distributed by the red corpuscles, the two independent sets of observations seem to illustrate each other, and this by that very beautiful harmony of contrast which Coleridge has so admirably described.

ORIGINAL COMMUNICATIONS.

CASE OF

VESICO-UTERO-VAGINAL FISTULA CURED AT ONE OPERATION.

By T. SPENCER WELLS, F.R.C.S.
Surgeon to the Samaritan Hospital.

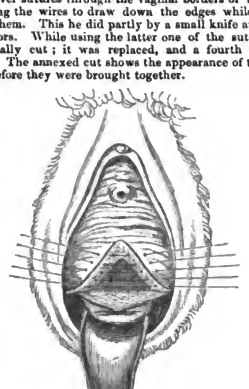
The interesting paper on "Vesico-Uterine Fistula," by Mr. James Lane, published in the last Number of the *Medical Times and Gazette*, induces me to bring the subject of "Vesico-Utero-Vaginal Fistula" also before the Profession.

In Mr. Lane's case of vesico-uterine fistula a cure was effected by closing the os uteri, but the patient was thus rendered sterile; and, at each menstrual period, the bloody fluid from the uterus passed away through the bladder, mixed with the urine. As his patient was 45 years of age, these conditions could not be considered as objections to the proceeding which he adopted; but they would render it altogether unjustifiable in a young woman, provided a cure could be effected without any such consequences. That it may be so effected, the following case is sufficient to prove. I am indebted for the notes to Mr. E. Parson, House-Surgeon to the Samaritan Hospital, a most intelligent gentleman who has just obtained the gold medal in Midwifery and the Diseases of Women, at the M.B. Examination for Honours of the University of London.

"J. W., aged 39, was admitted to the Samaritan Hospital on March 29, 1862. She was married fifteen years ago, and has had nine children. The last was born three years ago; it was of an immense size. The labour lasted a whole day and night, and the child was born dead after the use of the forceps. The next day the urine began to pass through the vagina, and has continued to do so ever since, the usual misery connected with this condition rendering her quite unfit for her duties.

"On admission, her general health appeared to be good; but the labia, thighs and nates were much excoriated, and coated with phosphatic deposit. The urine was ammoniacal, and contained much mucus. At the distance of two inches and a-half from the orifice of the urethra there was an opening in the vesico-vaginal septum. A curved sound, passed through the urethra, was readily carried through this opening into the vagina, and a finger passed into the vagina went very readily beside the sound into the bladder; but the opening was hardly large enough to admit two fingers. It was triangular in shape, the apex towards the urethra. Its base was formed by the anterior lip of the cervix uteri, which was split into two portions by a fissure which connected the cavity of the bladder with the canal of the cervix for a distance of about three-quarters of an inch from the os. By careful washing of the external parts, the use of oil, and frequent syringing of the vagina and bladder, the state of the urine was much improved in a few days, and the parts became much less inflamed, so that on April 7 Mr. Wells proceeded to close the fistula by operation.

"Chloroform was not given. The patient was told to ask for it if the pain became so great that she wanted it, but she bore all without a single cry. She was placed in the semi-prone position recommended by Dr. Sims, and the fistula was brought into view by his speculum. Mr. Wells first passed three silver sutures through the vaginal borders of the opening, using the wires to draw down the edges while he was paring them. This he did partly by a small knife and partly by scissors. While using the latter one of the sutures was accidentally cut; it was replaced, and a fourth and fifth passed. The annexed cut shows the appearance of the pared edges before they were brought together.



"The wires were all passed after the fashion of Dr. Sims, by a needle-holder and short needles carrying fine silk, by which the wire was afterwards drawn through. The edges of the fissure in the cervix uteri had been pared at the same time as the vaginal mucous membrane was removed, so that when the sutures were fastened—which was very readily done by simple twisting of the wires—a longitudinal line of union along the vagina came into contact with a slightly curved transverse section of the anterior lip of the uterus, as shown in the annexed cut. The apposition was so close that it seemed hardly necessary to apply a suture, but one was carried, as shown by the dotted lines in the cut, through each side of the vaginal line of union and through the cervix.

"Dr. Sims' catheter was introduced as soon as the operation was completed, and the patient was allowed to lie on either side, or on her back, as was most comfortable. The vagina was syringed twice a-day; the catheter was changed and cleaned night and morning. No urine passed by the vagina. On the ninth day Mr. Wells examined, and finding union perfect, he removed all the stitches, but kept the patient in bed for five days longer. When she got up she could retain the urine for two hours at a time, the whole passing

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by the urethra. After she had been moving about for a week, M. Nélaton carefully examined the woman with Mr. Wells, and found that union was perfect. In order to see if any small opening might still remain between the bladder and uterus, the bladder was injected with warm water till it was full; but though it overflowed by the urethra beside the catheter, not a drop escaped into the vagina. Still, after this experiment, she was for several days unable to retain the urine for more than half an hour at a time. On May 13 the note is: 'Can retain the whole of her urine one hour. If she does not pass it then, there is a little dribbling from the urethra.'

"May 21.—She was discharged, the power of holding the urine gradually increasing.

"A letter, dated September 29, speaks in most grateful terms of the comfort she now enjoys compared with her former miserable condition. She is able to walk about all day without any inconvenience; but when she is lying down in bed, if the bladder becomes distended, she is obliged to get up, otherwise she could not avoid wetting the bed. This slight inconvenience is probably due to the bladder not having quite recovered its original size, and may be expected to disappear in time."

It is not uncommon to meet with cases of vesico-vaginal fistula in which the cervix uteri forms the upper border of the opening; but these do not become examples of vesico-utero-vaginal fistula unless there is a communication between the bladder and the cavity of the uterus or the canal of the cervix. I have only met with one other case of true vesico-utero-vaginal fistula besides that reported above. This was in 1857. I succeeded in closing a considerable portion of the opening, taking great pains to avoid closure of the os uteri; but a small opening still remained, after several operations, in the cervix uteri, and the patient fell into the hands of a person who has acquired some notoriety by his treatment of vaginal fistulæ. He operated, but was so ignorant of what he had done, that he boasted of having cured a case in which I had failed; and even after it was proved to him, by the fact of the menstrual fluid passing through the bladder, that he had closed the os uteri, he published his egregious failure as a successful case. This patient was a young married woman, yet her os uteri was closed quite unnecessarily,—as the first case above alluded to sufficiently proves. The annexed diagram, which shows how the uterine and the vaginal borders of a vesico-utero-vaginal fistula were brought together without interfering at all with the os uteri and cervical canal, and the successful result of only one operation, it is to be hoped will induce Surgeons to pause before they render a young married woman sterile who may be cured without any such damage.

Two practical details in relation to the cure of vaginal fistula deserve a word of passing notice—the material of the sutures, and the use of the catheter. Since this case occurred I have been gradually arriving at the conclusion that fine strong silk answers even better than wire. It is passed much more easily and with finer needles, causes less irritation of neighbouring parts, and is removed much more easily, while union takes place quite as well as when wire is used.

With regard to the use of the catheter, a most troublesome part of the after treatment, I believe it may be dispensed with altogether. The catheter certainly need not be left in the bladder, and I believe it need not be used to empty the bladder. At any rate, in one of my later cases, it was never once used after the closure of a fistula by five silk sutures, and perfect union resulted with less inconvenience to the patient than I had ever seen before. That the use of the catheter is not altogether free from danger, is proved by the frequency of catarrh of the bladder, persisting occasionally for months, after a fistula has been cured; and by one case of death which occurred at Brussels, where, although the fistula was cured, the patient died of peritonitis caused by the point of the catheter having caused ulceration, and perforated the fundus of the bladder.

Upper Grosvenor-street.

CASE OF

DIABETES SUCCESSFULLY TREATED BY THE SACCHARINE METHOD, AND REMARKS THEREON.

By HENRY USSHER, B.A., M.B., L.R.C.S., L.M. Ed.

Obadiah S., 31 years of age, was, two years ago, as fine a specimen of an active railway navvie as could anywhere be found. His present illness is of nine months' duration. He was discharged from Hospital as an incurable, dying man, and I certainly thought so on my first visit to him, that took place on April 3, and the following was the condition in which I found him:—He was in bed; face very much flushed; eyes glazed; tongue hanging from the mouth; lips covered with sordes; skin harsh and dry; intense thirst; inability to sleep or take a morsel of food; sternal pain severe and constant; bowels constipated. I hardly recognised the man, so attenuated was he; and he expressed his case to be hopeless. ℞ Spt. juniph. ʒj; liq. hydrarg. bi., ℥iv.; tr. opii, ʒj.; inf. tiliæ Europ., ℥ij. (blossoms of the lime tree, and a most excellent diaphoretic); inf. juniph. ad ℥vj.

April 7.—Pulse 96; breathing regular and more easy; sternal pain gone; eyes less glazed; lips covered with sordes; passing three pints and one-half in twenty-four hours; odour of the urine all through the house. Six months ago he had a strain, but no ill effects remained. Specific gravity of urine, 1·033; no albumen present; effervesced with nitric acid, gave off fumes of ammonia; has slept somewhat since the medicine was given to him, and made less water after the use of it. Previous to his getting worse, he had occasional vomiting, and, thinking that the man might be suffering from sarcinæ, I prescribed the following, the sugar suggesting itself in a paper I had read of Dr. Budd's:—℞ Sod. hyposulph., ʒij.; glycerinæ, ʒiij.; acet. zinci, gr. xij.; aq. ad ℥vj. M. s. coch. amp. ter die. Now, there was a marked increase in the quantity of urine voided, viz., April 8, 4 pints; 9th, 4½; 10th, 6; 11th, 8 pints. The first improvement was in his appetite, and I furnished him with a dietary, but it requires an unusual amount of self-denial from persons in this class before they will adhere to it. I think he did so generally. His sleep was middling; more thirst complained of; and his water scalded him.

11th.—Omitted the acetate of zinc, and substituted the mixture:—℞ Quinæ dis., gr. viij.; ferri am. tart., gr. x.; acid. nit. dil.; tr. hyoscyami, āā ʒj.; glycerinæ, ʒiij.; aq. ad ℥viij. M. s. c. a. 4tis hŏris. ℞ Pulv. Doveri nocte.

12th.—Urine paler, less smell; sp. gr. 1·035; bowels slightly opened; slept better.

14th.—Passing eight pints in twenty-four hours. Repeat mist. with ʒss. of the dilute acid.

15th.—Had a copious and satisfactory diaphoresis for the first time; urine still scalds; his tongue is cleaning, and not so dry; appetite increases; there is visible improvement; face not flushed; pulse 104, steady, and not full.

17th.—Pulse 92. Omitted the Dover's powder, and he did not rest or perspire. Specific gravity of urine 1·030, very much paler, and whitish looking; smells like whey; decomposes much sooner; crowded with crystals of uric acid. Nitric acid causes a slight fawn colour. Rep. mist. c. gr. xij. sod. bicarb.; continue the powders likewise.

18th.—Pulse 72.

19th.—Able to sit to his dinner of roast mutton, vegetables, and coffee. He is gaining flesh, but rather down in heart at his wife's illness, which turned out to be typhoid fever of a severe type, and which the child also contracted. Tongue cleaning. Passes less water. Clouds of mucus in urine. Specific gravity, 1·032.

20th.—Specific gravity 1·035.

22nd.—Still gains flesh. Makes more water at night, which I attribute to the disturbed state of his mind, then more at ease for reflection. ℞ Quinæ dis., gr. vj.; ferri am. tart., gr. x.; tr. chirettæ, acid. nit. dil., āā ʒj.; glycerinæ, ʒiij.; aq. ad ℥viij. M. s. c. a. ter, hŏris.

25th.—Met him out walking; he goes with the aid of a stick. Tongue losing its slimy coating. Urine gets darker, and the whey smell vanishes. Sweating copiously day and night. Made rather more water last night. Specific gravity 1·040.

28th.—When the urine stands some hours, clouds of

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mucus float in it, looking like a fine gelatinous substance, and moving with the fluid. These clouds contain visible crystals of uric acid. The glycerine was now omitted, and the tartrate of iron increased to ℈j.

29th.—He ate some salt pork on Sunday, which brought on purging, and to-day he is voiding ten pints in twenty-four hours. I have told him to measure accurately, to see if the iron increases the quantity. Now the wheyey smell is gone, and the urine gets more of an amber colour. Specific gravity 1·037. He is much depressed in mind at his family troubles, and the consequent pulls on his diminished exchequer.

May 2.—Weighs 9 stone 6½ lbs., the former weight in health being 12 stone 11 lbs. Since the glycerine was omitted, the quantity of sugar has increased, and also the amount of urine passed, viz., fifteen and a-half pints in twenty-four hours, which plainly shows the former decrease was not due to the iron. He complains of great weakness, but looks wonderfully well, and uses a small amount of white bread and a little wine when he can get it. Now that the anxiety about his wife and child has abated, I should expect some improvement in him.

4th.—Increased thirst.

8th.—He again reverted to the glycerine, having been without any medicine for two days. Thirst gone; quantity in twenty-four hours reduced from ten pints to three; pulse 80; tongue healthy and clean.

13th.—Specific gravity 1·033; gained 3lbs. in weight; walked to the village over one mile distant. Has again eaten some salt beef, and is purged—℞ Pulv. Cret. c. op. gr. v., sumat si opus sit. o. secund. hôris. ℞ Ol. jec. aselli coch. min. omni mane sumend.

18th.—Passed four quarts in twenty-four hours, consequent on the use of the salt meat and unguarded drinking of water. To-day his weight is 9 stone 13 lbs., showing an increase of 6½ lbs. since May 2. Urine still shows traces of sugar, turning yellow with Barreswill's solution, and when evaporated it yields a syrupy residue. Moore's test also indicates sugar, but I found the Liq. potassæ contained lead.

19th.—℞ Ferr. am. tart., ℈j.; liquoris strychniæ, gr.j. ad Oj. ℥j.; quinæ dis., gr. vj.; acid. nit. dil. ℥j.; aq. ad ℥viij.

20th.—Again omitted the glycerine, and increased the quinine and iron, with minute doses of strychnia. It will be remembered, that on May 8, when he was without medicine, and had taken large doses of iron, it was attended with the best results, and I have continued it with the most signal benefit. I think it has some influence in arresting the elimination of sugar, perhaps in the same manner as it did albumen in the cases of my respected teacher, the late Dr. Cathcart Lees.

23rd.—The quantity now passed in twenty-four hours is a little over three pints. He eats well, looks hearty, and his only complaint is of weakness in the legs.

26th.—Weighs 10 stone 1 lb., being an increase of 2 lbs. in nine days; his average of water passed is about five pints in twenty-four hours; urine still pale by day and very clear, but of an amber colour in the morning, and smells natural; there is a very trifling shade of sugar in the urine. ℞ Fer. am. tart., ℈j.; quinæ dis., gr. vj.; acid nit. dil., ℥j.; liq. strych. ℥j.; aq. camp. horæ ad ℥viij. S. c. a. 4tis hôris. I fear he occasionally recurs to his old habit, and will not forego the Beer. I have to add this fact, viz., that his illness was immediately subsequent on fright. He was jumping on burning brambles, to prevent a hedge taking fire, and after the excessive heat sat in a shady shelter, cooling rapidly; then he felt himself completely unstrung, and became worse from day to day.

His diet was a mixed one, and liberal; he took little bread. The amount of sugar, as indicated by the "companion phial" method, varied thus, during my attendance, at the following specific gravities, and an equal temperature:—April 19—1·033, 21 grains in the ounce; 1·035, 17 grains; 1·032, 17 grains. April 27—1·035, 18 grains in the ounce; 1·035, 7 grains. Here I had the misfortune to break my urinometer, and, not having a Garrod's glucometer, my observations on this head were suspended.

June 5.—Weighs 10 stone 6 lb., being a further increase.

6th.—Liq. strychniæ, ℥iij.; tr. ferri mur., ℥j.; quinæ disulph., gr. vj.; aq. dest. ad ℥viij. M. sumat. coch. amplum 4tis hôris.

16th.—Continued improvement manifested; the mixture is repeated with the addition of an alteratives pill. He looks well; has walked from his house to Canterbury, nearly three miles; sleeps very well; passing an average quantity of four pints in the twenty-four hours, of which quantity about two pints are voided at night-time; no thirst continues; breath still smells melleous; pulse 96, good; has motions, two or three in the day, formerly constipated; tongue a little slimy, and somewhat sore from the alterative pills, which are discontinued; appetite better; skin acts well; diaphoresis takes place when he drinks hot coffee; flesh getting firmer, and more muscle; hair falling off. ℞ Acid. nitr. dil., ℥j.; liq. strychniæ, ℥iij.; tr. ferri mur., ℥j.; quinæ disulph., gr. vj.; mist. camphor ad ℥vj. M. s. c. a. 4tis hôris.

December.—The last I saw of him a few days back he was working on the South Eastern Railway; and, although he complains of languor, still I should say, from his appearance, that he was able to do a fair day's work with any one.

Remarks.—The conditions under which sugar makes its appearance in the urine, seem to be reducible in most cases to defective nervous energy, when reaction is unequal to the shock,—*e.g.*, a patient, after much exposure and wet, secretes diabetic urine; or after great mental shock and utter prostration, the same thing obtains, an arrest of function as clearly taking place as in typhus or any other functional disorder. To which of the organs are we to attribute this change? Examination of the urine detects nothing but sugar; no evidence of decay is discoverable in any of the other organs that subserve the purposes of life. If there is any faith to be placed in the experiment that detected sugar in the hepatic veins, and the absence of it in the portal, I think we have one starting point for reflection. The presence of an hepatic organ, or its counterpart, is, I believe, almost universal in nature. It is the largest solid body in our organism; and this would seem a strong argument *à priori* in favour of its duties being manifold. Subject to excessive changes in the circulation, it enjoys a great power of adaptability: its proximity to the surface of the body, and connexion with the skin, make it highly probable that their uses are co-ordinate, illustrations of which abound both in disease and therapeutics. Practical Physicians well know how much of disease may be fairly attributed to the arrest of nervous power—that link, the severance of which terminates in death; and of its action in the body, each one is cognisant of for himself, and sees the effects in others. Constant interference with this power as surely develops disease as if it was introduced from without. If the influence is everywhere observable over mind, why not equally true of matter? Who can doubt that cancer of the stomach and heart disease are often correlatives, and even coetaneous with the "*res angusta domi*?" It is a well-known fact, that injuries of the head, and the excitement of the floor of the fourth ventricle at particular situations, influence the production of sugar in the system. This very correlation, it seems to me, may be as effectually produced through the medium of the cerebral circulation, constantly congested by the requirements of an intensely busy brain. Look at the concentrated force of the cerebral circulation, as it must be in those large vessels which compose the circle of Willis. All this is carried on close to the fourth ventricle, and a choroid plexus enters the cavity: what, let me ask, can prevent emboli acting as the source of irritation here, with precisely the same result as if mechanical means were employed? Here, I humbly conceive, we have an approximation to the truth. Lately, I was subject to much mental worry, and became temporarily diabetic. The attack commenced with a severe pain in the right hypochondria, and remarkably severe and constant in the right shoulder. The skin was harsh and dry. I passed an unusual quantity of water; had a sweet taste constantly in the mouth, and excessive languor, thirst, and an irresistible desire to sleep, most evident on Sunday, which symptoms preceded the appearance of sugar in the urine; and, had not chance led me to examine it, I should have remained in ignorance. When the cause was removed, I returned to my original state of perfect health. External sensations will produce internal changes,—*e.g.*, vomiting, and the suppression of singultus by fright, etc., etc. How often is the advent of typhus predicted by a sudden invasion of the nasal faculty, which then and there marks the commencement of disease, or the arrestment of function perhaps never to be reinstated? Cold, the most common of all external influences, acts thus, I believe, to determine the formation of sugar. As a necessary conclusion, then, I conceive that sugar is present often when least suspected, and that its presence is of no more moment than the hepatic disturbance that has caused it; both are evanescent. Under the

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influence of mechanically obstructed respiration, sugar makes its appearance in the system, and Dr. Pavy considers this due to hepatic pressure. If this be a correct explanation, then we should expect the same results in severe cases of empyema, diaphragmatic and other pleurisies; and if this were ascertained to be so, we might have a valuable aid to diagnosis at hand. I am myself persuaded that the sugar itself causes an obstruction in the respiration, as may be seen in the worst cases of this disease. Lehmann has pointed it out in the saliva and expectoration; and the melleous odour of the breath shows that the circulating air is charged with it, and the persons afflicted are sensible of a sweet taste in the mouth. The diabetic expends largely of azotised material in the formation of sugar, and draws, in a corresponding manner, on the supply of other organs. To furnish him with this sugar in the quantities that he can appropriate, will stop the downward progress as it did in this case; while the other constituents of glycerine will help to restore the general decadence. It is, no doubt, an expensive medicine when the best quality is used; but I am sure it would soon recommend itself by economising the stay of the patient in the Hospital, reducing it from months to weeks, and thereby saving a very considerable amount of pabulum and space for others.

Canterbury.

THE USE OF ARSENIC IN PHTHISIS.

By ARTHUR LEARED, M.D., M.R.I.A.
Physician to the Royal Infirmary for Diseases of the Chest.

It cannot be questioned that, under certain circumstances, arsenic possesses a singular power in restoring health. It is used in some countries, as is well known, for the purpose of improving the outward appearance of men as well as of horses, and its efficacy in malarious diseases and skin affections is perfectly established. Liebig's theory, that it acts by delaying the retrograde metamorphosis of tissue, is plausible, and may be true. If, then, as appears from many indications, this metamorphosis is peculiarly active in phthisis, an agent capable of controlling it might be expected to prove valuable.

But it must be admitted that great therapeutic hopes should not be founded on mere theoretical grounds. The direct contributions of science to the improvement of therapeutics have been exceedingly small. Experience is the only safe guide; and, even in certain cases where the connexion between cause and effect in relation to the action of a remedy seems proved, we have much to unlearn. Take, for example, the universally received opinion, that we cure anæmia by giving iron because a material is supplied to the blood in which it was deficient. It is certain, however, that in some cases of anæmia arsenic will restore the complexion and the strength as effectually as iron itself. Omitting the class of direct nutrients, as cod-liver oil, manganese, and probably other remedies, possess more or less of the same power. It is also known to every Practitioner that iron often fails in curing anæmia, which goes to prove that mere chemical supply is not a sufficient explanation of its beneficial action.

In the nine following instances arsenic was used in the treatment of phthisis. The cases occurred amongst the patients of the Royal Infirmary for Diseases of the Chest, but were in no way selected. Cod-liver oil and sedatives were conjoined, as it did not seem justifiable to omit them; but most of the patients had been taking oil before admission:—

Case 1.—July 17, 1860.—J. H., aged 23 years, tall and very thin; ill two years. Marked dulness on percussion, and deficient respiration beneath right clavicle; profuse night sweats and troublesome cough; never had hæmoptysis. ℞ Sol. arsen. potass., ♏iij.; tinct. camph. co., ♏xx.; mist. camph., ℥j., ter. in die sumend post cibos.

Under this treatment he gradually improved up to August 21, when he stated that his cough had quite disappeared—that pains in the chest which used to trouble him had vanished, and that he had now nothing to complain of but "shortness of breath."

He went on well, the treatment being continued, until September 30, when copious hæmoptysis came on, that being the first time of its occurrence. This made him very weak, and the treatment was discontinued.

Case 2.—July 31, 1860.—H. C., a delicate, slightly-made man, aged 23 years; health began to fail upwards of three years ago. Hæmoptysis in small quantities every few days for a long time; cough very troublesome; night sweats; great loss of flesh and strength.

Dulness on percussion, with very moist crepitation beneath both clavicles, but most marked on right side. Ordered the same as in previous case.

He took the medicine for two days only, when hæmoptysis to the extent of a teacupful occurred.

Died September 10.

Case 3.—July 31, 1860.—R. C., a tall man, of large build, aged 36; has been in failing health for six months; has had hæmoptysis. All the signs of a large cavity beneath left clavicle. Sol. arsen. potass., etc., as in former cases.

August 7.—Says he feels medicine is doing him good; is stronger; has less cough and expectoration.

September 4.—Cough not so well, but otherwise improving. Says that the night perspirations which used to saturate his shirt have been removed by the medicine.

11th.—Spat nearly half-a-pint of blood two days ago; omit cod-liver oil, but continue mixture.

18th.—Feels stronger; appetite very good; no sweating; but cough is troublesome.

October 12.—Good deal of hæmoptysis lately. Omit medicine.

Case 4.—August 3, 1860.—Mrs. B., aged 24 years; cough for twelve months; has lost flesh notably within the last few weeks; has had slight hæmoptysis; sweats much at night. Dry cavity in upper part of right lung.

17th.—Expectoration streaked with blood; says medicine increases her appetite.

21st.—Says the medicine has increased her appetite very much.

September 11.—Had taken, through misapprehension, only half the dose of medicine until a week ago; diarrhœa came on a few days since. The diarrhœa was controlled by small doses of morphia, but the arsenic could not be continued.

Case 5.—August 14, 1860.—Mrs. B., aged 40 years; out of health three years; bad cough, loss of flesh, night sweats. Has had copious hæmoptysis. Dulness on percussion under right clavicle, also fine crepitation. Medicine as in the other cases.

25th.—Does not think the night perspirations lessened; but "heat and flushing of the face," to which she was subject, are much better, and she attributes it to the medicine. Cough not better, but expectoration less.

Case 6.—September 14.—Mrs. D., aged 45 years; losing flesh for five months; profuse night sweats, &c.; second stage of phthisis well marked. Medicine, as in the other cases, discontinued in a few days, owing to its causing pain in the bowels.

Case 7.—August 21, 1860.—Mrs. S., aged 32 years; in failing health for several months. Left infra-clavicular region dull on percussion, with moist crepitation there. Slight hæmoptysis several times. Medicine as in the other cases.

24th.—Feels better in general, but bowels rather relaxed. Omit arsenic.

Case 8.—August 24, 1860.—R. H., aged 22 years; healthy until last three months; slight cough; loss of flesh and strength; never spat blood; dulness on percussion below right clavicle, and well marked sub-mucous crepitation. Medicine as in other cases.

31st.—Cough not so well; but says the medicine has almost entirely stopped the perspirations.

September 28.—Going on well until a few days ago, when he appears to have caught cold. The sweating has not returned, however. Medicine changed.

Case 9.—September 14, 1860.—H. M., 37 years of age, says that he has been in bad health for eleven years, but much worse for about nine months. Large vomica in upper part of right lung. Medicine as in other cases. Discontinued after a few days, as he experienced a sinking sensation at the epigastrium, accompanied by faintness.

It will be observed that nearly all the patients were in an advanced stage of disease, when the irritability of the stomach, as well as the general susceptibility of the system, were likely to interfere with the medicine. Four were obliged to discontinue it after very short trials; but it is probable that hæmoptysis, which was the cause of discontinuance in one instance, and occurred in two other cases, was simply a coincidence. Of the remaining four, three affirmed the cough or expectoration to be improved, one that pains of the chest were removed, two that night-sweats had been arrested, one that

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flushing of the face was much relieved, and one that appetite was greatly increased.

It seems from these cases that arsenic would be useful in phthisis by virtue of its action on the respiratory system, as well as its tonic properties, but that it is not easily borne by the digestive system, even when combined with sedatives. If anything is to be effected through the chemico-vital action spoken of, it will only be early in the disease, when the vital power is comparatively unimpaired and capable of repelling any injurious effect of the drug.

It may be mentioned here that, in consequence of a very favourable report presented to the French Academy, of the use of arsenic in doses of one-seventieth of a grain for dyspepsia, I gave the proposed remedy a fair trial, but without any good results.

I mean on a future occasion to detail my experience as to the use of arsenic in some forms of dyspnœa.

12, Old Burlington-street.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

ROYAL INFIRMARY FOR CHILDREN.

NOTES ON SCARLET FEVER.

(By Dr. WILKS.)

In this Journal for November 29, 1862, we gave a series of cases showing some of the complications and sequelæ of scarlet fever. As these cases excited some interest, we now follow up the subject. At our request, Dr. Wilks has supplied us with the following very interesting remarks. In an early Number we shall report a series of cases of scarlatinal dropsy:—

The Scarlet Fever "Poison" more Virulent by Concentration—Cases Suddenly Fatal—The Renal Affection Connected with the Exanthem, and not Secondary—Sequelæ, Sloughing of the Neck, Otorrhœa, and Deafness—Connexion of Scarlet Fever with Rheumatism—Scarlet Fever as a Cause of Heart-Disease—Secondary Fever: its Nature.

In the neighbourhood of the Infirmary, the district being a poor one, scarlatina is always prevailing, and with more or less severity, but during the last year it has been more than usually rife and fatal in its character. There can be but little doubt that the poison (to use the common expression) becomes more virulent by concentration, and thus it is that, when the disease is prevailing in any district, or has taken up its abode for awhile in any small street or court, its victims are numerous; and it always augurs ill for any fresh patients when two or three deaths have already occurred in the same house. It would, therefore, be a boon above all medicines could the poor children, when first attacked, be removed at once into a pure atmosphere. The marked changes which are so constantly noticed in fever patients, after removal to the large ward of an Hospital, can be only due to the beneficial effects of the comparatively purer air.

When the disease is rife, and the poison thus concentrated, patients are often struck down in a most remarkable manner,—children who are well in the morning being dead at night, the only suspicion as to the nature of the ailment being the presence of the epidemic in the neighbourhood. With reference to these cases, further investigation is needed, in order to discover whether this speedy and fatal result is owing, as was formerly thought, to the scarlatinal poison concentrating itself upon the blood or upon the brain, instead of displaying itself upon the surface of the body in the more ordinary manner; or, whether the effect be not due to the simultaneous implication of the kidney,—the latter theory being supported by the fact, that the convulsions and coma, which so commonly exist in the cases of which we speak, are the symptoms ordinarily met with in renal suppression. There are, also, other cases occurring in neighbourhoods where scarlatina exists, and where the presence of the exanthem in the same house or street can alone throw a light upon their nature. For example: lately, a man, living near the Waterloo-road Station, was seized with acute pleuro-pneumonia, which was rapidly fatal; but that it was set up by scarlatina was very clearly proved, by the condition of the pharynx and surrounding parts, as seen after death.

With regard to the rapidly fatal cases, and their connexion with the kidney, there appears to be a gradually increasing opinion, that the scarlatinal renal affection is intimately connected with the exanthem, if it be not a necessary part of it, and must not be regarded as a simple secondary affection or sequela. Thus, it has been said, that, in scarlatina, three parts of the body are more especially affected—the skin, the throat, and the kidney; that, in ordinary cases, or in *Scarlatina simplex*, the rash is prominent, the fauces are inflamed, and the kidney also affected; but the latter passes unobserved. In other instances, however, the throat may be the part more particularly selected for the operation of the disease, and then the case is styled *S. maligna* or *anginosa*. Or the whole virulence of the poison may display itself upon the kidney; a suppression of its important function takes place, and death occurs through the brain in a very few hours; such a case is one of *S. renum*. Supposing, however, that the throat be unusually affected, an extensive inflammatory and sloughing process may be set up, continuing long after the subsidence of the original exanthem; in the same way, if the kidney be more than usually affected (but to a less extent than in those cases where death is speedy), an inflammation or nephritis ensues, and this continues, as albuminuria or dropsy, long after the original disease has departed. A difficulty in determining the presence of renal disease is often very great, and especially in those cases where a knowledge of it is most needed. As the urine is not always albuminous, the microscope may be used for the detection of casts; but, at the very onset of scarlatina, these will not be present, and the mere appearance of a few epithelial cells can scarcely be satisfactory evidence.

One of the most frightful of the sequelæ of scarlatina is the sloughing of the neck; the sores resulting therefrom continuing open for many weeks in scrofulous children. For these we generally use the iodine lotion. Occasionally, they may be the cause of death, as in a case lately at the Infirmary, where the jugular vein was laid open, and the child died of hæmorrhage.

Another fearful consequence is the effect on the ear, causing otorrhœa and deafness. In a child now attending amongst our out-patients at the Infirmary, hearing is quite destroyed, and there is purulent discharge from both ears, and exfoliation of parts of the mastoid process. When the disease exists to this extent it may be looked upon as one of the sequelæ of scarlatina, in the same manner as the throat affection or the nephritis, but, like those affections, probably exists to a slight degree in all cases. Where we have had an opportunity of judging from post-mortem examination, the inflammation of the pharynx has been found to proceed upwards into the Eustachian tube, and, therefore, in all probability, there is, in all cases of scarlatina, some inflammation of this tube and the tympanum, and the pain in the ears is an indication during life that such is the case.

There remains another condition in which many patients succumb in connexion with scarlatina, and this is intimately associated with the rheumatic affection, which is well-known to accompany the exanthem. This condition is very frequently styled pyæmia, but it appears to be one due rather to a peculiarity of the blood which prevails in this disease. The simple rheumatic affection in connexion with scarlatina is of a most interesting character: it is sometimes spoken of as rheumatism following scarlatina, and sometimes as a pseudo-rheumatism, but it appears to be very like the ordinary, well-known joint affection, and to be intimately associated with the exanthem.

In both these diseases there is a hyperinosis of the blood, and in both a tendency to the deposition of the fibrin of the blood in the capillary system of the viscera, and on the valves of the heart; and thus endocarditis is frequently met with in both affections. The disease occurring in the tropics, styled *Scarlatina rheumatica*, is sufficient to show that their close relationship is recognised. In several cases, where a fatal result has followed scarlatina, and the patient has suffered from pains and swellings in the joints, we have found the fibrinous deposits in the spleen and kidneys, with or without vegetations on the heart; but we have not found, as sometimes suspected, a pyæmic condition arising from a purulent absorption from the neck.

This connexion between scarlatina and rheumatism has been known ever since our acquaintance with the practice of Medicine; for, more than twenty years ago, we have heard Dr. Barlow, at Guy's Hospital, state that, when seeking for a

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history of rheumatism, as, for example, in a case of heart disease, we should often be told of a scarlatina having preceded the attack; or, on the other hand, if seeking for a history of scarlatina in a case of albuminuria, we should be frequently told that it followed rheumatism. In such instances, probably, both diseases had existed, but the one had been more prominent and appreciable than the other.

Such cases as this are of daily occurrence, as, for example, within a few days, the two following cases came to the Infirmary:—

Jane L., aged 5, had swelling and pain in all the joints, evidently of a rheumatic character. Ten days before she had scarlatina.

Robert S., aged 11, came to the Infirmary with a loud systolic, cardiac bruit, indicative of mitral disease. The child was said never to have had rheumatism, but had not been well since a severe attack of scarlatina three years before; at that time the mother remembers that he complained of great pain in his limbs.

The form of disease, however, which led to these remarks, and which has carried off many patients, has been a kind of secondary fever, associated with which there has been some tenderness and swelling of the joints, but the cases have never assumed a decidedly rheumatic character. It appears as if a secondary poison had been set up in the system, or that the state of blood, which is a necessary part of the scarlatinal process, continuing in full force, the patient died from that condition after the other effects of the exanthem were over. The cases are mostly of this kind, that after the child has had the disease, and the worst appears to be over, a secondary fever is set up with typhoid symptoms, and to this the child succumbs. The following is an example:—

A little girl, 3 years of age, was taken ill on March 23. The rash was out on the next day, and the throat became swollen. The child was very ill, but at the end of the week the eruption had disappeared, and the throat was better; there was, however, a discharge from the nose and from the ears. She then became worse again, and took to her bed; the skin became dry and harsh, and the whole surface mottled as if the scarlatina were about to appear again, the tongue was furred, and sordes appeared on the lips. This was on April 1. On the next day roseolous patches appeared, and some of these were livid, as though disposed to become purpuric. The child then remained in this so-called typhoid state for several days, the wrists and other joints appearing somewhat red and swollen. She was quite conscious, there being no cerebral or pulmonary symptoms, and the urine was healthy; in fact, there appeared to be no defined affection to treat, but she seemed as if she were suffering from a mere poisoned state of the blood. A large amount of nourishment was given, together with ammonia, quinine, and chlorate of potash. The mottling rash, which at times went away, at others reappeared, and, at one time, much resembled measles, when, towards the close, the spots became petechial. The child died on April 9, and was, on that day, for the first time, unconscious, shortly before death. There was no post-mortem examination; but there was never any indication of any organic disease; probably, fibrinous clots might have been found in the viscera; but, if so, these could only have been regarded as results indicative of the peculiar morbid state of the blood. The child is thus seen to have been ill seventeen days from the commencement of the illness.

(To be continued.)

ST. BARTHOLOMEW'S HOSPITAL.

UNUNITED FRACTURE OF THE LOWER JAW, OF FIVE WEEKS' DATE, WITH PARTIAL NECROSIS —PERFECT UNION UNDER TREATMENT.

(Case under the care of Mr. WORMALD.)

For the particulars of this case we are indebted to Mr. Vernon, House-Surgeon.

J. W., a stout Irish lad, aged 26, applied at St. Bartholomew's Hospital, in October last, for an injury to his lower jaw, the result of a fall upon the pavement five weeks previously. His face was much distorted and swelled on the left side; articulation imperfect; mouth opened with great pain and difficulty. Careful manipulation discovered a fracture through the thickness of the body of the jaw, between the canine and bicuspid tooth on the left side. The two fragments were very movable upon each other; and the fragment holding the molar teeth was displaced upwards, and bulging into the mouth; the gums were bleeding and swelled; the under surface of the chin was much swelled, and two or three sinuses were discharging offensive matter. The probe passed directly to the seat of fracture, and entered the mouth between the cheek and gums. He had been a patient at another Hospital; but, from his own account, had had no very strict treatment.

A loop of wire was fixed around the bicuspid tooth, and the ends were brought down and out beneath the chin, and were there fixed to a pad, with the effect of bringing the fragments in thorough apposition. The whole jaw was encased in a gutta-percha splint.

During the next fortnight small spiculæ of bone were discharged; the discharge became more healthy and gradually ceased. The wire was removed on the fourteenth day after his admission; union evidently had taken place to some extent. He left the Hospital five weeks after his admission, with thorough repair of the injury; and in a month from this date he showed himself, and said his "mouth was as sound as ever it was."

WESTMINSTER HOSPITAL.

UNUNITED FRACTURE AND NECROSIS OF THE LOWER JAW, AND FISTULA, FROM OLD GUNSHOT INJURY — OPERATION — SATISFACTORY RESULT.

(Under the care of Mr. CHRISTOPHER HEATH.)

Cases of gunshot injury are of rare occurrence in the London Hospitals, except, as in the present instance, in the case of soldiers who apply for relief after being discharged from the army. Although simple fractures of the jaw ordinarily unite readily enough, the frequency of ununited fracture of the lower jaw in cases of gunshot injury has been noticed by several authors, and, amongst others, by Dr. Williamson, of Fort Pitt, in his "Notes on the Wounded from the Mutiny in India," from which we extract the following:—

"The lower jaw is well supplied with blood, so that necrosis to any great extent does not generally follow severe comminution; still, callus is not thrown out so copiously for the repair of fracture as in the long bones of the extremities. Ununited fracture of the lower jaw does not seem to have been of such frequent occurrence amongst the wounded from the Crimea as those from India.

"Six were admitted from India with fracture of the lower jaw. Of these, three were invalided, two sent to duty, and one to modified duty. Of these six cases, three were instances where the fracture remained still ununited, although the fractured ends of the bone were in contact. In one case the ball struck one side of the lower jaw, and was cut out on the opposite side one month after, fracturing the bones on both sides. In one, the ball was cut out from below the tongue. In one case, from a shell wound, there was a double fracture, one on the right side of the ramus, and also another near the symphysis, with great laceration of soft parts, and resulting deformity; the first-named fracture remained ununited. In another case there was a double fracture from a musket-ball; the fracture at the entrance of the ball still remains ununited; that at the exit has become united. In one case, from round-shot, the whole of the left ramus of the lower jaw had been extracted at the time, or came away by exfoliation, leaving a large chasm and great deformity on this side of the cheek from laceration of the soft parts. In one case there was a fracture on the left side, at the angle of the jaw, still ununited."

For the particulars of this case we are indebted to Mr. Beadles, the House-Surgeon:—

James P., aged 32, was admitted, August 19, 1862, into St. Luke's ward, under the care of Mr. Heath, for necrosis of the lower jaw.

History.—In March, 1860, when in the 64th Regiment, and whilst marching through Central India, he was struck on the right side of the lower jaw by a spent bullet, fired by some hill robbers. He was stunned for a few moments, and had hæmorrhage for half an hour. He went to the rear, but was able to continue the march. The following day he went into camp Hospital, under the regimental Surgeon, at which time the parts about the wound were much swollen. The wound was bathed with warm water, and the swelling was rubbed with soap-liniment. At this time he was able to open his mouth and cut on the left side without pain; but three weeks afterwards, having attempted to eat on the right side, he felt

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a grating sensation and much pain, and told the Surgeon his jaw was broken; but the Surgeon did not believe him. The last molar tooth was found to have been displaced, and to be lying horizontally, and attempts were made to extract it, but unsuccessfully. It gave him extreme pain, and the Surgeon then admitted that the jaw was splintered. A gutta percha splint was now moulded on, and a bandage applied for eight days, the wound having by this time closed. On April 9, 1860, he was admitted into the Kurrachee Hospital, and another splint was applied, and kept on three or four days, when a large abscess formed. It was opened, and a large quantity of matter discharged, and the wound then healed. Another abscess began to form immediately behind the opening, and just below the original wound; and this also was opened and poulticed, and has never closed. The regiment arrived at Dover on August 6, 1861, and the man was doing duty; but the cold weather coming on, the wound inflamed and swelled up again, and he was sent into Fort Pitt on May 14, 1862. During the whole of the time he felt a numbness over the chin and all round the mental foramen. Various attempts had been made to extract the last molar tooth, which Dr. Longmore removed with some difficulty. After the patient had been in the Hospital for twenty-one days, he was, on June 26, 1862, invalided and discharged from the service.

Present Condition.—There is an open sinus on the right angle of the jaw leading down to dead bone and into the mouth, and he can blow air through the aperture. He can bite perfectly with the left side, and can open his mouth as wide as most people. He does not complain of any pain in the part, and his general health is good. He has never had syphilis. A small piece of bone has worked out into the mouth since admission. On looking into the mouth, a good deal of swelling about the ramus of the jaws is seen. The second molar tooth is *in situ*, but loose.

Operation, August 26th.—Chloroform having been administered, Mr. Heath proceeded to enlarge the external opening, and removed, with the gouge, several pieces of necrosed bone. He found that the jaw had been fractured, that it had not united, and that the upper fragment was tilted forwards by the temporal muscle, thus causing the projection in the mouth before noticed. The wound was filled with lint, and a compress applied.

28th.—Face considerably swollen, but pain slight; wound discharging freely; can blow air freely through the wound from the mouth.

Sept. 10th.—Wound has much decreased in size; two or three small particles of bone have worked out through the mouth.

20th.—The last molar tooth of the right side being quite loose, was extracted.

28th.—Says that the opening from the mouth has appeared larger since the extraction of the tooth, so that he is unable to hold fluid on that side of his mouth; external wound very much diminished in size.

November 4th.—The wound having degenerated into a small fistula, and there being no evidence of further disease of the jaw, Mr. Heath determined to attempt to close it. For this purpose, he introduced a narrow knife into the opening, and, by rotating it, pared the surface, including the skin, and then brought the edges together with a curved needle and twisted suture, over which collodion was applied.

7th.—One end of the needle having cut its way out, it was removed altogether. The wound was not united. The edges were now brought together with a strap and pad and bandage.

14th.—Wound much diminished in size; the edges touched with nitrate of silver.

22nd.—No fluid now passes through the fistula, and he says that he can feel with his tongue that the internal wound has healed.

26th.—External wound closed.

December 9.—Discharged cured. The movements of the jaw are much freer than they were, and he can eat on the wounded side without pain or inconvenience. The false joint does not appear to affect in any way the powers of mastication or articulation.

ST. MARY'S HOSPITAL.

CASE OF PARALYSIS (NEUROLYTIC) OF THE EXTERNAL RECTUS OF THE RIGHT EYE—CLINICAL REMARKS.

(Under the care of Dr. HANDFIELD JONES.)

Mrs. P., aged 48, very fat and stout-made, was admitted July 24, 1862. The catamenia had ceased ten months ago. She had had ten children, the youngest six years old.

Her first attack of head symptoms was in October, 1861; the second in April, 1862. She did not lose consciousness in either, but had pain at the top of the head, and at the "back of her eyes." From the first she recovered in six weeks; from the second she still suffers. Before the first attack she had leeched her head a good deal. Cupping has been performed, but did harm. Was always a weakly nerved person. Her urine, which at the beginning of the attacks used to be very copious, is much less so. She complains now of burning heat at the top of the head, and of pain there at times with great heat. She has some numbness in both her hands, along the back of the fingers. Her head is not tender.

She has double vision, the right external rectus being paralysed to a considerable extent; she has to turn her head to the right in order to see properly. The pain in the head is increased in the recumbent position. Pulse apparently of good force. Bowels open; tongue clean; appetite good; and she does not feel very weakly. She has had boils lately about the pudenda. Urine clear; a week later it was examined, and found free from albumen, sp. gr. 1022.

During the first week iodide of potassium, with tincture of cinchona and infusion of chiretta, was given, but without any benefit. She was then ordered—

℞ Strychniæ, gr. $\frac{1}{30}$; ferri et quinæ citr., gr. viij.; acidi citrici, gr. viij; aq., ℥j., ter. die.

25th.—She is much improved; vision much better; action of eyes much more symmetrical.

September 8.—No double vision now, but has pains and "numby feelings" at times. Suffers with bleeding piles, and loses a good deal of blood thereby. To continue the mixture; sulphur electuary every night, and alum lotion.

The bowels were subsequently disordered with a kind of lientery, which yielded to tannin and opium internally, and she was last seen much improved October 23.

Clinical Remarks by Dr. Handfield Jones.—This case is well worth study in various respects. First, it may be contrasted instructively with one recorded in the *Medical Times and Gazette*, January 29, 1859, where paralysis of the left external rectus appeared to depend on the presence of a bit of dead bone in the left thumb. The paralysis in that case was of inhibitory character, and essentially similar to reflex paraplegia. In the case just related the presumption is fair that it depended on simple debility of the nervous centre, and might be designated, therefore, as simple or neurolytic. Such cases are even more proving than post-mortem examinations as to the possibility of the occurrence of dynamic paralysis without any organic change. Secondly, the difficulty of diagnosis is worth remark. The absence of marked debility, the quality of the pulse, the increase of pain in the recumbent posture, were against the view of neurolytic paralysis; while the copious diuresis, the bad effects of cupping, the bodily habit, and the somewhat intermittent character of the symptoms, might have been set down as in its favour. It was not ascertained till a later period that there was hæmorrhage from piles, and it is not at all known whether this had preceded the attacks. On the whole it seemed only prudent to commence treatment with a trial of the iodide of potassium on the supposition that the paralysis might depend on some rheumatic inflammation of the dura-mater and the fibrous sheath of the nerve. This, however, was of no avail, while direct nerve tonics produced speedily a good effect. There are many instances of a like kind, where a judicious trial and observation of the action of remedies will do more to determine the true nature of a disease than any other mode of examination. Apart from this, as it were, chemical testing, it may be laid down as a good rule, that the greater the amount of general derangement the more hope there is that the paralysis is not dependant on irremediable organic change; whereas, when the functions are all duly performed and the health good, it is but too probable that any existing paralysis is the result of some local lesion.

JUNIOR MEDICAL SOCIETY OF LONDON.—The next meeting of this Society will be held at the Whittington Club, Arundel-street, Strand, on Tuesday, the 20th, at 8 p.m., when a paper will be read by Mr. H. Cooper, of St. George's Hospital, on the "Treatment of Fever."

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Medical Times and Gazette.

SATURDAY, JANUARY 17.

RIPE OR ROTTEN.

The story of a jugged hare, which appeared in our last Number, is a capital illustration of that cardinal defect in Medical reasoning which the *Medical Times and Gazette* finds its special vocation in correcting (a). There are, as is well known, two ways of laying down the law. The first belongs to the *doctrinaire* or rationalistic school; the second, to the humbler-minded men, whom we will call practical, and whom the Greeks called *εμπειρικους*. The first method consists in stating some general law, and predicting certain consequences as following of necessity from its operation. The second consists in collecting the results of experience, and using them for precedents. The first, or *à priori* method, is the most perfect in itself (when applicable), and the most gratifying; but, unluckily, it is of too high an order for so imperfect a branch of knowledge as Medicine. We, who practise Medicine, must, for a long time to come, be content to gather up facts, and leave the evolution of general laws to future generations.

We find in actual life that the men who have enjoyed the largest experience are always the most careful to appeal to that experience, and not to run the hazard of enunciating general laws. On the contrary, amateurs, women, clergymen, chemists who do not practise Medicine, and young men fresh from the schools, are singularly fond of propounding dogmas *à priori*. One dogma that has gained considerable currency is that which pronounces all substances in a state of decomposition to be hurtful. There is even a school of quackery (an antiseptic school), whose main creed is that diseases proceed from decomposing food, and whose panacea is charcoal. This, we are told by the advertisements, will preserve "a sound mind in a sound body," and even a religious sanction is claimed for its use. So thoroughly is the amateur Medical mind imbued with this notion, that one of the early tracts of the Ladies' Sanitary Association, "On the Influence of Wholesome Drink," was literally founded on the notion that fermented liquors ought to be abstained from because fermentation is a kind of decay, and all decaying substances are, *ipso facto*, deleterious.

The subject is sufficiently practical to deserve a few remarks.

When we begin to investigate it by the light of experience, we shall find that it is very far from being the law, that food and drink, to be wholesome, must be in a *stable* (*i.e.*, undecomposing) condition, or that a state of decomposition *per se* is unwholesome. In the first place, it seems to be the fact, that all moist organic substances, unless at very low temperatures, and unless they have been subjected to some special antiseptic process, are in a state of silent, but ceaseless change,—a change tending, however slowly, to reduce them to their ultimate elements. In the case of fruit, there is no line of demarcation between full ripeness and incipient rottenness. The quantity of water diminishes, the acids diminish, the green rind, which gave out oxygen, is succeeded by the red or purple, which gives out carbonic acid; and, as is well known in the case of the apple and of the medlar, what is called ripeness in one is rottenness in the other. One of the best known instances of decay is the alcoholic fermentation. This is employed in the manufacture of bread. A certain portion of the sugar and starch of the flour is converted into carbonic acid, and a certain small portion of the nitrogenous matter is possibly consumed to regenerate the leaven or yeast. Hence, persons who have an interest in unfermented and aërated bread attempt to alarm the public by representing the fermentation of bread as a process both wasteful and noxious. But, for our own parts, if we compare a good fermented loaf with any specimen of unfermented bread we have ever yet seen, we become conscious of the intense privation which must be inflicted on the children of Israel during the days of unleavened bread. We have lately examined some aërated bread, and find it to be first-rate in sweetness, flavour, and colour, wofully deficient in *firmness*,—the quality, *par excellence*, which fits it to satisfy a hungry stomach, and is a proof of the goodness of its nitrogenous constituents. Assuming, then, that the non-fermented bread and the fermented are both made of equally good flour, we can but conclude that fermentation—in other words, a certain measure of decomposition—renders bread not only more palatable, but more satisfying; not only does not destroy, but develops and improves those qualities which should be conspicuous in good wheaten bread.

Of all the articles of food, milk is that whose *sweetness* we are accustomed to consider most essential to its wholesomeness. But we must not forget that in almost every part of the civilised world, except England, dishes of milk, in various states of sourness, are amongst the most popular luxuries—from the Icelanders with their skier and the Russians to the Arabs. Even in England milk is used when slightly soured, and set with rennet. Perhaps, cheese furnishes the strongest proof that certain articles, in a state of active decomposition, and yielding intensely fœtid products, may yet be not only safe or wholesome, but specifically beneficial as food. In those counties which yield much good butter, the cheese is, of necessity, poor. That of Dorsetshire, for instance, when first made, is a white, insipid curd, very pure, but we should think utterly indigestible; then it sets into a material as hard as stone, and tough as gutta percha. After this it dries and cracks, becomes pulverulent, and impregnated with a minute vegetable growth, in which stage it is called "*blue vinny*" by the natives, and is eatable and relishing, though rather dry. But in its further or prime stage it softens into a mass of the consistence of clay, with an odour which some call fine, others insufferable. They who like it call it ripe; the majority of mankind would call it abominably rotten and putrid. Not only would no London servant eat it, but even the rats in a well-bred house turn up their noses at it. But, put it before a Dorsetshire labourer, and you will see a commentary on the Homeric phrase—"*γηθήσε δε θύμων*." "The conscious swain, exulting in the sight," knows that this is the stuff which gives warmth to his stomach, and force to his limbs, and enables him to digest his clammy bread, and to do work which would overtax the powers of many a beefeater. If we refer to that Chapziegar cheese, whose odour has procured it the name of "*pieds des voyageurs*," it will be confessed that the distinction between fragrance and fœtor, like that between ripeness and rottenness, is not always easy to draw, and that fœtor is no proof of poison.

Butcher's meat, that is to say, the flesh of the ox, sheep, calf, and pig, as well as the flesh of domestic poultry, is insufferable to an English stomach if it have the least *taint*; yet there is no doubt that it does not acquire its full *flavour*

(a) See leading article on "Therapeutics," *Medical Times and Gazette*, 1861, vol. ii. p. 8.

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till the *rigor mortis* has passed off, and that *tenderness* has succeeded which is the first stage of decay. The phrase, "*well-hung*," applied to a joint of meat, is as simple and expressive as an epithet of Homer's. As for the flesh of wild animals, the best qualified appetites pronounce that it can scarcely be kept too long; and there is many a man who enjoys the flavour of his roast pheasant or jugged hare, who would have been disgusted had he superintended the process of plucking and trussing.

As a proof that the fondness for decaying flesh is no evidence of effeminacy and sophistication by the arts and luxuries of civilised man, Bishop Colenso tells us that those innocent and unadulterated savages, the Zooloos, at whose conversion he so energetically labours, not only greedily devour half putrid flesh, which they call *ubomo*, but that they regard this delicacy as the type and climax of all beatitude, ghostly and bodily; insomuch that missionaries have no other term than "*eating ubomo*," wherewith to describe the ineffable joys of Paradise.

Fish, as a rule, and especially oily fish, is best fresh. But the London epicure knows that there is a certain stage in the history of a turbot when its flavour is fullest, though it might have been ignorantly rejected, had it been smelled by one of the antiseptic school before it went into the fish kettle.

As for cod-fish, the man who began dinner with hare-soup, and intends to eat his way through half-a-dozen *entrées*, a roast joint, a bird, a jelly or cream, and a bit of Stilton, and to moisten the mass with two or three kinds of wine, prefers it fresh, no doubt. Not so the hungry peasants on the Scotch coast, who tell you that it is not good to eat "till it shines in the dark." The same poor creatures ferment their oatmeal into "sowens," in order to prove that man in fermenting his food obeys an universal instinct, spite of pseudo-sanitarian law, and that it is possible to wring something like a luxury even out of oatmeal.

We will refer, in passing, to the hay which is made of fermented grass, and which is not mere flavourless dried grass, but contains odours generated by decay; to the tobacco, whose flavour is developed by fermentation; and to the tea, wherewith the writer of the tract for the Ladies' Sanitary Association refreshes herself, but which yet would be dull and flavourless had not the leaves been fermented when green.

Thus far we are, we think, justified in our assertion, that a *stable*, or *fixed*, or *non-decomposing* state is not essential to the wholesomeness of food, and that all products of decay are not deleterious. Like most general laws, that against decomposition is premature and unwarranted. Experience shows that some states of decay are pernicious, and some products of putrefaction poisonous; and it is left for man's industry and acuteness to find out, in daily life, which are the instances that come under either head. Within a very few years, champagne used to come under the ban of the silly sanitarian and amateur doctor who wrote books on diet, because it was a fermenting liquid, and "it is a general law that all substances in a state of fermentation," etc., etc. So they used to forbid pie-crust, and roast goose, and crab, and duck, and pork, because they were "oily," and "it is a general law that all oily articles," etc., etc. Now, however, under the guidance of experience, the true practical Physician, the εμπειρικος, has learned that champagne is one of the lightest and wholesomest of wines, and has imitated the poor Dutch, and the Manchester mechanics, in their use of train oil for scrofula and chronic rheumatism.

The fact is, the stomach of every adult working animal craves for flavour. Instinct and experience have shown that flavour is an incident or product of decay, and has determined what kinds and stages of decay shall yield useful products, and be called *ripeness*, and what shall be noisome and *rotten*. The odorous matters which come into existence during various stages of the decomposition of animal and vegetable matter, are probably more than can be imagined. Their distinctive qualities can only be learned by that use which has taught us that decaying rose leaves yield an agreeable perfume, and rotten cabbage an odious stench. But the difference between perfume and stench is subjective and conventional only. Sometimes, the anatomist, in opening an old preparation bottle in his museum, comes across a rare musky perfume, which he would think even nice did he not know that it resulted from a slowly decaying piece of man's anatomy; and they who know how to appreciate the flavour of a well-kept country ham will not wonder that our forefathers, when they translated the relics of some mediæval saint, were sometimes surprised at finding a mysterious odour proceeding from the half-dried fragments, or a fragrant oily liquid exuding from the bones. They looked upon these as instances of divine favour, which permitted the relics of the saints to exhale an "odour of sanctity," and refreshed their mouldering bones with the "oil of gladness."

THE WEEK.

THE COMMITTEE OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY ON CHLOROFORM.

The Committee of the Royal Medical and Chirurgical Society appointed to investigate the effects produced by the administration of chloroform, consider that the co-operation of the Profession is necessary to enable the Committee to pursue their investigations in a satisfactory manner, and they are, therefore, desirous it should be generally known that their primary object is to inquire into the use of chloroform by inhalation, and its results: (*a*) in the treatment of internal diseases, such as tetanus, delirium tremens, asthma, epilepsy, and infantile convulsions; (*b*) in Surgical operations; (*c*) in obstetric practice. The points on which the Committee at present especially desire and ask for information are the following:—(1) Reports of any unpublished cases of death during the administration of chloroform, or of any other anæsthetic. (2) More complete reports of fatal cases already published. (3) Notes of any accidents with chloroform in which death has been threatened, but averted. (4) Facts as to the effects of chloroform employed by inhalation as a remedial agent in disease; the mode of its administration, the quantity used, and the results both immediate and subsequent. (5) Notes as to the comparative results of operations before and since the introduction of anæsthetics. Gentlemen who may be disposed to oblige the Committee by furnishing information on these subjects, are requested to address their communications to Mr. Callender, Reporter to the Committee, Royal Med. Chir. Society, 53, Berners-street, W.

THE PROCEEDINGS OF THE METROPOLITAN BOARD OF WORKS.

The proposition on the part of the Board of Works to pour one-tenth of the whole sewage of the metropolis into the Thames near Cremorne, to which we lately drew attention, has rightly excited general condemnation. Whilst we regard the whole of the present main drainage scheme as a huge blunder, we really did not expect that the Metropolitan Board of Works would have thus proposed to stultify itself, by neutralising its own resolutions and relinquishing one of its main objects, the purity of the river. We extract the following from an article which appeared in the *Times* of the 14th inst.:—

"We admit that the area to be thus relieved of its sewage is but thinly peopled in comparison with other districts; that the sewage thus discharged into the Thames would be less than a tenth portion of the whole sewage of the metropolis, and that even this is to be carefully deodorised first in a reservoir prepared for the purpose. These qualifications of the proposal will, no doubt, be pressed on our notice, and we have no wish to disguise them, but they will have, in reality, little effect in modifying the result. Though the western area

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of the metropolis contains at present only a comparatively small population, it is precisely the district in which the population may be expected most rapidly to increase. Its extent is great, and it is the quarter to which London is gravitating. In a few years it may be closely inhabited; and in such a scheme of drainage as that now in hand, which is to cost us millions, we may surely ask that the exigencies of the future should receive some consideration. Then, again, although the sewage to be thus poured into the Thames is but a fractional portion of the whole flood for which provision is to be made, it is still an enormous body of refuse in itself. It is all very well to talk about 'one eleventh' part, but this part amounts to no less than 10,000,000 gallons daily. As to the previous deodorisation, it is hard to think with what face such a plan could be brought forward by the Metropolitan Board. They have already been told that they are either wrong at this point or wrong at all others. If sewage matter can be so completely divested of all noxious qualities as to render it harmless to the river even in these enormous quantities, and if the work of purification can be conducted without injury to the neighbourhood, why was not so simple and inexpensive a principle applied to the whole scheme of the main drainage? Why were all those gigantic sewers constructed on their several levels at so immense a cost for the mere purpose of intercepting the sewage from the river, if a little chemical manipulation would have secured the desired object? Why, in short, should we put ourselves to such prodigious expense in taking nine-tenths of the metropolitan sewage down to Barking, there to be out of harm's way, if the remaining fraction can be safely disposed of at Battersea? One of these plans must needs be wrong. Either the western drains at Cremorne must be injurious to the river and the population, or the discharge of the other drains at such a distance must be a gratuitous piece of folly."

It appears, however, that public remonstrance is likely, in this case, to have good effect. Mr. Thwaites has already written a letter to the *Times*, stating that a Committee of the Board have unanimously recommended that body to rescind their resolution of the 29th of June, 1858, which directed the formation of the deodorising works at Fulham; and that they have further advised that the sewage of the western area be carried into the low level sewer, to be conveyed to Barking-creek. He adds that there is little doubt but that the Board will approve of the recommendation.

COMBATANT AND NON-COMBATANT.

THE just complaints of the Medical officers of the army, which have lately attracted public attention, are only the latest fruits of the old jealousy of the so-called civil element which has long been fostered at the Horse Guards. Admittedly, the Doctor is a non-combatant officer, although instances are plentiful where valuable services, even in the way of fighting, have been rendered by our Professional brethren. The Royal Duke now at the head of the army owed his life, at the battle of Inkermann, to the bravery of a Medical officer; and we all remember how that type of an army Surgeon, the late George James Guthrie, taught his men, in the Peninsula, to defend themselves against cavalry by placing their backs against the bullocks of their baggage-waggon, and how he, on one occasion, attacked and captured a gun. Still, it is the business of the Surgeon to save, not to take, life. But, actual killing apart, we maintain, that the army Surgeon is a military officer, in a sense which cannot be affirmed of the chaplain or the commissary. His duties are at least as military as those of the engineer, and his services are constantly required and rendered under the hottest fire, and in the most exposed situations of the battle-field. Guthrie used to assert, that the Surgeons of the Fusilier Guards in Spain were under more fire than half the general officers of the Army. If personal bravery, coolness, and endurance be military virtues, it may well be asked whether, in any branch of the service, they are more necessary than in the Medical? The pluck required to arrest hæmorrhage from a wounded artery, when balls are whizzing about the operator, is greater than that necessary to lead a forlorn hope. The bravest men are nervous when going into action, but, in a very short time, all thought of personal danger is lost in the wild excitement of the scene. Yet this very excitement, which gives vigour and dash to the soldier, would be fatal to the clear head and steady hand of the Surgeon. On the battle-field, as in the sick ward, he must not only seem, but be "a calm intelligence." He dares not permit himself to be carried away by the overwhelming interest of the game which is occupying all around him. We repeat, it requires more moral courage to dress the wounded under fire, than to have ridden with "the six hundred" at Balaklava. It is necessary that these facts should be borne in mind when an attempt is made to diminish the privileges and lessen the standing of Medical officers on the part of those in power, on the pretence that the original Royal Warrant has given too much prominence to, and conferred too much authority on, a civil branch of the army. If the military Surgeon is anything he is a military officer, educated in the art of healing, who devotes himself to the care and cure of his fellow soldiers. Reduce him to a mere civilian attached to the army, and you take away one of his greatest incentives to excellence by depriving him of his *esprit de corps*. It is admitted on all hands, that the efficiency of the army could not be maintained for a single week without its Medical department. It is, therefore, a suicidal policy to take every opportunity of lowering the status of the army Surgeon in his own eyes, and in the eyes of his brother officers. Last week we said that such short sighted proceedings must, and will, deter men from entering the service. If the Medical students of Great Britain are true to themselves, and to their Profession, they will refuse a service where no faith is kept, and in which a Royal Warrant can be set aside at the caprice of the military authorities. It is a noticeable fact, that the *Gazette* of last week contained an announcement of the retirement of no less than four Medical officers: amongst them is Dr. P. Frank, to whose able report on Ophthalmic Surgery we had lately to direct attention. We know nothing of the circumstances which have led to the retirement of these gentlemen; but at the present juncture the fact is highly ominous. Urged by the remembrance of the disasters of the Crimea, the Medical department were assigned by Government an honourable position and rank, and a remunerative pay; but with the return of quiet times it appears to be the intention of those in power to rescind one by one their privileges, and to reduce them to the position they held before Scutari and Balaklava. Public opinion, in the event of war, would not allow such a policy to be pursued for a day. It belongs to a class of wrongs which are pre-eminently the "cankers of a quiet world and a long peace."

"HOSPITALS AND THE STAFFS OF HOSPITALS."

AN able article, an extract from which has been going the round of the daily papers, has appeared under the above title in the *Social Science Review* of last week. The writer states his argument forcibly and clearly, and with an appearance of fairness which goes far to carry with him the ordinary reader. We fully agree with him in the general conclusion, that the staffs of Hospitals employed in the out-patient departments are not large enough to do the work required of them. But, at the same time, exception may be fairly taken to certain of his premises. In the first place, we entirely dissent from the assertion, that a change of sentiment is taking place in regard to Hospitals. We believe, that never did these institutions stand higher, nor more justly so, in the appreciation of the public. Of this fact, their increase, and the enormous sums which are being yearly expended in their support, are the best proofs. It may suit enthusiastic *doctrinaires* like Mr. Rawlinson to state, "that Hospitals are a mark of a degraded civilisation," and Dr. A. Uytterhoeven to brand them as

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"anteechambers to the graveyards;" but common sense will set down such assertions as paradox, and will consign them to the limbo of things new, but not true. In reference to the main question discussed,—viz., the sufficiency of the staff of Hospitals for their work, the Social Science reviewer draws the following lively picture of the afternoon labour of a conscientious Physician who endeavours to do his duty by 224 out-patients who presented themselves in his waiting-room:—

"We once calculated this work up in a particular instance. In this case, at half-past six in the evening, an Esculapian bee was putting on his overcoat to return home. He had taken his seat in a wooden-bottomed chair at one p.m. of that day. For the intervening five and a-half hours he had sat there, ringing his bell, calling out 'Come in,' examining his patients, and writing prescriptions, without a break. In the course of that period he had counted 4480 strokes of the heart, listened to 86 chests, looked at 190 tongues, asked 1120 questions, written 336 separate receipts, 11 certificates for clubs, 3 certificates of death, and brief notes in the Hospital books of 29 new patients, giving their ages, sex, occupations, duration of illness, residence, and disease. Altogether, he had given advice, gratis, to 224 people, and remarked that he fell short of his usual number. Shall we describe the man at the end of his day's work? The description is worthy of record. He was so pale that he might have played Ghost to Hamlet in broad sunlight. He was a little deaf on one side from the frequent use of the stethescope; one of his fingers was sore from percussing; his eyes were wearied; his back ached intensely; his head was heavy; and his voice was hoarse and tremulous. He had a misgiving that, at the close of his work, he had written a prescription for one patient on another patient's letter, and was dreadfully put out to find that, right or wrong, the patients had gone off with their medicines. As he passed out of the Hospital, nine persons whom he had never seen in his life waited to ask him privately his solemn opinion as to cases some of which had not been before him for weeks, and of which he had no more recollection than of Adam. His face of white despair now became terrible, conveying to the anxious listeners meanings of which he had not the remotest conception; and when he got away from them all, there were still three long miles yawning between himself and his dinner and his easy chair."

There can be no doubt that the sketch, highly coloured though it be, has a real substratum of truth. But it must be remembered that our friend "the bee" has done his work voluntarily, that he expects sooner or later—directly or indirectly—to reap a return for it, and that he does reap that return in the experience which he gathers. It is not, as a rule, at the large endowed Hospitals, but at the free Hospitals and Dispensaries, that such unmanageable crowds of out-patients present themselves—institutions of which it is no wrong to say, that in most instances they have been founded and maintained, in great measure, as fields of Medical and Surgical practice. And rightly so: the young Surgeon and Physician must obtain experience, and if, as in many instances, he has no chance of getting a footing in an established Hospital, he rallies his friends around him, and they, partly out of charitable feeling for the poor, and partly out of friendly feeling to himself, start a Dispensary or Hospital. The public find their account in it: not only are the ailments of the poor attended to, but themselves are provided with a body of Medical men possessing an amount of practical experience which formerly was limited to a very few. The system of free admission of patients has its evils, like everything else. People come to the Hospital to gossip and waste their time. The poor, huddled together in the waiting-room for hours, contaminate each other with their filth and poisonous effluvia. Children catch scarlatina, measles, and whooping-cough, and occasionally, in particular cases, there is no doubt that more harm than good results. But the picture has its opposite side, and we firmly believe that, in the long run, the good overbalances the evil. One of the assertions made by the writer of this article is manifestly a mistake. He says that an average of four minutes should be allowed to each out-patient. For certain cases five times that time would not be too much; but it may be safely asserted that out-patients can be seen and prescribed for honestly and conscientiously by the practised Physician at a quicker rate than fifteen an hour. With regard to the gratuitous nature of the services of the Medical officers of Hospitals and Dispensaries, it is doubtless, on many accounts, a thing to be deplored. Formerly, the Medical officer of a Charitable Institution received an *honorarium*, and we believe it is so now in some of the large Hospitals, such as St. Bartholomew's and St. Thomas's, and in some of the older metropolitan Dispensaries, such as the Bloomsbury. But the thing appears to have arisen necessarily from the circumstances of the Profession—from the fact that it has been becoming every year more strictly a profession and less a trade. The Practitioner does not now rely upon the medicines in his surgery, but upon the knowledge and skill which he possesses; and he has found it his policy to sacrifice time and labour in order that he may increase his stock. Gratuitous Medical services have, indirectly, at least, made many a fortune; and if the system has grown into an evil, it is an evil for which we have ourselves to thank. One of the most crying evils in the system of free Hospitals and Dispensaries is to be found in the fact, that they tend to injure the Practitioners in the neighbouring district. The same objection does not so much apply to institutions where the sick are required to produce a letter of recommendation from a governor. But even then charity is too often abused. Undoubtedly, the first reform needed in our Hospital system is the exercise of some check on the shoals of *quasi*-respectable people who, well able to pay the general Practitioner his fees, present themselves under the garb of pauperism as proper objects for Medical charity.

THE LATE MR. JOHN GUNNING, C.B.

Mr. John Gunning, formerly, and for many years, Surgeon to St. George's Hospital, died on Sunday morning at his house, No. 52, Rue de Colisée, Paris. He had attained the great age of 90, and we believe him to have been the oldest Fellow of the College of Surgeons, his diploma of membership dating 1793. A distinguished Army Surgeon, he served on the Staff as long ago as 1792, and at Waterloo held the rank of Deputy-Inspector General of Hospitals. Whilst absent with the army under Lord Wellington, his place at the Hospital used to be filled by his then junior, the late Sir Benjamin Brodie. After the peace, Mr. Gunning returned to London, was promoted to the rank of Inspector, resumed work at the Hospital, and received the appointment of Surgeon Extraordinary to the King. After the battle of Waterloo it fell to his lot to amputate Lord Raglan's (then Lord Fitzroy Somerset) arm. The operation was performed at the Duke's quarters, in the village of Waterloo, in a room where Alexander Gordon lay dying, and the Prince of Orange lay wounded. The Prince used to recount that not a word announced Lord Raglan's entry or presence till he heard him call out, in his usual tone, "Hallo, don't carry away that arm till I have taken off my ring!"—The ring was the gift of his wife, whom he had shortly before married. About the year 1824, Mr. Gunning retired from London practice, and took up his residence in Paris. He resided there until his death. A correspondent of the *Express* writes:—

"His house was a joyous *rendezvous* for his own countrymen, at which he delighted to mix with young people, and promote their amusement. There was scarcely anything of the old man about him. His sight, hearing, memory—all his faculties, indeed—were perfect to the last, and his friends confidently predicted that he would live to a hundred. On New Year's-day he had a dinner party; and cards for one of those little friendly dances which he loved to see were issued so lately as last week. An attack of bronchitis prevented him from receiving his friends on the day expected. His Medical attendant, Dr. Davison, thought it serious; but it

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got better, and within the last two or three days he was considered to be out of danger. On Sunday morning, however, he expired in his arm-chair without pain, and with scarcely any previous symptoms to denote an approaching end. His daughter, Mrs. Bagshawe (the wife of the Queen's counsel), and two of his granddaughters, were with him at the time of his death."

REVIEWS.

Lectures on Surgery, delivered in St. Bartholomew's Hospital. By William Lawrence, F.R.S., Sergeant-Surgeon to the Queen, and Surgeon to the Royal Hospitals of St. Bartholomew and Bethlem. London: John Churchill and Sons. 1863. 8vo. Pp. 632.

This handsome volume does not embrace the whole of Surgery; but rather those parts of it which may be called its general principles. Nearly one-third of it is devoted to inflammation and its consequences, about one-sixth to wounds and other injuries, whilst the remaining half of the book is divided between the specific diseases, as scrofula, gout, rheumatism, syphilis, cancer, and the other varieties of so-called "malignant" disease.

The work has for its original basis the celebrated lectures on Surgery formerly published in the *London Medical Gazette*. It is now, however, divided into chapters instead of lectures, although, as the author observes, the language still retains traces of lecturing, which he has not thought it necessary to efface. We may say, in a few words, that it is an admirable book, and one adapted to the wants of all ages, ranks, and classes in the Profession. It forms a valuable set of first lessons for the young student, and a charming recreation for the senior, whose eyes will be delighted by its clear type. Its characteristic is common sense—that kind of common sense which belongs to a man of great natural power, refined education, immense experience in his Profession, and equal knowledge of men and manners. It contains the finished work of the prime of life, re-cast with the help of all those corrections and suggestions which have resulted from the author's subsequent experience.

Proceeding from a father in our Profession, the opinions advanced are not so much to be criticised as to be reviewed. We must open the book with some of that feeling of veneration with which we one and all regard its author; and we naturally read it without any disposition to carp either at the theories or practice of the writer. We shall, therefore, content ourselves, and we are certain that we shall satisfy our brethren, by stating, in Mr. Lawrence's own language, some of the views which he holds upon matters of practical interest.

First, then, in respect of the moot question of the utility of blood-letting in inflammation. Mr. Lawrence evidently is no friend to the "change of type" theory; neither does he admit the notion that countrymen bear bleeding better than Londoners:

"A notion has prevailed that the inhabitants of London and other large cities do not bear bleeding, and that the depletion which is advantageously employed for removing inflammation in the residents of the country is neither safe nor proper in Londoners. This view, which is not set forth as a deduction from experience or argument, seems to be one of the commonplaces handed from one writer and teacher to another, without direct inquiry or examination. The inhabitants of London, from the highest to the lowest, for the most part, indulge their appetites like the rest of the world, and they who live in the country do the same. Nowhere is the consumption of animal food and fermented liquors more general than in our metropolis. These habits, of which the injurious effects are aggravated in many instances by sedentary occupations or indolence, produce their natural results,—a plethoric state of system, and abundance of inflammatory diseases, both of which will soon be detected by the attentive observer in all classes. I am convinced that inflammations are as numerous and violent among cockneys as among countrymen, and I know that they can only be counteracted by the same means, which are just as necessary and safe in the one case as in the other. . . . It would require long and close observation, with careful examination of corresponding classes in cities and the country, to determine whether there is any real difference between them in the respect above mentioned. I have not met with any allusion in reference to the capital and great cities of France or of other European countries. My own experience does not lead me to accept the notion above mentioned, or to believe that there is any essential distinction in pathology and therapeutics between town and country. We must direct our practice, in either situation, not by any abstract principle, but by careful consideration of each case."—Pp. 87, 88.

We suspect that, whilst Mr. Lawrence has remained unchanged, Professional opinion may veer round to him:

"General bleeding may sometimes, not frequently, be resorted to with advantage when it is important to subdue active inflammation quickly, or to check it decidedly. Such occasions are afforded by serious and alarming inflammatory disorders of the respiratory apparatus, whether in the throat or chest, by similar attacks of the cranial contents, or those of the abdomen.

"The same course of proceeding, or the use of such local depletion as may be equivalent to general bleeding, may be necessary to prevent injurious changes of structure in parts delicately organised—as the brain, eye, or ear—or where the function is important, and requires a perfect state of the structure, as in a large joint or the hand. In the latter case, I have often seen the greatest advantage and relief from opening a vein at the elbow."—Pp. 81, 82.

"It has been objected to the large bleedings which we sometimes find necessary that they weaken. They certainly do so in one sense; that is their object. We think that the patient has too much blood, and that the heart is acting too powerfully; that is, too strong, if those circumstances are the criteria of strength. The object, however, is to stop the inflammation, to do it effectually, and, at the same time, safely. I cannot doubt that these points will be most completely secured by employing active means in an early stage. One large bleeding generally suffices. I never saw a patient labouring under a serious inflammation injured by one venesection, however large."—Page 84.

We are surprised to find that erysipelas is not included in his volume, as the author once took a prominent share in a controversy respecting incisions.

As to the treatment of delirium tremens, he writes thus: "The treatment of delirium tremens turns on two points, the use of stimuli and that of opiates. The former is the most important in the early stage, when it may possibly supersede the necessity of resorting to the latter. When, however, the want of sleep has come on in the full development of the complaint, opium must be resorted to, and must be used freely, as the nervous system is less amenable to its influence than under other circumstances." After recommending the combination of tartrate of antimony with this medicine, he proceeds:—"It is certainly advisable to avoid the large and repeated doses of opium which have sometimes been necessary in the treatment of this affection." He then notices the use of tincture of digitalis, the sovereign remedy of the late Mr. Jones, of Jersey. "This plan of treatment," he writes, "has been followed by others without doing harm in any case, but not with invariable success. To a female, about fifty, with a bad fracture of the leg, by whom two or three large doses of laudanum had been taken without effect, I gave three drachms of the tincture, which quieted her immediately and permanently, inducing a tranquil state of the circulation, under which recovery went on most favourably."—P. 297. Let us add, that the success of Mr. Jones with this medicine in the form of the disease met with in Jersey, where spirits are cheap, and where it usually immediately succeeds prolonged debauch, was most marvellous. Such as have, like ourselves, been privileged with watching the practice of this talented and accomplished man—Surgeon, Physician, and Accoucheur—have all been strongly impressed with the value and importance of his discovery. He informed us that he never lost but one case since accident opened up to him this method of treatment; and in the Hospital practice of Jersey cases of delirium tremens were of daily occurrence.

The subject of syphilis occupies one hundred pages of the volume. The views of the author upon the question of mercury or no mercury in its treatment are thus summed up:—

"Although the researches of Mr. Rose, supported as they have been by other concurrent evidence, entirely overthrew the long-established doctrine, that the cure of syphilis without the use of mercury is impossible, and thus proved that repeated and injurious courses of the remedy are quite unnecessary, they do not, and were not intended by that gentleman to show that the remedy ought to be altogether discarded,

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that it has no special power over the disease, or that it ought not to be still retained, under proper management, as the principal means of treating a large portion of venereal affections. I must, therefore, express my entire dissent from the opinions of a distinguished teacher, the late Dr. John Thompson, Professor of Pathology in the University of Edinburgh, who entirely abandoned the use of mercury both in primary and secondary syphilis, considering, not only that patients recover much better without it, but that many of the affections regarded as the secondary symptoms of syphilis, especially in their more aggravated forms, are owing to the use of mercury. For many years before his death, he trusted entirely to the simple decoction of sarsaparilla, in all forms and stages of the disease. It is likely enough that too free use of a remedy under an exaggerated notion of its powers, should be followed by the opposite mistake of disbelieving its real efficacy. These errors are gradually corrected by time, and thus it has been found necessary, in numerous instances, to resume the use of mercury after it had been entirely abandoned."—P. 565.

Mr. Lawrence notices briefly the treatment of the constitutional or secondary forms of the disease by syphilisation, as practised by M. Boeck at Christiania, and by others of his school, without expressing any opinions of his own upon its value. As regards one use of syphilisation, however, all right-minded men will agree with him:

"If I am not mistaken (he says) the notion has also been entertained that healthy persons might be rendered insusceptible of syphilis by this process of syphilisation. We cannot be surprised that the French Academy of Medicine, after a long debate, should have recorded its entire disapprobation of the whole scheme. I have heard of one instance in which the plan has been attempted in London, with results too well calculated to discourage any repetition of the experiment. I trust that this example will not be imitated, and that the inoculation of syphilis will be entirely discontinued."—P. 441.

And now, after giving our readers a taste of its contents, we close the book. Mr. Lawrence is a Surgeon of the old school, but when it is recollected for how long a period the views he re-announces upon these general topics were held, and for how long they influenced practice, it is well that we should, through the medium of such a work as this, look back upon the opinions of our predecessors, and ask ourselves whether, after all, in a few cases at least, we may not, in avoiding Scylla, have fallen upon Charybdis. Blood-letting and mercury, at all events, have not been thrown aside as harmful agents by the veteran Surgeon, who now reproduces his old teachings for our renewed instruction.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

January 10.

Looking over the published records of Medical science, and watching Hospital experience, in France, I do not find many brilliant discoveries or remarkable observations during the past year. There has been wanting neither patient investigation on the part of the distinguished members of the Faculty, nor any deficiency of reports from the institutions that furnish the public with the narrations of that which is passing. There is a steady march towards improvement.

The Medical School of Paris opened this year in the month of November, under the auspices of some of the most acute and experienced Professors that this country has ever known; still the number of foreign and provincial students has been somewhat diminished of late. English searchers after knowledge do not find the same necessity for this termination of their studies as they formerly did. The great Schools of London now furnish them with all the means of acquiring sound Professional information, and they are no longer compelled to come here for anatomical science. Subjects are, under the regulation now in force in London, quite as easy of acquisition as they are here; indeed, at the present time, more so; for, of late, the deficiency has been remarkable. The fee required in November from each student was 60 francs; but, up to this moment, very few have been placed on the dissecting table, and those, for the most part, in so mutilated a condition, and without injection, so as to be, in many instances, almost useless. The prosector—for so is the demonstrator called—comes late into the dissecting-room, seems scarcely to trouble himself about individuals, and pays attention only to the general accommodation: he does not attempt to point out to the student the object which is to be kept in view, nor the means by which he is to gain information, but leaves him entirely to the anatomical volume that lays down the ordinary rules. In fact, there seems to be a carelessness which rather disheartens the student than excites him in his labours. The general accommodations of the dissecting-room, too, are altogether on an inferior scale to those that are found in the established Schools of London.

The session opened in the month of November at the *Ecole de Médecine*, with one of those storms which essentially belong to the Schools of Paris. The pupils have never been, within the memory of man, on good terms with any of the governments of the country: looking, perhaps, to the perfectibility of the human species, they are never satisfied with things as they are, but exhibit their impatience for something better whenever they have an opportunity. Dr. Rayer, the Dean of Faculty, a man of considerable influence, and remarkable for scientific study, best known in England by his work on the "Diseases of the Skin," took his seat as President amidst a storm of noise, a volubility of exclamations, and reiterated hissing, because he had been nominated by the Emperor. When calm was re-established, which did not take place until the police had removed some individuals more noisy than the rest, the Dean delivered, with much energy of manner, an address, such as was worthy his position, and could not but be acceptable to the pupils. This was followed by a lecture from M. Gosselin, who pronounced an eulogy upon a lately-departed colleague, M. Moreau, whose conduct he called upon his audience to imitate when they commenced their Professional career. It was somewhat long and prosy: the young men took it, however, in good part, and seemed to forget their political feelings, only again to exhibit them when the opportunity presented itself of greeting with acclamation M. Nélaton, who is at the present moment their idol, not so much for his skill as a Surgeon, as a professor of liberal political principles.

The Academy of Science holds it regular meetings, at which subjects of scientific value are nightly brought forward and discussed, of which I hope to be enabled occasionally to furnish you with details. The last two meetings have been devoted to the formation of bureaus, and election of officers for the ensuing year. The only paper read at the last was by Dr. Fournie, upon the "Laryngoscope, and the Employment of Remedies to the Affections of the Air-tubes." He gives the result of his employment of different caustics; he approves of solutions of nitrate of silver; discourages the employment of gargles; and prefers the application of caustics to the amputation of the tonsils. There is considerable simplicity in the laryngoscope, and its use seems likely to become popular.

Beclard has lately added to his reputation by the production of an elementary treatise on "Human Physiology," the fourth edition of which is just issued. "A Clinical Examination of the Diseases of Women," of considerable value to obstetric science, has appeared from the united labours of Bernetz and Gonpil. The Hospitals continue to be sources of most important information. Dr. Trosseau daily adds to the stock of Medical knowledge by his clinical lectures. The Hôtel Dieu has of late furnished him with some cases, which would require to be laid before you in detail did space permit. He lately gave a most admirable view of hydatic cysts in the liver: his diagnostic and prognostic skill is equal to that of any of the greatest Professors of the past or present day; and if English science claims excellence in the treatment of disease, it may fairly be said that the French School surpasses all others in its mode of ascertaining the nature and the probable effects of the maladies. M. Villeneuve still tries, at the Hôtel Dieu, the effects of various remedies, and gives most satisfactory explanations of the views that lead him to the numerous experiments that he tries in cases that enable him to form accurate judgments. One of the most valuable means of obtaining information as to the state of the general health of this city is a monthly report, presented by M. Lailler to the Medical Society, on the sanitary state of the Hospitals. It enables Practitioners to judge of the epidemics that exist, and of the character of the affections that are most predominant. Thus are obtained the observations of the most active men at the Hospital. Some changes occur always at this time amongst

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the Profession at the different institutions; the Surgeons are removed from one Hospital to another. The only one I have yet heard of as decided is M. Cusco, who leaves the Midi for the Hospital Saint Louis: the Hôtel Dieu remains unchanged.

Adolphe Béclard, one of the favourites of the day, opens a course on "Fractures and Lacerations" on the 13th of this month. The Corvisart prize is offered for the best dissertation on "Hyoscyamus, Datura and Belladonna." The fashionable amusement of the day is the smoking "hachich, the hemp." M. de Luca has followed the example of Dr. Lallemand, and given a curious history of the effects of the drug. He took, at nine in the morning, at the laboratory of the College of France, two scruples of the paste as brought from Turkey; its effects upon the senses were most singular. On leaving the establishment, and walking in the street, he appeared to himself magnified, and as if he were walking in the air, whilst those he met were diminished in size; the houses appeared to run away from him; sounds were scarcely audible; distances much increased. Upon reaching home, he threw himself on his bed, and was speedily immersed in feelings of contentment and ease. All the transactions of his past life floated before him, but with such rapidity that he could retain no idea that presented itself. For four hours he was in a state of extraordinary cerebral affection, which, gradually diminishing, left him in the state of previous health.

LIVERPOOL.

January 12.

Although I have already occupied some of your space with observations as to the effects of the cotton famine on the health of the people, I think that some further information about the same subject may be, especially just now, of interest to your readers. In order to obtain reliable information, I have communicated with a number of gentlemen practising in the localities in which the pressure of the distress is most severely felt, and, in order to be able to see for myself, and to describe the kind of relief which is afforded, and to see the morbid results of the distress where alone they are alleged to exist in any intensity, I paid a second visit to Preston.

I think that if I give first an epitome of the information which has been so kindly furnished me by Medical men in the suffering districts, and then some account of what I saw and heard at Preston, I shall convey a just idea of what the general sanitary condition of the county is now, and has been, during the last three months.

From Bolton, Mr. Carruthers writes to say that the health of the operatives and lower classes, in general, is satisfactory. The complaints most prevalent are bronchitis, pneumonia, pleurisy, and some croup and measles in children. About twenty cases of typhoid fever apparently originated from infection conveyed from Liverpool. A child, whose mother died of fever in Liverpool, went to Bolton, sickened, and recovered; but eight of the family into which the child was received were struck down, and two died. Two nurses who attended the family were attacked, and one died; and other cases occurred in the same locality. Mr. Carruthers had heard of no cases of relapsing or "famine fever," and believes the health of the town to be not below the average. From the same town, Mr. Garstang writes that, with the solitary exception of the family just referred to, there had not been any but sporadic cases of fever, arising from accidental causes, and by no means of an infectious character.

At Burnley, I hear, from Mr. Thomas Brown, there has been an increase in the amount of illness among those receiving parish relief. There has been a good deal of influenza, and a few cases of typhoid fever have been met with; but this disease is not prevalent. Mr. Coultate states that the amount of disease of all sorts now prevalent at Burnley is not above the usual average, and that, from the care exercised by the relief committees, any disease fairly ascribable to want has been prevented.

At Over Darwen, which was visited in 1861 with a terrific epidemic of typhus, I am informed, by Mr. Wraith, there is some rubeola and scarlatina, which are the only prevalent diseases of this class. The fatality is not great; but patients recover slowly, and most diseases appear to be more complicated and difficult of cure.

Mr. Clark, of Farnworth, says that up to the present time (December 27) there has not been any epidemic disease attributable to the distress.

From Heywood, Mr. Brown writes that neither in public or private practice has he had a single case of fever, and that the common diseases have been coughs, colds, whooping cough, and infantile remittent fever.

At Leyland, Mr. Berry says there has been an increase of the usual style of complaints, catarrh, bronchitis, etc. He has seen but one case of fever, and that terminated favourably; and believes that what disease has occurred has not been due to scarcity of food or clothing, all being pretty well supplied by the District Relief Committee.

At Manchester, I hear from Mr. Evan Thomas that cases of maculated fever are on the increase; but that all such cases admitted into the Workhouse Fever Hospital have come from infected houses, thus showing, as far as this circumstance goes, that the disease is not epidemic. No scurvy; a few cases of purpura within the last week or two. The general appearance of the people is more anæmic than in better times. Mr. J. O. Fletcher also reports an increase of typhus, though not to any great extent, during the last four months. There has been scarlatina and hybrid rubeola, with a tendency to fall into a typhoid state, among children. Rheumatism among adults, owing to deficient clothing and the employment in farm labour, etc., of those who have always been used to work within the factories. Mr. Roe states that, in his district of the Barton-upon-Irwell Union, the number of sick has been nearly doubled during the last six months, but that the character of the complaints is not serious; catarrh, bronchitis, whooping-cough, and diarrhœa the most prevalent. Of 188 new cases occurring in the quarter ending December 24, there were only 8 deaths: 1 from fever, 1 from paralysis, 4 from bronchitis, and 2 from phthisis. In the Salford Union Workhouse Mr. Brownbill tells me there have been rather more cases of fever than there were a month or two since, but not more than is usual at this time of the year; that it has all been synochus, not typhus or typhoid. Chest affections prevalent as usual at this season.

At Middleton, Mr. T. B. Knott has noticed an increased amount of cases suffering from debility, attributable to insufficiency of food, but no increase of fever. At Mossley, I am informed by Mr. Schofield that the amount of sickness has been less than usual, and the deaths below the average, but that, within the last few weeks, fever of a continued type has made its appearance.

At Rochdale, Mr. Collingwood states that, up to the end of October, the health of the district was remarkably good; from that time to the middle of December there was an increase of sickness, followed by a decrease; so that, at the beginning of this month, disease was rather below the average. The death-rate of the past quarter has not been at any time above the average. There have been a few cases of typhus and typhoid fever, which he had no reason to ascribe to the cotton famine. At the Rochdale Dispensary, Mr. T. F. Green has seen some mild cases of typhoid; few deaths from this cause. No typhus. Heart disease much aggravated and fatal. Phthisis and other lung diseases not above the average. Exanthemata—only a few isolated cases of variola, of a mild type. Scabies very prevalent.

Mr. Brierly, of Staleybridge, informs me that, out of between six and seven hundred cases attended by him in the last three months, there have been—of typhus, 2; catarrhal fever, 16; gastric fever, some cases putting on a typhoid type, 16; scarlet fever, 14; measles, 33; itch, eczema, etc., 73; acute rheumatism, 9; the rest being made up of the cases ordinarily met with in the routine of parish practice.

At Stockport, Mr. J. Blackshaw says, we are free from epidemics; a few cases of scarlatina, measles, and fever, but not more than usual at this time of year. The Medical orders during the past year have been about 1000 more than usual; many have been for very trifling cases.

At Warrington, Mr. Spinks says, there is no disease but that which is incidental to the season; not one case of fever in his district, or in the Union Hospital, and that several Medical men in the neighbourhood give the same report.

At Wigan, Mr. Maclaghlin, Surgeon to the Dispensary, finds that the health of the poor remains as it was in September, and no more fever exists than is generally expected to present itself at this time of year.

Next, as to Preston, whither I went on January 5. My first visit was to the central clothing depôt and soup kitchen, in Crooked-lane.

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Here an iron warehouse, belonging to Messrs. Smith and Grime, and kindly lent by them, is now a kitchen and dining-room on the ground floor, a blanket-store, second-hand clothes stall, and work-room on the first floor, while higher up are tailors and shoemakers, and bedding and bedstead manufacturers. At the time of my visit, the dining-room was still gay with the festoons and wreaths put up in honour of Christmas. On the side furthest from the door a row of gigantic cauldrons were boiling and bubbling, and the atmosphere was fragrant with the odour of the meat, potatoes, and onions which they contained; while, on the other side, were tables surrounded by men, women, and children unanimously feeding, not with the savage energy of ravenous hunger, but with the leisurely satisfaction of people who are enjoying their dinner. They were mostly poorly dressed, some ragged, but clean and orderly. There was a policeman present, but the only duty I saw him perform was that of handing soup. In the centre of the room is a sort of office for the distribution of bread, and at one and a *quasi* butcher's shop, where a benevolent gentleman, who has made his fortune in that craft, kindly gives his time and experience to the supervision of the meat. From this establishment bread, meat soup, sweet soup, and potato hash, *alias* "lobouse," are given in exchange for the relief committee's tickets. These articles of diet are made as follows:—Meat soup—beef, 130 lbs.; barley, 150 lbs.; meal, peas, rice, and onions, 30 lbs. each; carrots and turnips, 40 lbs.; salt, 12 lbs.; curry powder, ½ lb.; and water, 175 gallons. A penny ticket obtains a quart of this. Sweet soup—barley, 120 lbs.; rice, 48 lbs.; sago, 28 lbs.; meal and treacle, each 40 lbs.; salt, 12 lbs.; and pimento, 1¼ lbs. This is a halfpenny per quart. The "scouse" is composed of mutton, 30 lbs.; onions, 12 lbs.; and potatoes, about 240 lbs. This is given twice a week.

At 21, Great Stone-street, is the sick kitchen, whence cooked meat, beef-tea (1 lb. of beef to 1 quart of water), arrowroot, sago, gruel, tea, and wine are given on the orders of Medical men. Upstairs are employed a small army of sempstresses, tailors, and shoemakers, repairing, etc., the cast-off clothes, boots and shoes sent to the relief committee. The blankets, as, in fact, all the things which I saw, were of the best kind, and conspicuously stamped with the word "lent," to prevent them from being pawned. The beds are made of the ordinary ticking, and filled with chopped straw, which is as soft as chaff, and much cleaner and far softer than the whole straw. The straw cutting is easily managed by two or three of the ordinary machines worked by a small steam-engine. The bed, bolster, and chopped straw to fill them are supplied to the ward committee at from 5s. 6d. to 7s. Full suits of clothes for men, 8s. 6d. to 10s. 6d.; for boys, 4s. to 5s. 6d.; print dresses for women, 1s. 6d. to 2s. 8d.; stuff, from 3s. 6d. to 6s.; men's boots and shoes, new, 3s. to 4s.; women's, 1s. to 3s. I mention these money details to show that it is difficult to estimate the amount of relief actually afforded by the amount of money expended on the poor.

I noticed carefully the general aspect of the people, both at the soup-kitchen and in the streets, and, as far as such observation went, I could not perceive any difference in look from that of any miscellaneous assemblage of poor people.

To turn now to the more strictly Medical part of my inquiries, I was informed by Dr. Brown, of the Dispensary, that, after making all allowance for the fact, that many persons who in prosperous times pay a doctor have been obliged to apply to the Dispensary or the parish, that the number of patients attended by the Union Medical officers and by those of the Dispensary, has been, during the last six months, considerably above the average. At first, the effects of a diet, defective both in quantity and quality, were shown in the amount of anæmia, diarrhœa, and general debility which was met with. The increased liberality in the relief has checked considerably this class of maladies, and the convalescence from acute diseases has been rendered less protracted than it would otherwise have been, in consequence of proper articles of diet having been provided for the destitute sick from the sick kitchen.

In the latter part of the summer, typhus made its appearance, and from the beginning of October up to Christmas there was a steady average of 24 new cases a-week, according to the returns of the Union and Dispensary Medical officers; a marked decrease, however, has occurred during the last two weeks of the past year. This outbreak, unfortunately, found the town completely unprepared with adequate accommodation: the House of Recovery was soon overcrowded, patients died, nurses and others in the house sickened at so alarming a rate, that it became evident that the House of Recovery was far from justifying its name. A temporary Hospital was, therefore, erected, and, after some inexplicable delays, the patients were transferred to it.

Through the courtesy of Dr. Ridley, under whose charge this Hospital is now placed, I had the opportunity of visiting it. The building is entirely of wood, with light iron girders in the roof, and it is placed upon a foundation of brick. Its plan is extremely simple, there being two sheds, 120 feet in length, running parallel with each other, separated by a partition which reaches only a little more than half way to the roof, so as to allow a free current of air from side to side. The total breadth is 50 feet; the height to the angle of the roof, 18 feet 6 inches. There are windows on each side, and ventilators, guarded by plates of perforated zinc, above and below each. The temperature is maintained by means of a triple row of hot-water pipes running round the building. The whole was put up in about ten days. The cases which were there at the time of my visit were almost, if not all, true typhus; those which had been recently admitted, and of which I could judge myself, were well-marked examples of this disease, with very distinct rash.

Cases of typhoid fever have occurred, and their proportional amount may be inferred from the fact, that of deaths from fever there were, in—

	Typhus.	Typhoid.
September	4	1
October	18	0
November	21	4
December	10	9

The mortality of the fever cases appears to have been at least 23 per cent.

I would make but one comment in conclusion, that there are many points to be carefully weighed before we take it as fully proved, that the disease now existing in a few spots of the cotton districts is due to deficient food or clothing, one of these being the remarkable fact, deduced by Dr. Beddoe, of Bristol, from the Registrar-General's report, that the mortality of Lancashire, for the summer quarter of 1862, was below the average, and that the whole of this diminution took place in the cotton districts; and, further, that the proportional increase of zymotic disease has been, during the past quarter, more decided in Liverpool, where the pressure of the cotton famine is not so severely felt, than in any of the most suffering places, with the single exception of Preston.

GENERAL CORRESPONDENCE.

THE PRESENT STATE OF THE ARMY MEDICAL DEPARTMENT.

[To the Editor of the Medical Times and Gazette.]

Sir,—At the last competitive (?) examination for the above department, the number of vacancies exceeded the number of candidates; and, as a preliminary to that of February next, we have the Medical journals strongly advising young Professional men to turn their attention elsewhere!

Nor is this all. We find leaders, comments, and letters, very much in unison in their tone, appearing in various portions of the press, daily, military, and Medical. To complete the picture, the *Gazette* of January 9, contains the following resignations, on the part of those who have long tasted the sweets of the department, and found them, it is to be presumed, only to leave a bitter savour in the mouth:—Assistant-Surgeon Dr. Macartney; Assistant-Surgeon Dr. Frank; Assistant-Surgeon Hyde; Assistant-Surgeon Frazer; all resigned.

Shortly after the appearance of the Warrant of 1858, for the first time in the history of the Army Medical department a post in it was sought by some of our best men. How is this? The causes are not far to seek. Not only has that Warrant become a dead letter, but the department has steadily and surely retrograded ever since the lamented death of Mr. Alexander.

During his reign there was a manifestly hopeful and satisfied tone prevailing amid the members of the department, and those who are best conversant with it now can state how this

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has been replaced by distrust, dissatisfaction, and dislike. The latest occurrences at home and abroad would seem to have been applied as a test of how much the back of the Army Medical camel could bear.

If the Army Medical department is to be respected as a body—if its members are ever to take their stand upon the ground of regulations common to every other officer, something must be done now.

There is one only sure mode of attaining the end. It resolves itself into a simple question of ordinary business. So long as vacancies are filled, so long, depend upon it, will things not only remain, but become worse. If the pile of unfilled vacancies can only be made to accumulate rapidly upon the official backs of the Government horses, the just claims of the department must be ceded; and this is the only way, probably, in which they ever will be.—I am, &c.

January. X. L. Y.

THE ACTION OF DIGITALIS.

LETTER FROM MR. W. B. KESTEVEN.

[To the Editor of the Medical Times and Gazette.]

SIR,—Attention having recently been directed to the effects of digitalis, it may not be uninteresting or uninstructive to your readers to have their attention directed to the opinions expressed in Dr. Fuller's recent work on "Diseases of the Chest." Dr. Fuller is well known as a man of sound practical judgment, and one who does not express an opinion without having duly weighed all the facts on which it is based. It is urged by Dr. Fuller, that the general notion of the danger attending the administration of digitalis in dilatation of the heart is incorrect, inconsistent with fact, and founded on the erroneous impression, that digitalis exercises a depressing influence over the action of the heart, and, therefore, leads to accumulation and coagulation of the blood in its cavities, if not to actual paralysis of its muscular structure. Dr. Fuller affirms, that digitalis stimulates the muscular fibres of the heart, and augments the contractility of the capillaries; that when it kills, it is not by paralysis, but by tonic contraction and spasm of the heart; that, such being the case, it is a valuable remedy in dilatation, and dangerous only when administered in hypertrophy. The grounds given by Dr. Fuller for these opinions are thus stated by the author (p. 592):—

"1st. During many years, I have observed, that the cases of heart disease most benefited by digitalis have been those in which the heart has been weak and dilated, and the pulse feeble and irregular. In these the pulse has become stronger and steadier, and less frequent under its action.

"2nd. In the only cases in which I have known death to occur suddenly during the administration of digitalis, the heart has been hypertrophied and firmly contracted. This may have been a coincidence, but, viewed in connection with the results of experiments to which I shall presently refer, it is, at least, a suspicious fact.

"3rd. Dr. Dickenson has pointed out (*Med.-Chir. Trans.*, vol. xxxix.), and I have repeatedly verified his observation, that digitalis, if given in full doses, induces violent uterine contraction, and checks uterine hæmorrhage; and, inasmuch as its action in staying menorrhagia and uterine hæmorrhage is permanent, it seems fair to conclude that it gives tone to the capillaries, and increases their contractility.

"4th. This view is borne out by what I have long since observed relative to its action in arresting hæmoptysis, viz., that, whilst effecting the object required, it does not weaken but rather increases the force of the pulse, though it lessens its frequency.

"5th. When patients die of delirium tremens, the pulse is usually rapid and fluttering before death, and the heart is found weak, flaccid, and distended with blood afterwards. These are just the cases in which, on the commonly-received doctrines as to the action of digitalis, the drug ought necessarily to prove fatal, and yet modern experience has shown that in these cases it is tolerated, even in excessive doses. My impression is, that its remedial action in these cases depends on its stimulating the heart, subduing its irritability, and increasing the tonicity and contractility of the heart and capillaries, so that the brain is better supplied with blood, and the effusion of its more fluid parts, which gives rise to the "wet brains" of habitual drunkards, is avoided.

"6th. It has been proved by experiments on animals (Dr. H. Jones) that when death is induced by digitalis, the heart is not flaccid and distended with blood, as is commonly supposed, but, on the contrary, empty, contracted to the utmost, and in a state of tonic spasm. All these facts confirm my view as to the action of digitalis; and if it is correct, its practical importance in relation to the treatment of cardiac dilatation can hardly be over-estimated."

The preceding extract places before us so clearly all that can be said on the action of digitalis, that, although long, it will not, I believe, be found too long to claim the careful attention of your readers. Having myself observed the clinical facts stated by Dr. Fuller, I would, with much deference, beg permission to endorse the practical views thus put forth on the therapeutic value of digitalis. I am, &c.

Upper Holloway, January 6. W. B. KESTEVEN.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND AND THE TITLE OF "DOCTOR."

THE following correspondence has been sent us for publication:—

(Copy.)

King and Queen's College of Physicians in Ireland,
Dublin, November 10, 1862.

Sir,—In reply to your letter of April 4, I am directed to forward you a copy of the opinion of the Attorney-General for Ireland, from which you will see that, as a Licentiate of the College, you are legally entitled to assume the title of "Doctor"; and I am further instructed to inform you, that if any authority or individual desire to try the question legally, the College is prepared to defend the privilege of its Licentiates.

The College being in recess prevented an earlier reply to your letter. You are at liberty to make any use you please of this communication.

I am, Sir, your obedient servant,
LOMBE ATTHILL, M.D., Fellow and Registrar.
J. Styrap, Esq., M.D., Shrewsbury.

"King and Queen's College of Physicians in Ireland,
Dublin, November 24, 1860.

"Sir,—I am instructed by the President and Fellows of the King and Queen's College of Physicians in Ireland to forward to you, for your information, the subjoined copy of the opinion of the Right Hon. her Majesty's Attorney-General for Ireland, as to the power of the King and Queen's College of Physicians to confer the degree of Doctor of Medicine.

"I have the honour to be, Sir, your faithful servant,
"WILLIAM MOORE, M.D., Fellow and Registrar.

"The two Charters of the College, and the several Acts of Parliament bearing thereon, having been submitted to the Attorney-General, his opinion was requested on the following query:—

"'Whether the Licentiates, as such, of the King and Queen's College, are entitled to the degree and title of Doctors in Medicine, and to use the abbreviation or initial letters M.D. after their names?'

(*Answer.*)

"'I think the Licentiates and Fellows, as such, of the King and Queen's College of Physicians, are entitled to the degree and title of Doctors in Medicine, and to use the letters M.D. after their names. (Signed)

"'November 21, 1860.'" "'R. DEASY.

CASE OF SUSPECTED POISONING IN IRELAND.—A case of suspected poisoning is just now occupying public attention in Ireland. The supposed victim was a young lady, named Cary, aged 18, and the suspected person is domestic servant to Dr. Courtenay, Medical Officer of the Galgorm Dispensary, who attended the deceased in her illness. The body has been exhumed, and a coroner's inquest held. The viscera were healthy, with the exception of the stomach, which was said to be livid and in a state of gangrene. There was also slight congestion of the brain. The stomach and its contents have been sent to Dr. Hodges, of Belfast, for chemical examination.

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REPORTS OF SOCIETIES.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, DECEMBER 19.

DR. BARCLAY, President, in the Chair.

A PAPER was read, by Dr. EDWARD HARVEY, ON CONTINUED FEVER, AS IT APPEARED AT ST. GEORGE'S HOSPITAL DURING THE LAST SEVEN MONTHS.

The author remarked that, since the time of Jenner, no better opportunity than the present outbreak had occurred for studying this disease and its treatment. What is fever? That no eruption need accompany it is quite admitted, other organs manifesting its various symptoms; but as a disordered organ may produce the symptoms of fever, its diagnosis requires great attention. This care is needed, for the statistics of the years 1855 and 1859 differ materially at St. George's and the Fever Hospital. Can this be due to an epidemic varying widely in different parts of the town? The post-mortem book of St. George's shows that, from 1852 to 1861, the deaths from fever average 9 a year,—15 being the highest number, and 3 the lowest. Now in this year 16 have already died. Of these 16 cases, 4 were not examined: of the 12 that were, 3 had ulcerated bowels; 3 patches of congestion, but the glands natural; and in 6 the bowels were healthy. Thus, of those examined, 25 per cent. had ulcerated bowels, whilst it was 70 per cent. in former years. As to symptoms: 1. The eruption on the skin.—One of the 3 with ulcerated intestines had no eruption; 2 had rose-spots going away on pressure; the 6 with healthy intestines had mulberry or measly eruption; of the 3 with patches of congestion, 2 had mulberry spots, and 1 only petechiæ. The connexion between the mulberry eruption and healthy intestines—between the rose-spots and ulceration—is evident. —2. During life, ulceration of the bowels and diarrhœa coexisted. Of those who died with ulcerated bowels, 2 had mild, and 2 severe diarrhœa; 7 the bowels well open; and 2 costive. In the 8 cases of typhus fever this year, diarrhœa existed, and at the Fever Hospital was also prevalent.—3. Cerebral symptoms.—These marked the difference between typhus and typhoid. The mulberry eruption was always accompanied by delirium or stupor; the rose-spots by ulcerated bowels and cerebral restlessness, without delirium. There have been, in the last seven months, 58 cases of fever at St. George's: of these, 9, or 15·5 per cent. have died, which is less than 1 in 6. At the Fever Hospital it is about 1 in 5; whilst the last nine years, ending 1859, give at St. George's a per-centage of 11·4. Of the 58 cases lately in the Hospital, 41 had eruption, 10 rose-spots, and 31 mulberry or measly. Of those without eruption, 2 were typhoid, 3 typhus, and the rest febricular. The total of typhus was 34, of typhoid 12, and of slight fever 12. All the typhoid had confusion of thought, but no active delirium; 10 out of 12 had diarrhœa. One-fourth of those who died had typhoid fever. Of the typhus cases, the brain was clear in 5, slightly delirious in 11, and severely so in 18. The bowels were costive in 11, quiet in 10, relaxed in 8, and given to diarrhœa in 5. Of the 58 patients, 26 came from the neighbourhood of the Hospital; 6 became infected in the Hospital. There is no instance of a typhus and a typhoid case coming from the same house. From May to December, most were admitted in July, and least in August. The treatment has, for the most part, been to support the patient by beef-tea, wine, brandy, etc., opiate and other injections being used, if necessary, for the bowels in the typhoid cases, and purgative, with care, in the typhus. The treatment of Dr. Fuller differed from the ordinary, and consisted of an emetic at the outset, with a scruple of quinine every hour for three doses, and, subsequently, quinine in smaller doses. This treatment, in 6 out of 8 cases, caused considerable temporary depression and deafness, due to the quinine. Patients on this plan mended on the ninth day, and on the seventh with the ordinary treatment.

THE HUNTERIAN ORATION.—The biennial oration in memory of the immortal genius of John Hunter will be delivered in the theatre of the Royal College of Surgeons, on Saturday, the 14th of February, by George Gulliver, Esq., F.R.S., a Member of the Council of the College.

MEDICAL NEWS.

UNIVERSITY OF ST. ANDREWS.—EXAMINATION FOR HONOURS.

First Class.—Wm. Bloxam, London, and Edward Ray, Dulwich,—Equal.
Second Class.—John M. Bright, Forest-hill; John L. Prichard, London; Charles H. Phillips, London; John W. Irvine, Lancaster; James Steele, Wishaw.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a Meeting of the Court of Examiners on the 13th, 14th, and 15th inst., and, when eligible, will be admitted to the Pass Examination:—

J. B. Brown, T. F. Lloyd, R. T. Freeman, T. Wilson, J. Mathews, G. H. Whitborne, H. W. A. Maclennon, G. Griffiths, W. Hinches, C. F. Bullmoore, C. Adcock, F. W. Adams, H. J. Lipston, H. W. Jackson, J. A. Woodhams, H. J. Dwelly, W. C. Penn, A. Charles, A. W. Walls, E. Hyde, F. E. Chambers, J. C. Robinson, E. H. Ruddock, E. J. Hardwicke, A. Tuxford, J. H. Dowman, W. McDadlish, M. Wright, F. Sutton, J. Dutter, E. Chentle, J. Loane, C. H. Weld, R. Bonice, T. Smallhorne, D. J. Canny, S. Morton, R. W. Henderson, H. O. F. Butcher, J. Morris, R. Hay, E. H. Pearson, R. Willmet, G. R. T. Phillips, W. Wigmore, J. Shackleton, W. E. Loffe, J. Stedman, S. H. L. Murray, G. V. Wright, F. S. Taylor, H. McK. Parkes, F. K. Picard, J. Demaine, W. P. Dukes, J. P. Hewley, G. Pourddocke, C. E. Cockerton, and E. T. C. Ellis.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise on Thursday, January 8, 1863:—

Frederick Waghorn, 34, Soho-square, W.; Henry Dunsler Trimmer, Gloucester; William Thelwall, Farndon, near Chester; Alfred Gibonie Chuck Mann, Guy's Hospital.

APPOINTMENTS.

DAVIES, JOHN SIDES, M.R.C.S. Eng., has been elected Coroner for the borough of Shrewsbury.

GRAHAM, G., M.R.C.S. Eng., has been appointed Senior Assistant Medical Officer to the Surrey County Lunatic Asylum, Wandsworth.

HIGHES, WILLIAM HOOH, M.R.C.S. Eng., has been appointed Medical Officer to the Chorlton Union Workhouse, Withington, Manchester.

DEATHS.

BROWN, JOHN, M.D. St. And., at Quadrant-villa, Lower-road, Islington, on January 5, aged 51.

CAMERON, EVAN P., M.D., at New Amsterdam, Berbice, on November 30, aged 53.

FINNIE, WILLIAM, Staff Surgeon-Major, at 19, Kew-terrace, Glasgow, recently.

GERRARD, JAMES, M.R.C.S. Eng., at Aboyne, Aberdeenshire, on December 26, aged 29.

GUNNING, JOHN, C.B., at Paris, Inspector-General of Army Hospitals, on January 11, aged 90.

HARWOOD, JABEZ, M.R.C.S. Eng., at Eckington, on December 28, aged 89.

HOLLAND, WILLIAM, Surgeon, in practice prior to 1815, at Over, Cheshire, on January 3, aged 69.

JONES, GEORGE HAINES, M.D., J.P., at Ashling-house, Hambledon, Hants, on January 3, aged 72.

KINGDON, WILLIAM, F.R.C.S., at Abbey Wood, Kent, on January 5, aged 74, late of New Bank-buildings.

M'DOUGAL, J., M.D., at Leith Hospital, on January 4, aged 25.

MOTT, CHARLES, M.R.C.S. Eng., at Church Stretton, Shropshire, on January 11, aged 73.

NEWINGTON, CHARLES E. H., M.D., at the Vineyard, Ticehurst, Sussex, on January 6, aged 70.

RATLIFFE, RICHARD, at sea, off Bermuda, Senior Assistant-Surgeon H.M.S. *Melpomene*, on December 8, aged 34.

RITCHIE, JOHN, L.R.C.S. Edin., at Tean, near Cheadle, Staffordshire.

THOMAS, WILLIAM, L.R.C.P. Ed., at Pembroke Dock, on December 25.

GAROTTING.—Mr. George Cooper, F.R.C.S., Surgeon to the Bloomsbury Dispensary, has addressed a letter to the *Morning Post*, calling attention to a case of garotting at his own door. The subject of the assault was a poor widow, who was returning home from nursing a lady, with her money concealed in her bosom. Two men, dressed like gentlemen, assaulted her in Woburn-place, Russell-square. She was rendered unconscious by a blow on the head, and was then plundered of her wedding-ring and money—£7 10s. The woman sought shelter at Mr. Cooper's door, and has been under his care ever since. He adds:—"About the time mentioned [nine p.m.], I was engaged in visiting some patients in the immediate neighbourhood, when, on passing along the northern side of Russell-square, I noticed a policeman engaged in conversation with a man-servant at an area-gate for at

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least a quarter of an hour, he being similarly occupied on my return home. My residence is only a short distance from the spot alluded to; consequently, at this period a poor woman was being thus maltreated whilst a policeman was idling his time, instead of patrolling the streets and protecting the public."

ETHNOLOGICAL SOCIETY.—At the meeting of this Society, held on Tuesday last, John Crawfurd, President, in the chair, a paper was read by the President on the "Commixture of Races of Man in Africa." In the course of his paper, Mr. Crawfurd discussed the causes which influenced the civilisation of Ancient Egypt. He observed that—"Egypt is a country in which foreign blood has been intermixed with native in greater abundance and variety, perhaps, than in any other part of the world. The aborigines were a peculiar race, differing from the rest of mankind physically and intellectually, even from their nearest neighbours, the Arabs and Phœnicians. Favoured by the peculiarity of the Nile, which almost spontaneously irrigated and fertilised their small country—for the Egypt of the Nile is little more than one-half of the size of Ireland—the Egyptians attained an earlier and a higher material civilisation than, perhaps, any other people, unless, perhaps, we except the Hindoos and Chinese, whose great rivers conferred upon them benefits similar to those which the Nile conferred on the people of Egypt. The late Mr. Buckle ascribed the early civilisation of the Egyptians to the capacity of their country for the production of dates,—a wild and groundless hypothesis, for it is certain that no people feeding on fruits, on roots, or the farinaceous pith of trees, ever attained a decent measure of civilisation. Some one cereal or another seems indispensable to the growth of civilisation. A people without corn never, for example, invented the art of writing. Wheat has been the chief instrument for this purpose in the temperate regions of the Old World, rice in intertropical Asia, and maize in America. The civilisation of the Egyptians, however, was of a feeble and effeminate character. Their government was an unmitigated despotism, and, in the language of Gibbon, their superstition was, of all others, 'the most contemptible and abject'—of such a character that even tolerant Rome could scarcely endure it. The Egyptians wasted their strength in building huge tombs and temples to nameless kings and deified oxen. They wanted the courage to defend themselves, and, while their wealth attracted invaders, every invader became an successful conqueror. They themselves subdued only poor tribes in their vicinity; and even so small a nation as the Jews, when they found a leader of genius, were able to baffle them, and escape from the bondage in which they were long held." Papers were also read by W. Bollaert, Esq., F.R.G.S., on a "Human Skeleton found in a Fissure at Kellet, in Lancashire," and on "Indian Antiquities from Ecuador." The latter were derived from a stratum underlying seven feet of marine clay, and represented large apes, and human beings with the crania artificially deformed. Observations were offered on the subject by Mr. Carter Blake, Mr. S. J. Mackie, Mr. Christy, Sir Charles Nicholson, and Sir John Davis. The next meeting of the Society will take place on the 20th inst.

ST. THOMAS'S HOSPITAL.—Mr. McWhinnie, of St. Bartholomew's, has addressed a sensible letter to the Editor of the *Morning Star*, on the subject of the future of St. Thomas's. He advocates the establishment of the Hospital near its old site, and also the erection of a country branch Hospital in some healthy open locality. We extract a passage from his letter:—"In most of our Hospitals, the vacant beds, excepting those which are reserved for casualties, are, on a certain day in the week, filled from amongst the numerous applicants, many of whom, of necessity, cannot obtain admission. Such selection, for many reasons, is often a very painful task. One of my colleagues—the Physician of the week—would recollect, whilst sharing the duty with me, saying, 'On these occasions, one ought to have a heart of stone, in having to reject so many distressing cases.' Now, not a few of these cases are constantly turned away, not on account of the insufficiency of bed accommodation, or that their complaints are of a trifling nature, but are refused, and constantly refused, because the air of our wards is judged unsuitable to them. Some of these poor persons may have been sent up expressly from the country, and thither they are recommended at once to return. Now, what a boon it would be, as I have frequently remarked, to the almoners in the admission-room, for our Hospital to be able to command, for properly-selected cases, a few beds, in a convenient and healthy spot, there to receive some of the advantages they enjoy when sent by us to a sea side Infirmary, while they would be more within our reach and continued supervision. There are other cases of a description more especially Surgical, whose treatment might, not only with safety, but even advantage, be postponed for time and season. One single illustration may be allowed for my argument. An operation of comparatively modern date, and which originated with an English Surgeon, Mr. Park, of Liverpool, consists in relieving a patient of an irreparably diseased joint without sacrificing the entire limb, which, being thus preserved to the sufferer, remains of considerable use to him afterwards. Now, the statistics of this important operation, which is considered one of the triumphs of conservative Surgery, tell much in favour, as we should expect, of its performance in the country, for the patients requiring it are frequently of a weak and scrofulous habit, and I have, for this reason, as friends associated with me know, declined on more than one occasion undertaking it in St. Bartholomew's Hospital on patients, though sent up for the purpose, and whose cases were deemed proper for this treatment; and although the operation is not unfrequently attended with a happy result in our London Hospitals—in some it is performed in more instances than in others—yet no Surgeon would affirm that a case of this description would not, with the same judicious treatment, have a better chance of recovery in pure air. The same applies to other operations: instances could be multiplied. 'Let me have,' as an eminent *confrère* once said to me, 'the skill and experience of a Hospital Surgeon, with the advantages of country air and scene, and I believe that there is scarcely a London operator who would not prefer such were he himself the sufferer from a complaint of this kind.'"

THE HOTEL DIEU.—The Paris correspondent of the *Times* writes:—"The demolition of the Hospital of the Hôtel Dieu and its reconstruction, which the inhabitants of Paris have loudly called for during many years, are at length decided on. The place on which the new Hospital is to be erected is not yet fixed; but a decision must shortly be adopted, inasmuch as the present building is so defective. This is the second time that the Hôtel Dieu will have been displaced. The primitive position of the Hôtel Dieu was to the south of the little church of St. Christophe, nearly in the middle of the *parvis* of Notre Dame. The Seine was not then, as it is now, confined with walls, and its waters, after the least flood, washed the wall of the old city. During the excavations made in 1847 the foundation of this wall was discovered. It followed a line parallel to the river, and its position is distinctly indicated by the iron railing of the garden of the Hôtel Dieu in the Rue Neuve Notre Dame. The present building, consequently, could not have been erected until after the demolition of that wall. The opening of the Rue Notre Dame, which was accomplished in 1181, in order to facilitate the approach to the grand entrance to the church then being constructed, and which absorbed a portion of the church of St. Christophe, coincides with the destruction of the Gallo-Roman wall. Thus the appellation under which it was generally known—*Hospitale Pauperum quod est apud ecclesiam Sancti Christofori*—was beginning to be replaced by its present title, *Domus Parisiensis Dei*. The Hospital, moreover, did not in those distant ages possess the character which it subsequently acquired. It was rather a house of refuge for mendicants and foreigners. The friars, according to the ancient custom, washed the travellers' feet. It was not until the reign of Philippe Auguste that invalids were admitted. This Prince, who may be called the founder of the Hospital, built the Hôtel St. Denis and its additions. Blanche de Castille, his daughter-in-law, founded the Hall St. Thomas, and Louis IX. built the large hall on the bank of the river and a chapel beside the Petit Pont. The crypt, which extends under the ground occupied by the old church and by the Hall St. Thomas, and which now serves as a wine-cellar, has preserved the character of the period, and the distinct signs of the 13th century. Louis XI. decorated the two doorways opening on the Petit Pont. All the buildings on the banks of the Seine were constructed during his reign. In 1535 Cardinal Duprat constructed a magnificent building called the Legate's Hall. It occupied the place now used as a clothes store. When Francis I. heard of this munificent act of the Cardinal, he observed that the hall should be very large to contain all the people in

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had ruined. It appears from the bill of the carpenter who made the beds for this hall, that a bench was placed beside each bed, called 'the bench of repose,'—that is, if the bed contained three invalids, it might be made to accommodate six by permitting three to sit on the bench while three took their turn in the bed. During an epidemic which prevailed in Paris, eight persons were placed in a bed. The buildings of the Hôtel Dieu being in a dilapidated state during the reign of Henry IV., they were repaired by that monarch. Between the years 1802 and 1804 the Hôtel Dieu was again repaired, and the building lost its mediæval character. The chapel, with its doorway, was taken down, and the architect, Clavareau, replaced the handsome and delicate work of the 13th century with a heavy peristyle."

Salted Slugs.—The author of "Life in Normandy," a book full of curious details of the customs of the Norman peasants, tells us that they add to the pleasures of their table by partaking of sea-crows, cuttle-fish, limpets, frogs, snails, and maggots. He illustrates the nutritive properties of the latter by the following:—"An Irish gravel-digger lately died near Sydenham, leaving his widow and family utterly destitute, save that he had built them a hovel against the side of the gravel-pit, which was on the common. There the widow and the orphans lived, and it was observed that, though they had no visible means of earning a livelihood, they were fatter and rosier than any labourer's family in the parish. About this time hen-roosts were robbed and sheep were stolen in the neighbourhood, and the plump widow and her rosy family were at once set down for the thieves. A warrant was granted to search her house, and the policemen found what they deemed proof of her guilt. They took her in custody, and bore with them the proof in the shape of a good-sized cask, containing, as they said, the sheep, salted and minced into morsels. The poor woman denied that the little salted morsels were of the composition of mutton, but she refused to say what they were to 'them blackguards'—the policemen. She told the magistrate, however, what they were. 'Send them fellows away, and I will tell your honour,' she said. Under the seal of secrecy she let out that they were salted slugs. She had seen them given in Ireland to a young man who was supposed to be in a consumption, and who grew fat and well on the diet; and, failing other means of subsistence, she tried the same food for her starving children. She first tried the slugs fresh; they were found to be good and nourishing; and then she took to salting them for winter consumption. Her mode was to drop the slugs into boiling water, and then to lay them with salt in a cask." The author concludes the story with the obvious moral, that no one need starve where there are plenty of black slugs to be got.

BOOKS RECEIVED.

A Practical Handbook of Medical Chemistry. By John E. Bowman, F.C.S. London. 1862. Pp. 303.

Charter of Bye-Laws and Regulations of the Royal College of Physicians of London. 1862. Pp. 92.

Die Krankheiten des Ohres, Ihre Erkenntniss und Behandlung. Ein Lehrbuch der Ohrenheilkunde in form Akademischer Vorträge. Von Dr. Von Tröltsch. Wurzburg. 1862. Pp. 262.

The Tropical World: a Popular Scientific Account of the Natural History of the Animal and Vegetable Kingdoms in the Equatorial Regions. By Dr. G. Hartwig, Author of "The Sea and its Living Wonders." With eight chromoxylographic plates, and numerous woodcuts. London: Longman, Green, Longman, Roberts, and Green. 1863. Pp. 566.

Illustrations of Puerperal Diseases. By R. Uvedale West, M.D. London: John Churchill. 1862. Pp. 84. Second Edition.

Lectures on the Distinctive Characters, Pathology, and Treatment of Continued Fevers; delivered at the Royal College of Physicians of London. By Alexander Tweedie, M.D., F.R.S. London: John Churchill. 1862. Pp. 301.

Lectures on Surgery; delivered in St. Bartholomew's Hospital. By William Lawrence, F.R.S. London: John Churchill. 1863. Pp. 632.

A Treatise on the Continued Fevers of Great Britain. By Charles Murchison, M.D. London. 1862.

The Elements of Christian Science: a Treatise upon Moral Philosophy and Practice. By William Adams, D.D. Philadelphia. 1857.

Familiar Letters on the Diseases of Children. Addressed to a Young Practitioner. By James Bower Harrison, M.D. London. 1862. Pp. 197.

China from a Medical Point of View in 1860 and 1861; to which is added a Chapter on Nagasaki as a Sanitarium. By Charles Alexander Gordon, M.D., C.B., Deputy Inspector-General, etc., etc. London. 1863.

Diseases of the Skin. By Erasmus Wilson, F.R.S. London. 1863. Pp. 784.

Sanitary Statistics and Proceedings in St. Giles's District. By Dr. Buchanan. London. 1862.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

C. S. R.—Let bygones be bygones.

Dr. Abbotts Smith.—The communication shall appear. Want of space only has delayed it.

An Agriculturist.—We shall be happy to publish the letter if the author will favour us, in confidence, with his name and address.

Vacancy.—A House-Surgeon is required to the Lock Hospital, Dean street, Soho.

To Correspondents.—All communications intended for publication should be authenticated, in confidence, by the enclosure of the author's name and address; but especially should communications be so accompanied which reflect in any way upon the character, doings, or writings of others.

Extension of Areola in Pregnancy.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Can you or any of your readers inform me whether the following is an uncommon occurrence:—

A woman, aged 21, recently delivered with her first child, has an areola round the nipple, measuring 4¼ inches in diameter, and of a very deep brown colour; both breasts are alike, and, as they are not unusually full or large, this circle of nearly 13 inches in circumference has a very singular appearance. The woman is rather stout, and has fair skin and hair.

Portsmouth, January 14. I am, &c. M.D.

Nitrate of Potash and the Fibrinous Coagulation of the Blood.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Dr. Basham, in his interesting lecture on the treatment of acute rheumatism by nitrate of potash (*Medical Times and Gazette*, December 20, 1862), lays it down as an ascertained fact, that "nitrate of potash, circulating in the blood, prevents the separation or coagulation of the fibrin." On December 23, I observed, in performing a post-mortem examination, a fact which must, to a considerable extent, modify the position assumed. The patient had died somewhat suddenly on the morning of the 22nd. He had long been labouring under the general paralysis of the insane, and was known to have heart disease, but presented no severe disturbance of general health until about ten days before death. He was then observed to be getting rapidly dropsical. The serous cavities and cellular tissue of his body were gradually filling and becoming infiltrated with serum, and symptoms corresponded—dyspnœa, prostration, cutaneous ulceration, etc. The urine was tested and found albuminous, and physical signs of mitral regurgitation were revealed on examination. Nitrate of potash was prescribed in the doses of gr. xii every two hours, in combination with Sprt. eth. nit., considerably diluted, and was sustained up to the time of death. On examination the blood was found to be generally very dark and coagulated; and the heart, which was hypertrophied, dilated, and fatty, contained, especially on the right side, a large quantity of black sanguineous coagulum and masses of fibrinous clot encircling the tubercular structures of both ventricle and auricle, and continued into the large vessels.

Other pathological appearances were very interesting, but foreign to the point in question. The kidneys were severely affected with Bright's disease, and what remained of their pyramids congested.

I am, &c. Kenneth M'Leod, A.M., M.D.

Durham County Asylum, January 14.

Scarlatina Co-existent with Measles.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your Number of last week I read with much interest a short letter on the above subject; and having lately met with a case somewhat similar, I forward you a short account of it. In this case the scarlatina preceded the measles.

W. T., aged 2 years and 8 months, was taken ill on December 7. I first saw him on the evening of the following day, when there was a very distinct rash of scarlatina on the abdomen, arms, and legs. There was no eruption on the face, but the mother states that she noticed the rash on the face and neck last evening and this morning. The surface of the body was very hot. There was no swelling of the tonsils. On the 10th, the tonsils were slightly swollen. On the 13th, the rash had disappeared, and the cuticle began to desquamate; the tonsils rather more swollen. On the 16th he appeared quite well, and all swelling about the throat had subsided. On the 21st, a peculiar mottled eruption, of a dark purple colour, appeared on the face and neck (where the mottled appearance was most marked), ultimately extending to the abdomen and extremities. The eruption on the abdomen was slightly raised, and felt rough to the feel; and the day following the cuticle began to be detached in branny scales. On the 24th, the child died comatose, eighteen days from the beginning of the illness, and the fourth day from the appearance of the second rash. I may mention that on several occasions during his illness the child parted with large lumbrici.

I should be glad if some of your correspondents would give us the benefit of their experience on this subject, as so little is said about it in Medical writings. I am, &c.

January 10. An Inquirer.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—If you can make room for them, the following notes of a case of co-existent measles and scarlatina, which I attended about three years since, will interest your correspondent, "R. C. B.," and possibly others, as such cases are uncommon:—

A young lady, aged 18, whose sister had just passed favourably through measles, but who was not known to have been exposed to the infection of scarlatina, was attacked with catarrhal symptoms, and, when seen the following morning, had a few spots of commencing measle eruption, and the ordinary symptoms of that disease. On the third day of indisposition, the measle eruption had but little developed, and was still confined to the face and neck, but, in addition, the diffused rash of scarlatina had also made its appearance; the tongue and throat were characteristic of the latter disease. Later in the day the throat had begun to ulcerate, the

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scarlatinous eruption was more marked, the measle rash, as before, slightly so; and it became a question if the case were not simply scarlatina. The following morning, however, both rashes were well marked; the measle rash had put on the crescentic arrangement—the scarlatina was more general, and deeper in tint. My partner saw her with me, and agreed that there could be no doubt as to the co-existence of the two diseases. In the evening of this day there was a violent attack of palpitation and dyspnœa. (A bruit had previously existed, but there had been very slight results produced by the heart disease, nor has it produced much inconvenience since her recovery.) The next morning the rashes were both paler, but the measles more so than the scarlatina, which was more extensively diffused than ever. The throat and other symptoms improved By evening the measle rash had almost disappeared; the scarlatina much as in the morning. From this time convalescence was steady. The cuticle desquamated very freely. I am, &c.

Heath-street, Hampstead, January 10. ROBERT R. PRANCE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your journal of January 3, "R. C. B." asks if any one has seen scarlatina existing with measles? and, in the same journal, "A Medical Student" doubts the rheumatic character of the acute arthritis that sometimes supervenes in cases of scarlet fever. At the present time I have one case under my care that illustrates both questions:—

A boy, aged about 8 years, was first taken ill with measles; on the going off of the rash, sore throat came on, and was followed by the rash and other symptoms of scarlet fever, accompanied with tenderness of the joints, and, at times, great perspiration. The day after the commencement of desquamation, the pains in the joints became worse; the perspiration became profuse; the tongue, which was dry and red, has become moist, with a thick white fur; pulse 144; and urine, from being abundant and clear, has become scanty and high-coloured, with lithates. There is now effusion into some of the joints, and desquamation, which was very limited, has ceased.

Without being aware of the previous history of the case, I doubt whether "A Medical Student" could diagnose the case to be anything but acute rheumatism. The boy's two sisters and mother have had the measles, and one sister has since had the scarlet fever, and is now in the desquamation stage.

It is the opinion of some, that no two poisons can exist in the body at the same time, each producing its own peculiar symptoms. The above case illustrates that measles, scarlet fever, and rheumatic fever may follow so close, one upon the other, that you cannot say that the action of one poison has ceased before that of the other has begun. I have before witnessed the appearance of the rash of scarlet fever the day after that of measles had faded. That small-pox and measles may occur together in the same subject is another fact.

A little girl, whom I recently attended, was taken ill with a mild attack of small-pox; there was an abundant crop of pustules, and on the second day of their appearance the rash of measles appeared, and she went through the two diseases together. Her brother had them separately, the measles first, and the small-pox when convalescent of the former.

I am, &c.

11, Craven-hill Gardens, January 13. J. BRENDON CURGENVEN.

CHLOROFORM IN OVARIOTOMY AND PARTURITION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The interest attaching to ovariotomy at present is so great, and objections are so often made to chloroform in this operation, for fear of syncope following the tapping and removal of some quarts of fluid, that it seems desirable to state the fact, that there are really very few operations where there is such and so great a "tolerance" of chloroform as ovariotomy; whilst in two or three cases (out of about thirty where I have administered chloroform for this formidable class of cases), where some faltering of the pulse came on, the immediate substitution of sulphuric ether at once restored the pulse and respiration.

A very erroneous, quackish idea has got abroad, that there is some new specialism or mystery in giving chloroform so that it shall not go the "round of the circulation." And we can have parturition without pain, or chloroform in the circulatory current! as we may have the present year 1863, perhaps, without the usual 1st of April in the "round of its circulation," a day dedicated to not overwise people who believe and subscribe to everything they see in print. We do not know exactly how much chloroform is taken up by the circulation; the quantity is, however, very small, and it probably exists as a vapour in the blood (like ammonia?) and certainly not at all, as recently described in America, in shape of some theoretic new formylic abstraction. It is, of course, quite absurd that we can produce anæsthesia (now more generally termed "analgesia"), as in parturition, by rapidly-repeated but interrupted impressions on the nervous system, which prevents the chloroform getting into the blood. This is as nearly nonsense as we can conceive anything to be; yet it is put forward as beyond contradiction—as the theoretic formyle abstraction from America, which destroys the blood altogether.

I find some very erroneous ideas on chloroform, also, in a book of Casper, just brought out by the Sydenham Society—ideas long since exploded by the earlier experiments of our late able friend, Dr. Snow. The fact is, in fine, the use of chloroform is becoming simpler and safer every year in midwifery and such operations as ovariotomy; and safer according as its use is simpler. We only encumber it with patent Calabrian pipes and bags, and aromatic spices of nutmegs, cloves, pterocarp chips, etc., which are to anæsthetics what the infallible virtues of "puccoon" were in curing all forms of cancer when mixed with chloride of zinc and other caustics, no credit being given to the caustics themselves.

Chloroform *vapour* in the blood most probably lessens for a short time the peculiar nervous polarity of the cells of the grey matter of the *sensorium*, as this polarity is described, for instance, by Dr. Radcliffe, or the late Dr. Todd. It exists in the blood in a different state from either ether or carbonic acid; the former (ether) not only is dissolved in the blood, but it seems to dissolve out the fat of some tissues, which fat glistens in spiculæ under the microscope in the blood of ether patients. And as to carbonic acid and oxide, if Mr. Gulliver would try their effect on blood globules and report on it, he would astonish his readers. The action of all these agents, in fact, is well known, so that it is absurd to say in parturition no chloroform becomes mixed with the blood.

Chloroform *vapour* in the blood is always striving to make its exit again, having completed the entire figure 8 of the circulation. There has not been a single accident from chloroform in midwifery. This is due, as I conceive, to the active healthy state of the reflex and respiratory systems during labour, and not at all to this new or quackish idea, so painful to be obliged thus to comment upon. I am, &c.

Sackville-street, W., December 28. CHARLES KIDD, M.D.

COMMUNICATIONS have been received from—

ROCHESTER; Mr. R. REYNOLD; Dr. GREENHOW; ALIQUIS; Mr. J. B. CURGENVEN; Dr. WILLIAM BELL; Mr. McWHINNIE; AN AGRICULTURIST; UNIVERSITY OF ST. ANDREWS; Mr. JAMES HUGHES; Prof. LAYCOCK; Dr. H. JACKSON; Dr. S. MARTYN; Mr. FLETCHER; Mr. J. T. BARRIE; X.L.Y.; M.D.; Dr. KENNETH McLEOD; Mr. H. LEE; Dr. ROBERTS; Mr. S. GAMGEE; EDINBURGH; Dr. MOORE.

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 10, 1863.

BIRTHS.

Births of Boys, 1024; Girls, 930; Total, 1954.
Average of 10 corresponding weeks, 1853-62, 1769·4

DEATHS.

	Males.	Females.	Total.
Deaths during the week	785	750	1535
Average of the ten years 1853-62	677·7	678·3	1356·0
Average corrected to increased population..	..	..	1492
Deaths of people above 90	..	..	8

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	3	19	14	1	5	8	3
North ..	618,210	9	16	25	7	11	9	4
Central ..	378,058	..	9	9	..	9	6	..
East	571,158	9	2	16	1	12	28	4
South ..	773,175	3	15	18	4	16	11	2
Total.. ..	2,803,989	24	61	82	13	53	62	13

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·258 in.
Mean temperature	40·1
Highest point of thermometer	48·6
Lowest point of thermometer	29·9
Mean dew-point temperature	37·4
General direction of wind	S.W. & S.E.
Whole amount of rain in the week	0·77 in.

APPOINTMENTS FOR THE WEEK.

January 17. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

19. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Dr. Richardson, "On Alcoholic Phthisis."

ROYAL INSTITUTION, 2 p.m. Special Meeting of Members.

20. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Marshall, F.R.S., "On Animal Mechanics."

21. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

22. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Professor Frankland, F.R.S., "On Chemical Affinity."

23. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Professor Tyndall, F.R.S., "On Radiation through the Earth's Atmosphere."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday (to-day) at 2 p.m.:—

By Mr. Fergusson—For Necrosis of Tibia; Removal of Dead Bone from Hand; Lithotrity.

By Mr. Henry Smith—Removal of Tumour from Thigh.

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F. PORTER SMITH, M.B. Lond.,
Evercreech, March, 1862. Associate of King's College, London, &c.

*** Fresh Reports will be published in the Medical Journals from time to time.—Bristol, 1862.

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NOTIFICATION.

THE attention of Medical Men is directed to the Piratical application, by some parties in the Trade, of the term "Chlorodyne" to various mixtures compounded of Chloric Æther, Opium, Indian Hemp, and Peppermint, in imitation of the ONLY Genuine preparation of this name.

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ORIGINAL LECTURES.

LECTURES ON DISEASES OF THE EYE.

DELIVERED AT

The Middlesex Hospital,

BY

SOELBERG WELLS, M.R.C.S. Eng., M.D. Edin.
Ophthalmic Surgeon to, and Lecturer on Ophthalmic Surgery at, the Hospital.

STRABISMUS.

LECTURE III.

GENTLEMEN,—Let us now pass on to the operation for strabismus. My time will not permit me to describe the various modes of operating which have been practised, and I shall, therefore, confine myself to the description of Von Graefe's operation, which I practise myself, and consider the best. I may mention, however, that the old operation, in which the conjunctiva and subconjunctival tissue were widely incised, the capsule of Tenon lacerated, the muscle itself, and not its tendon, divided, should never be performed. Its effect is generally most unhappy, and it brought the operation for strabismus into great disrepute.

The principle of Von Graefe's operation consists in a very careful division of the tendon close to its insertion, with the smallest possible amount of laceration of the subconjunctival tissue, and the tendinous processes of the capsule of Tenon. We diminish the power of the muscle by giving it a more backward insertion; but we, at the same time, preserve its length intact. Our object is only to weaken the muscle, and not to render it more or less impotent. Before proceeding to consider this method of operating, I would, however, recall to your mind the anatomical relations of the muscles of the eye with the ocular sheath. Commencing at the optic foramen, and loosely embracing the optic nerve, the sheath expands, and passes on to the eyeball, which it encloses. It is loosely connected with the sclerotic by connective tissue—so loosely, indeed, as to allow of the free rotations of the globe within it. At the equator of the eyeball it is pierced by the tendons of the oblique muscles, and, more anteriorly, by the tendons of the four recti muscles, with which it becomes blended; being finally lost on, rather than inserted into, the sclerotic, close to the cornea. The posterior portion of the sheath, up to the passage of the tendons, has been called the capsule of Bonnet; the anterior portion, from the passage of the tendons to its insertion into the sclerotic, being designated the capsule of Tenon. On piercing the capsule the tendons of the recti muscles beome connected with it by slight cellular processes sent forth from the capsule. These processes prevent the too great retraction of the muscle after the division of its tendon, which would be followed by a great loss of power. It is, therefore, of the utmost consequence that these connecting processes should not be severed by the tendon being divided too far back, or be lacerated by rude and careless manipulations with the squint hook. Von Graefe has, moreover, pointed out that the result may be unfavourable, even although the tendon has been divided anterior to these fibres, for the sheath of the tendon becomes thickened from the point at which it passes through the capsule, and this thickening extends nearly up to its insertion. If the tendon is, therefore, not divided sufficiently close to its insertion, it is apt to retract within this thickened sheath, and this retraction will in many cases prevent its reunion with the sclerotic. In the old operation the muscle was divided far back, frequently even posterior to its passage through the capsule, and it was consequently often rendered so powerless, that the eyeball could not be moved in this direction; its opponent acquired a corresponding preponderance of power, giving but too frequently rise to a secondary squint in the opposite direction. Hence, the popular dread of the operation, "lest the eye should go the other way." But you need not fear such unfortunate results if you practise Von Graefe's operation, if you are careful in its performance, and if you are thoroughly conversant with the theoretical part of the subject. Never do too much, for nothing is so difficult as to retrace your steps, to patch up a fault you have committed. It is far easier subsequently to increase the effect of the operation than to diminish it. Let me impress this strongly upon your minds, for by following this advice you will escape many unpleasant *contretemps*. I know of no surgical operation which is so safe and so sure in its cure as that for strabismus when properly performed. Let us now pass on to the description of Von Graefe's operation.

As it is sometimes very painful, the patient should be placed under the influence of chloroform. The eyelids are to be kept apart by the spring speculum, or, if this proves not sufficiently strong, by the broad silver elevators. An assistant should evert the eye with a pair of forceps (I am supposing that the internal rectus of the right eye is to be operated on), taking care to do so in the horizontal direction, without rotating the eyeball on its axis, otherwise, the horizontal position of the internal rectus will be changed. The operator should then seize, with a pair of finely-pointed forceps, a small, but deep fold of the conjunctiva and subconjunctival tissue, close to the edge of the cornea, and about midway between the centre and lower edge of the insertion of the internal rectus. He next snips this fold with the scissors (which should be bent on the flat, and have tolerably sharp points), and, burrowing beneath the subconjunctival tissue in a downward and inward direction, makes a funnel-shaped opening beneath the subconjunctival tissue, this being, however, done very carefully so as not to divide it to too great an extent. If the subconjunctival tissue is thick and strong, it will be better first to take up a small fold of the conjunctiva only, to open this, and then, seizing the subconjunctival tissue, to divide the latter. The squint-hook (which should be bent at a right angle, and have a slightly bulbous point) is then to be passed through the opening to the lower edge of the tendon. Its point being pressed somewhat firmly against the sclerotic, the hook is to be turned on the point and slid upwards beneath the tendon, as close to its insertion as possible, and the whole expanse of the tendon caught up. You must be careful not to direct the point of the hook upwards and outwards, otherwise it may perforate the fibres of the tendon, and only a portion of the latter be caught up; the direction of the point should, therefore, be rather upwards and inwards. When the tendon has been secured on the hook, the conjunctiva which covers its upper portion may be gently pushed off with the points of the scissors, so as to expose the tendon, which is then to be carefully snipped through with the scissors as closely as possible to its insertion. When it has been completely cut through, the conjunctiva is to be slightly elevated on the point of the hook, and a smaller hook passed upwards and downwards to ascertain whether the lateral expansions of the tendon have been divided. Should a few fibres remain, you must divide them, and again ascertain whether any others are still present. Never omit to satisfy yourselves upon this point, for sometimes the lateral expansions are considerable, the tendon spreading out like a fan, and, although a few fibres only might remain undivided, they would often suffice to spoil the effect of the operation.

If you find, on the first introduction of the hook, that it slides up to the edge of the cornea without having caught up the tendon, you may be certain that you have either not divided the subconjunctival tissue at all, or that you have passed the hook between it and the conjunctiva. If the former is the case, you must open the subconjunctival tissue, and then, on reintroducing the hook, you will have no difficulty in finding the tendon. The opening in the conjunctiva and subconjunctival tissue should be but small, and the excursions with the hook limited, otherwise the subconjunctival tissue and the lateral processes of the capsule of Tenon will be extensively lacerated, which will be followed by a too great recession of the muscle.

The after treatment is very simple. The eye, after having been well washed and cleansed of any blood coagula, is to be kept constantly moist with cold water dressing during the day of operation, so as to prevent any extensive effusion of blood under the conjunctiva. No button of granulations will form on the stump of the tendon, if the latter has been divided close to its insertion, and if the opening in the conjunctiva has been made near the upper or lower edge of the tendon, so as not to leave the latter exposed.

The effect upon the squint, which follows immediately upon the operation, will not be the permanent one. We may, indeed, distinguish three stages in the effect produced by the operation:—1st. The period immediately following the opera-

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tion; 2nd. After three to four days have elapsed; 3rd. After the interval of a few months,—this being the permanent effect. During the first stage the effect will be considerable, for the eye can now only be moved in the direction of the divided muscle by the indirect connexion of the latter with the sclerotic by the lateral processes of the capsule of Tenon. As soon as the divided end of the tendon becomes reunited with the sclerotic, which generally occurs within three to four days, the effect will diminish, for the muscle now exerts again a direct influence upon the eyeball. This is the second stage. But we find that a further alteration in the position generally shows itself a few weeks or months after the operation, the effect being then again somewhat increased. This is due to the action of the opponent muscle, which, on account of its antagonist having been weakened, can now exert a greater influence upon the position of the eyeball.

A clue to the permanent result of the operation is furnished by the position of the operated eye during the accommodative movements of the eyes, when they are directed upon some near object. It is, therefore, of the greatest consequence always to test the position of the eyes during accommodation immediately after the operation, as soon as the effect of the chloroform has gone off. We have already seen that the position of the squinting eye (convergent strabismus) may vary when the object is approximated closely to the eyes; for whilst the optic axis of the healthy eye remains fixed upon the object, converging the more the nearer the latter is brought, the position of the squinting eye may undergo the following changes:—1st. It may retain its original position, sustaining only a few oscillating, irregular, lateral movements. 2nd. It may remain completely stationary, so that the angle of squinting will diminish the more the nearer the object is brought, until, at a certain point (if the squint be not excessive), its optic axis will also be fixed upon the object, and there will no longer be any squint. If, however, the object is approximated still closer, a divergent squint will arise; for whilst the healthy eye converges still more, the other retains its position, and now deviates (passively) outwards. 3. It resumes its position up to a certain point, and then, as the healthy eye moves inwards to follow the object, it makes an associated movement outwards. 4. It deviates suddenly and spasmodically inwards when the object is very closely approximated (a).

We should, therefore, immediately after the operation, ascertain whether both optic axes can be firmly fixed upon the object, when it is brought to a distance of from four to six inches from the eyes (their state of refraction being normal). If the eyes are very short-sighted, the distance should be still less. The final result of the operation may be predicted from the position which the operated eye now assumes. If it remains stationary when the object is brought up to within eight inches from the eyes, so that a passive divergence will arise on its being approximated still closer, we must expect a certain amount of divergence in the course of a few months. But this will be still more the case if the eye, instead of simply remaining stationary, makes an associated movement outwards. It is necessary to test this at short distances (four to six inches), for the eye might be able momentarily to fix its optic axes upon the object, although quite incapable of maintaining this position for any length of time. In both the above cases the effect of the operation is to be diminished by a conjunctival suture, and particularly so in the latter case. The effect of the suture will vary with its position and with the amount of the conjunctiva embraced in it. Its effect will be greatest if it be inserted in a diagonal direction from downwards and inwards, to upwards and outwards, so that the inner and outer lips of the wound are united. By giving it this direction we also prevent any sinking of the caruncle. The suture diminishes the effect of the operation by re-advancing the tendon, which is closely connected with the conjunctiva and subconjunctival tissue; the divided ends, consequently, will be more closely approximated, and the retraction of the muscle diminished. The suture may remain in for twenty-four to thirty-six hours.

The fourth position which the operated eye may assume during accommodation, viz., making a sudden spasmodic movement inwards, must make us fear that there will be a relapse, —that in the course of a few months the inward squint will again show itself; for this convergent squint, which at first only showed itself during accommodation for near objects, will gradually extend also to greater distances. In such cases the operation is said to have been only of temporary benefit; you should, therefore, at once intimate to the friends of the patient that the squint may return, and necessitate another operation.

The extent of the operation must be regulated according to the extent of the squint. I have already pointed out to you how the amount of the latter is to be estimated.

If the squint is but very slight (1 to 1½ line) a partial tenotomy is indicated. We must, however, divide at least three-quarters of the tendon, or even all but a few lateral fibres, otherwise the effect will not be sufficient. Should the latter exceed our wishes it is to be diminished by a suture. If the squint amounts to from 1½ to 2 lines, a careful, complete tenotomy is to be made. The conjunctival opening should be small, and the hook but of moderate size. The accommodative movements must be accurately tested immediately after the operation; for, if there is the slightest tendency to divergence, when the object is brought up to 8 or 6 inches from the eye, a suture should be inserted. In a squint of 2 to 2½ lines, the cellular tissue may be somewhat more freely incised, and a larger hook employed. In children we find that the effect is generally more considerable, for the muscle is not fibrous, and the surrounding cellular tissue is very elastic; we may, therefore, in them easily attain an effect of 2½ to 3 lines by a single operation.

If the squint exceeds 2½ to 3 lines, we must always operate upon both eyes. We may perform either a complete tenotomy in the squinting eye and a partial one in the other, or divide the tendon completely in both eyes. In this we must be guided by the amount of squint left after the affected eye has been operated upon. I advise you, as a general rule, never to operate upon both eyes at the same time, except the squint is very considerable, exceeding 4½ to 5 lines. For, if both muscles have been divided at the same time, you cannot accurately test the accommodative movements directly after the operation, and you thus lose the only clue to the permanent effect. It is, therefore, far safer to operate first upon the affected eye, and then, after a few days have elapsed, and the divided tendon has again reunited with the sclerotic, to ascertain how much of the squint is still left. The amount still remaining will guide you as to the extent of the operation necessary upon the healthy eye. If, after having operated upon the latter, you find that the effect somewhat exceeds your wishes, you can always diminish it by a suture. It certainly is far more brilliant to operate upon both eyes at the same time, and thus rid the patient at once of the squint, but then you run the risk of the unpleasant contingency of the eyes subsequently "going the other way." You should always remember that the cure is to be permanent, and not temporary. In some exceptional cases, however, you must run this risk—if, for instance, the time of the patient is limited, or a second visit impossible. If the squint exceeds five lines, you may, particularly in adults, operate safely upon both eyes at the same time. It may be occasionally necessary to operate not only upon both eyes, but even to repeat the operation upon the squinting eye, before you can cure the affection. This generally occurs only in cases of excessive squint, or if the strabismus has existed for a long time, and the muscle has become fibrous. This second operation upon the affected eye requires considerable care, for the effect of the correction will exceed the extent of the retraction, as the influence of the muscle upon the eyeball diminishes in proportion to the backward position of its insertion.

In divergent squint we may be somewhat bolder, particularly as to operating upon both eyes at one sitting. The effect of the operation is generally less, and has often to be increased by subsequent treatment. If we desire an increase in the effect, the patient should be made to look in the opposite direction, which will cause an increased retraction of the divided tendon, so that its reunion will take place further back than would have occurred if the eye had maintained a median position. If the abductor of the right eye has been divided, and we desire to increase the effect of the operation, the patient should be directed to look, as far as possible, towards his left side. The easiest way of attaining this is, by making the patient wear spectacles, the right half of each glass being covered with a piece of court-plaister, for he will in this way be obliged to look to the left. They should be worn during the first three or four days after the operation. Von Graefe points out the fact that, occasionally, though rarely, we meet with cases in which the operation is followed

(a) At page 402 (October 18, 1862), a misprint occurs to the effect that the eye moves spasmodically "outwards;" it should be "inwards."

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by no effect, either upon the position or mobility of the eyeball, and yet no lateral fibres of the tendon have remained undivided. In such cases there is a second connexion of the muscle with the sclerotic further back, near the equator; in one case, indeed, he found it even posterior to the equator.

If the operation for squint be carefully performed, there is no fear of any but the slightest sinking of the caruncle. A little sinking will occasionally occur, whatever mode of operation be employed; indeed, I know of no method which can guarantee a *perfect* immunity from it. Von Graefe thinks that the sinking does not depend so much upon the gaping of the conjunctival wound, and retraction of its inner lip, as upon the cicatrization of the connective tissue situated between the muscle and conjunctiva, by which the movable caruncle is retracted. The further back this cicatrization extends, the more will the caruncle sink. Hence, the danger of incising the tendon too freely, and of any considerable sweeping about with the hook, and consequent extensive laceration of the subconjunctival tissue.

ORIGINAL COMMUNICATIONS.

ON THE ACTION OF CERTAIN SUBSTANCES UPON PHTHISIS.

By RICHARD PAYNE COTTON, M.D.

Fellow of the Royal College of Physicians, London; Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

No. X.—Sesquichloride of Iron.

The sesquichloride of iron is, I believe, a very old remedy for phthisis; and, although there may be few Medical Practitioners whose experience of its use has not enabled them to form their own conclusions on the matter, I was, nevertheless, anxious to compare its effects with those of other agents. As in my previous experiments, therefore, I administered it in twenty-five cases of uncomplicated phthisis furnished by my own wards in the Consumption Hospital. Of this number, eight were males, and seventeen females. Eleven were in the first, four in the second, and ten in the third stage of the disease. None of the cases presented any very remarkable feature, all of them being examples of the ordinary run of patients affected with chronic consumption, care having been taken to exclude those in whom there existed either any special complication or secondary affection which demanded a different treatment.

The dose consisted of ten or fifteen minims of the Tinctura ferri sesquichloridi administered in water two or three times a-day, and was continued for periods varying from three weeks to four months. Cod-liver oil was also taken sometimes by a few of the patients; but, as a general rule, this substance was avoided, at least temporarily, with the view of not complicating the result.

Twelve patients improved greatly, five improved slightly, and eight experienced no relief whilst under treatment. Ten of the seventeen more or less improved cases did not take any cod-liver oil; but, by subsequent observations, it was sufficiently evident that the greatest good was brought about by the combined influence of these two substances.

Were I to be asked from which of the ten medicinal agents already experimented upon, I had observed the most benefit, I should unhesitatingly fix upon the sesquichloride of iron. For some years, indeed, I have been in the habit of using this substance extensively, both in private and Hospital practice, and some of the most happy results I have met with in the treatment of phthisis have certainly taken place during its administration. In no instance have I seen any reason to connect with its use the occurrence either of hæmoptysis, or any other active symptom. In passive hæmoptysis, indeed, I have often found it a very useful remedy; whilst it often helps to check excessive secretion, whether from the skin or the mucous surfaces.

A great disadvantage inseparable from Hospital practice is, that we generally lose sight of our patients at the very moment when their cases begin to be instructive. Circumstances have enabled me, however, to watch the continued progress of three out of the twenty-five cases treated with the sesquichloride of iron; and, as they are marked instances of its success, I shall briefly relate them.

Case 1 was that of a dressmaker, admitted into the Brompton Hospital six years back. She was well known to Dr. Arthur Farre, who had watched her case, as that of a private patient, from the very commencement, and who agreed in the opinion that it was one of advanced phthisis, with a cavity of moderate size under the left clavicle. The pulse was about 100, and the general health at a low ebb, although there were no symptoms of immediate danger. She was ordered fifteen minims of the tincture of sesquichloride of iron in water, two or three times a-day, with cod-liver oil and good diet. After remaining four months in the Hospital, during which time she took the steel very regularly, but the oil only occasionally, as it sometimes disagreed, she became very much better, and shortly afterwards returned to her employment. Dr. Arthur Farre and I have seen this patient occasionally up to the present time. She has continued, with a few short intermissions, both the steel and cod-liver oil; and although, perhaps, it might be going too far to say that she is cured of her disease—since we know only too well how frequent and how fatal in such cases is a relapse—her general health is fairly good, her pulse is quiet, and her cough gone; and she is now following pretty actively her business as a milliner. The physical signs in this case are not uninteresting. The thoracic wall over the original seat of the cavity has sunken considerably; there is considerable dulness there, and where the respiration was cavernous it is now simply very weak and harsh, but unattended with rhonchus. Dr. Arthur Farre has repeatedly said that he considers this case one of the best illustrations of arrested phthisis he has ever witnessed.

Case 2 was that of a governess, who was admitted into the Brompton Hospital four years back. She had all the symptoms of advanced phthisis; the pulse was over 100; the breathing oppressed; the cough severe; and there was considerable emaciation. Cavernous breathing, with loud gurgling rhonchi, unmistakably announced the stage of the disease. Under the continued influence of tincture of sesquichloride of iron, with cod-liver oil, and an opiate, chiefly at night, to check the cough and promote sleep, with ample diet, her health was gradually restored; and, after six months' perseverance with the treatment, she left the Hospital in fair health, greatly increased in weight, and able to undertake some light occupation. She was re-admitted into the Hospital the following winter, having continued the steel and cod-liver oil during the interval. She had lost a few pounds in weight, and her cough had returned; but her pulse was quiet, and there had been no recurrence of any active symptom. After leaving the Hospital a second time greatly improved, she went into the country, and for some time I heard very good accounts of her condition, the last report mentioning that she still continued both the steel and oil. For the last few months, I have been unable to ascertain particulars of this patient; but for more than three years I had ample evidence of her satisfactory progress. Mr. Edwards, the Resident Medical Officer, watched this case through the whole of its Hospital career.

Case 3 was that of a page, aged 17, admitted into the Hospital two years ago. It is unnecessary to say more than that both the general and local symptoms told of phthisis in its third stage; the humid crackling rhonchus, and cavernous breathing, respectively announcing tubercular softening and the presence of a cavity. The hurried pulse, with dyspnœa, and a very anxious countenance, led us to form an unfavourable prognosis. Under liberal diet, with the use of the sesquichloride and occasionally cod-liver oil, this patient left the Hospital in four months greatly improved in health, and with all his symptoms in abeyance; and I have continued to see him every two or three months since his discharge. He has perseveringly taken, with some few intermissions, both the steel and oil, and is now in tolerable health, and nearly a stone heavier than he was a year back; whilst the physical signs, as in Case 1, are indicative of the quiescent condition, and the greatly reduced size of the cavity, the chest-wall in that region having fallen inwards, and the respiration being very feeble and harsh, with occasional subcrepitant rhonchus. My friend and colleague, Dr. Stone, who happened to see the case lately during my absence, considers it a good illustration of checked phthisis, with a contracting cavity.

From the foregoing facts, coupled with preceding observations upon the effect of iron upon phthisis, I have arrived at the following conclusions:—

1. That iron is a very valuable remedy in consumption—

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perhaps more valuable than any other with which we are at present acquainted.

2. That of the numerous preparations of iron, the sesquichloride is the best, its astringent nature being generally well suited to many symptoms of the consumptive patient.

46, Clarges-street, Piccadilly.

CASE OF GUN-SHOT WOUND.

By M. F. MANIFOLD, Surgeon to the 34th Regiment.

Two cases of gun-shot wounds were treated during the past year, neither of which, I am happy to say, proved fatal, although one was a very serious and complicated case, the particulars of which are as follows:—

P. G., 34th Regiment, an Irishman, aged 31 years, seven years' service, of which four years have been passed in India, a man of intemperate habits, was admitted into the Hospital on the night of July 26, 1861, in consequence of having attempted suicide, by shooting himself with a double-barrelled rifle.

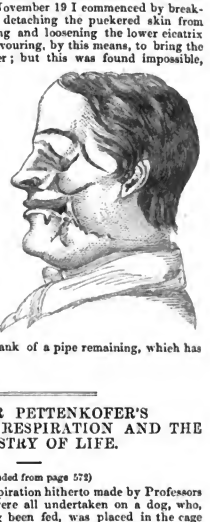
He was conveyed to the Hospital in a dhooly, between nine and ten o'clock at night, and presented the most frightful spectacle I ever beheld. He was bleeding profusely at the time from the mouth and throat, the blood being brought up in mouthfuls, flowing over, and covering his whole person.

His face, at the left side, was literally blown away, together with a portion of the upper and lower jaw at the same side: the ball, entering a little to the left of the symphysis of the chin, and passing through the hard palate, exposing the inside of the mouth and tongue, escaped superiorly through the floor of the orbit, carrying with it the eye, and displacing the malar bone, which was subsequently removed.

Assisted by Dr. Smith, I immediately proceeded to arrest the hæmorrhage by tying several vessels, while, at the same time, I removed all the loose pieces of bone that could be found, or seized with the forceps or my fingers; after which the soft parts were brought in apposition, and secured by sutures, water dressing, and a bandage.

Next day (27th), silver wire sutures were substituted for the silk, which latter were removed; and the day following, assisted by Dr. Burn (Royal Artillery) and Dr. Whisham, who kindly gave me the benefit of their advice, I proceeded to remove the malar bone, which was so much displaced and broken as to render its removal necessary. Having made an incision about three inches long, parallel with the zygoma, and reflected the flaps, the removal of the bone was easily effected with Liston's bone forceps. The parts were brought together, and union took place by the first intention. Not so the other soft parts, which sloughed, together with the eye, and profuse suppuration followed. Several loose pieces of bone were subsequently removed, and the case seemed to be doing well, when maggots made their appearance, in spite of every precaution used to prevent them, and quickly consumed every vestige of cheek that remained. The maggots, getting into the antrum, nose, and orbit, were with difficulty removed. All this time the patient was fed from a child's feeding bottle, and supported by a liberal allowance of wine, brandy, and eggs, his fine constitution remaining firm and unimpaired. He was, however, subsequently attacked with erysipelas, which was with difficulty arrested under the use of bark, ammonia, and stimulants. At last, healthy suppuration was established, and on November 15 the wound presented the appearance so faithfully delineated in the accompanying engraving.

With the view to remove the existing deformity, and, if possible, close up the opening so as to prevent the escape of saliva and food, with the assistance of Dr. Burn, R.A., Dr. Whisham, and Dr. M'Fall (who kindly assisted me), on November 19 I commenced by breaking up the old adhesions, detaching the puckered skin from beneath the eye, dissecting and loosening the lower cicatrix of the wound, and endeavouring, by this means, to bring the angles of the lips together; but this was found impossible, the contractions were so firmly bound down, and attended with so much loss of skin.



I, therefore, found it necessary to make a free incision beneath the chin, as recommended by Mr. Syme, elevating the skin as it became loosened, until by degrees, and with no little difficulty, I was enabled to bring the parts together, and secure them in position with hare-lip pins.

The operation, as will be seen from the accompanying sketch, was perfectly successful, an opening scarcely large enough to admit the shank of a pipe remaining, which has since been closed (a).

Sutopore, Oude.

(a) I am indebted to Lieutenant Pearson, Bombay Engineers, for these sketches.

PROFESSOR PETTENKOFER'S RESEARCHES ON RESPIRATION AND THE CHEMISTRY OF LIFE.

(Concluded from page 572)

The experiments on respiration hitherto made by Professors Pettenkofer and Voit, were all undertaken on a dog, who, immediately after having been fed, was placed in the cage contained in the respiration apparatus, where he remained for twenty-four hours. The general results were, that the elimination of carbonic acid by the skin and lungs is subject to considerable variations, the smallest quantity being 289·4 grammes, which was observed after the animal had not taken any food for ten days, and the largest amount being 840·4 grammes, after a very considerable quantity of food had been allowed, viz., 1800 grammes of pure meat and 350 grammes of fat. The proportion in the numbers thus obtained is as 1 to 2·9. The excretion of nitrogen is not proportionate to that of carbonic acid; the variations in the excretion of urea being much more considerable, viz., from 8·3 to 150·8 grammes, that is, as 1 to 21·8. Although it has appeared from investigations undertaken at a later period, that the carbonic acid expired is no standard for oxidation in the system, it may yet be concluded, from the large variations observed, that the quantity of heat generated in the same individual, in consequence of decomposition, may vary from one to three. It has, however, been shown by experiments undertaken by Dr. Ranke on himself in the same apparatus, that in man the exhalation of carbonic acid varies not nearly as much as it does in animals, the smallest quantity being 660 grammes, and the largest 860. A dog which has only half the weight, eliminates about as much carbonic acid as man, if a large quantity of food is given, but double the quantity of urea; while, if no food is allowed, the quantity of carbonic acid, as well as that of urea, is only half that excreted by man under the same circumstances.

In the further course of these investigations the important facts were elicited, that the quantity of carbonic acid eliminated can no longer be considered as a standard for the consumption of oxygen within the system; and also that hydrogen is not the substance with which oxygen always combines next to carbon. The results previously obtained by Messrs. Regnault and Reiset differ from these, which is probably to be explained by the circumstance, that the French physiologists did not observe the different states of nutrition so long as the Munich professors. Regnault only studied the

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altered condition of animals to whom no food was given for two days, while Pettenkofer and Voit withdrew food for ten days consecutively. Moreover, Regnault's animals were much smaller than those employed in the Munich laboratory; and, finally, Regnault always experimented in the same volume of air, while in Pettenkofer's respiration apparatus the air was continually renewed. In fact, the minimum of air that was carried to the dog amounted to 8000 litres per hour, which must necessarily produce a considerable difference. In the investigations which are to follow, Professors Pettenkofer and Voit intend working with four pumps simultaneously, in order to search for hydrogen and carburetted hydrogen in the air that enters as well as in that which leaves the apparatus. They also purpose to extend their observations on patients suffering from various complaints, so that we may at last arrive at a satisfactory insight into the general metamorphosis of matter in health as well as in disease.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

GUY'S HOSPITAL.

DISEASE OF THE SUPRA-RENAL CAPSULES WITHOUT BRONZING OF THE SKIN.

(Case under the care of Dr. GULL.)

In this Journal for January 10, p. 32, we recorded a case of disease of the supra-renal capsules, in which there was no discoloration of the skin. Mr. Hulke, under whose care the patient had been in the Middlesex Hospital, thought that "the probably short duration of the capsular disease, inferable from the generally firm, lardaceous character of the organs, and the presence of vestiges of their proper tissues, might account for the absence of bronzing." But, in the case we are about to relate, the disease was so extensive, that the functions of the capsules, whatever they may be, must have been annihilated. It is supposed by some, that disease of the renal capsules alone is not the cause of the symptoms of Addison's disease, but that it is disease spreading from them to the contiguous semilunar ganglia and solar plexus. But, in the following case, "the semilunar ganglia were more than usually involved. The right one was actually embedded in the capsule." Here, then, is a well-marked case of disease of the capsules, affecting also the great ganglial centres in the abdomen, and yet the most marked symptom is wanting. This case will, doubtless, be cited by those who do not believe in Dr. Addison's views, as an instance contradictory to his theory. But although the discoloration of the skin is the most marked symptom, it has never been considered the most characteristic. Dr. Wilks says, in a paper in the last Number of *Guy's Hospital Reports*, "the discoloration of the skin, although a striking feature of the complaint, was not the main one insisted on by Addison; but since it is that which can be pourtrayed in a drawing, and, consequently, apt to strike the eye on turning over the pages of a monograph, it is not surprising that it was at once regarded as the most remarkable part of the complaint, and would, therefore, be especially dwelt upon in our ordinary mode of communicating to one another the facts relating to the disease, until, at last, the erroneous opinion would be reached that Addison's disease and discoloration of the skin were convertible terms." In the same article, Dr. Wilks relates a case (Case 8 of his series) in which there was disease of the capsules, and no change of colour of the skin. Yet a most characteristic symptom, "an utter prostration of strength," was not absent.

Dr. Harley considers that disease of the supra-renal capsules is not fatal; but, he says, disease may extend from them to the semilunar ganglia or solar plexus, or may excite such an amount of irritation in them as to induce secondary disease, which, and not the contemporaneous affection of the capsules, may cause death. He states that a rat, from which he had removed both capsules, lived in good health three years after the operation, and died at the end of that time of old age. He says, that in all cases in which the animals have died after removal, it is clearly due to the effect of the operation, and not to the loss of the capsules. The fact that rats, in which the capsules are loose and easily removed, generally recover, whilst guinea-pigs and rabbits, in which they are intricately involved in the abdominal plexuses, frequently die, tends to favour the idea, that death is due to the operation alone.

In the article already referred to, Dr. Wilks writes, "the symptoms cannot be due simply to a destruction of the organs, since this must have happened, in many instances, long before death occurred, and is one reason, as before said, to suggest some implication of the organic system of nerves." In the case we are about to relate, as in Case 8 of Dr. Wilks' series, before alluded to, the disease was in an early stage. Dr. Wilks says (*op. cit.*, p. 13):—"A sufficient number of cases have now been observed to suggest whether the change in the skin does not depend on the chronicity of the disease; and that, if it should progress rapidly, no discoloration of the skin would be observed, the symptoms being merely those of asthenia."

William T., a publican, aged 31, was first seen at home by Dr. Gull on December 26. The case being a very obscure one, the patient was sent to the Hospital, and admitted December 27. He died on the 29th, before he had been seen a second time by Dr. Gull. As far as could be learned he had been ailing about four months, or, at least, there was no symptom to attract attention before that. He then began to get weak, pale, and thin. A Medical man was called in, who gave him medicines with varying effect; and it was his opinion that he was consumptive. At this time he often had sickness, his appetite was bad, and he also at times complained of pain in his back. He had also various nervous symptoms, which were differently described; it being stated that he had lost sensation on one side of his face, and could not eat so well on that side; and that he had numbness in his legs, and that he could not hold his water perfectly. He still continued at his employment. About a month before his death he became much worse, with all the above-named symptoms, and he then went to Greenwich for change of air. He still became worse, however, the pain in his back becoming more severe. He returned home, but was obliged to ride from the railway station to his house, a short distance. On December 26 Dr. Gull was requested to see him, and advised his removal to the Hospital. He was admitted the next day, December 27. He was so weak that it was necessary to carry him to the ward. He then brought up all the food he took, but rallied somewhat the next day. The next day Mr. Stocker saw him, and found him dying, after having vomited. Mr. Stocker said, that from this, his only visit to the patient, he did not know whether he was suffering from stomach, cerebral, or supra-renal disease.

The man's face was sallow, or of a yellowish cast, such as is seen in cachectic persons, but not sufficiently well-marked to attract attention. His wife said that his skin was sallow, but that no one had voluntarily remarked any change of hue.

The patient, on admission, stated that he had been ill six weeks, this being the time in which he had been incapacitated for work.

Autopsy, by Dr. Wilks.—Both supra-renal capsules were converted into large masses of an albuminous substance. They were larger than any which had yet been found at the Hospital, and were composed of a material of a much more recent formation than had been before observed. They had contracted adhesions to the parts around, as to the liver, etc., from which the right one had to be torn. The right capsule was also adherent to the vena cava, and the coats of the vein were involved. On opening this vessel, there was seen a raised rough patch where the coats had actually been destroyed; and the disease was penetrating their interior. There were also contiguous lymphatic glands enlarged. The diseased organs, or the masses of material which took their place, were not weighed, in consequence of their non-removal from the kidneys, but they, probably, would have weighed as much as two-thirds the size of the kidneys to which they were attached. The substance composing the diseased organs was a softish material, of a white colour, of the consistence of tallow or lard. It cut with a smooth surface, but was easily friable, and could be rolled up into a softish mass. It was of the same character as had been met with in previous cases, but not, as in them, associated with any yellow or so-called tuberculous or cretaceous material. In fact, there was no deposit within them indicating that the disease was of any age, as it had not undergone those changes which time brings about. The deposit had, no doubt, been formed in a comparatively short period. The diseased masses were so contiguous, and the material

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forming them so encroached on surrounding parts, that the semilunar ganglia were more than usually involved. The right one was actually embedded in the capsule, and many of its nerves passed into it. The left was in contact, and its nerves merely involved.

ST. THOMAS'S HOSPITAL.

DISEASE OF THE SUPRA-RENAL CAPSULES, WITH FRENCH MILLSTONE-MAKERS' PHTHISIS—CLINICAL REMARKS.

(Under the care of Dr. PEACOCK.)

THOUGH, in the following case, the patient died after leaving the Hospital, and there was no examination of the body, yet, Dr. Peacock says, the diagnosis appears so clear, that it is worthy of being placed on record.

W. W., aged 36, was admitted into Edward ward, St. Thomas's Hospital, on January 16, 1861. He stated, that he had been apprenticed to the trade of a millwright, but at 23 years of age he commenced to work at the French millstone-making in a London shop, and had continued to do so, with the exception of leaving for a few days at a time, till he became so unwell as to be incapable of any longer following his occupation. He, however, enjoyed good health till about sixteen months before his admission into the Hospital. He was of a healthy family, and free from any hereditary predisposition to phthisis. His father was living, at 80 years of age; his mother had recently died, at 83; and five brothers and one sister were all living, older than himself, and healthy. He acknowledged, however, to have taken much beer and spirits when in work. His illness commenced with rheumatic pains, and a cough and expectoration, which he ascribed to cold, and for which he became an out patient, under Dr. Peacock, and, though relieved, he had never been well since. The cough and expectoration had continued; and he found, soon after the commencement of his illness, that his complexion was becoming much darker, and this had gradually increased. He also suffered from dyspeptic symptoms, and, while not severely ill, lost both flesh and strength.

When admitted into the Hospital, he was found to be of a dark brown colour in all parts of the body. The discoloration, though everywhere marked, was much darker in some parts than in others, and especially about the forehead, at the front and sides of the chest, below the axillæ, at the backs of the shoulders and arms, and at the front of the thighs; and the dark portions did not terminate abruptly, but shaded gradually into the lighter. His hair was dark brown, but his eyes blue; and the contrast between the bluish-coloured glassy conjunctivæ and the skin was very marked. The skin in the roots of the hair was not affected. On the backs of the hands, the forearms, and the front of the chest, there were many small lines or patches of a white colour in the darker skin, and these were accompanied by numerous bluish-black spots, such as are common in those parts in millstone-makers, and result from the imbedding of particles of metal thrown off from the tools with which the siliceous stones are worked. The lighter spots, he said, marked the situations in which the metal had excited inflammation and ulceration; and a careful examination showed that they consisted of small cicatrices.

His general health was much impaired; he had a troublesome and somewhat paroxysmal cough, and expectorated a considerable quantity of sputum, partly viscid and glairy, and partly muco-purulent, but he had never spat blood; his appetite was capricious, and his digestive organs much out of order; the tongue furred; the bowels confined; and he not unfrequently vomited the food which he took. He was considerably emaciated, had a somewhat quick and feeble pulse, and was much prostrated; he complained of pains and weakness in the loins, and the joints of the fingers were swollen and livid. On examining the chest, the movements were found to be very imperfect, especially at the upper parts, where, also, the resonance, on percussion, was much impaired. At the right apex there was decided dulness on percussion, with falling in and deficiency of movement, and the respiration was bronchial; there was unduly loud cough resonance, and subcrepitation at the end of a deep inspiration; the urine was examined and found free from albumen. From the general history of the case, no hesitation was felt in diagnosing it to be one of supra-renal capsular disease, with commencing millstone-maker's phthisis. While in the Hospital, his condition varied greatly at different times. Upon the whole, he suffered less from the cough and expectoration, but the dyspeptic symptoms were never materially relieved; his appetite was extremely variable, and every few days he had attacks of vomiting, and rejected everything which he took; he sometimes suffered from diarrhœa, and he steadily became more emaciated,—indeed, the emaciation and prostration of strength were altogether out of proportion to any evidences of disease which could be detected in the lungs. The discoloration did not make any very great progress, but became, upon the whole, more marked, and it varied considerably at different times. When he was tolerably well the discoloration appeared less; when he was collapsed it became considerably darker. The local signs also progressed, but not rapidly; the dulness became more marked, the respiration more bronchial, and the subcrepitation more distinct. He, however, thought himself better during the fine weather of the summer, and requested to be discharged; he was, therefore, discharged, and left the Hospital on June 20.

Shortly after his discharge, however, he went into the country, and died in Oxfordshire, and the information was not given till it was too late to procure an autopsy; but there can, Dr. Peacock thinks, be no doubt that the case was one of supra-renal capsular disease. It is further interesting as showing the occurrence of the pulmonary disease caused by the millstone-making in a person, all the other members of whose family were healthy, and who was not brought up to the trade, and did not commence the work till he was grown up, and when he might be supposed to be more capable of resisting the injurious influence; yet in his case the disease was developed after a period of about twelve years, and, like almost every one in the trade, he died before attaining the age of forty.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.

CASES OF PHTHISIS—ARREST OF THE DISEASE, AND REMARKABLE GAIN IN WEIGHT—CLINICAL REMARKS.

(Cases under the care of Dr. POLLOCK.)

CASE 1.—M. N., aged 17, a servant, residing at Stepney, admitted to Montgomery ward, August 25, 1862, under Dr. Pollock. Father died of phthisis. Ill two years, cough constant, but very moderate expectoration. Never had hæmoptysis; has lost much flesh; night sweats last three months. Complains of pain in right side and back, much debility, dyspnœa, vertigo, tinnitus aurium, and dim vision. Pulse rapid, small; tongue clean; appetite good; catamenia had appeared once only, six months ago.

Physical Signs.—Right; dulness from the clavicle to the third rib; blowing on inspiration and expiration, and large dry crackle. Same signs in supra-spinous fossa. Base clear. Left: expiration much prolonged, and rough respiration throughout.

The girl stated that she had lived well, had had meat daily, and had not been overworked. She was ordered a dessert-spoonful of cod-liver oil twice daily, and five grains of citrate of iron in infusion of calumbo. The latter was changed a month later for a mixture of citrate of iron and quinine. Full diet consisting of four liberal meals per diem, one of them of meat *ad libitum*, and wine.

The following is her weight table:—

	st.	lbs.
Sept. 1.	7	0½
,, 15.	7	7
,, 29.	7	10
Oct. 13.	8	0½
,, 27.	8	5
Nov. 10.	8	7
Dec. 1.	8	13

The progressive increase has been:—

	lbs.
1st fortnight gained	6½
2nd ,, ,,	3
3rd ,, ,,	4½
4th ,, ,,	4½
5th ,, ,,	2½
Last three weeks	6
Total gain in 91 days	27

Cod-liver oil had been regularly taken for three months before admission.

On November 12, the following were the physical signs on the right side:—Dulness, as before; dry, leathery, creaking sounds have replaced the crackling under the clavicle; below

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this is heard a whiffing, dry inspiration; no moist sounds anywhere; the catamenia are still absent. This patient expresses herself as much relieved, and seems not to have much the matter with her. The night sweats ceased long ago.

Remarks by Dr. Pollock.—This seems to be a case of chronic tubercle in one lung, derived hereditarily, with little activity of the constitutional mischief, and arrested before softening had occurred to any extent, and before the isolated deposits had coalesced to form a cavity. On the eve, as it were, of such occurrence, the disease stopped short, the tubercle tending to dry, local irritation ceasing, and the nutritious processes of the body proceeding rapidly to replace the waste undergone by the tissues. It is important to observe that this patient was not taken from poverty and placed in the midst of plenty, for her living had been previously good; but it is equally important to remember that she was was taken from a life of daily labour and anxiety, and placed where there was no necessity for any exertion of mind or body, and where every want was cared for. The remedial influences were, therefore, many in addition to those purely medicinal. She had taken cod-liver oil for three months before admission.

The following case presents many points of similarity:—

Case 2.—M. A. G., aged 15, tailoress, admitted under Dr. Pollock, August 26, 1862, Harewood ward. Has always lived at home; the family being in comfortable circumstances, had had meat daily. Of middle height, chest pretty well shaped, hair light brown; of lymphatic temperament. Her father, mother, and several maternal uncles and aunts, died of phthisis. Ill three months, cough constant for that period, with slight expectoration. No hæmoptysis; catamenia established at 13, now absent for five months; no sweatings; complains of cough, debility, flushing; appetite indifferent; tongue clean; pulse quiet.

Physical Signs.—Left: dulness on percussion; humid crepitus over the whole front and axilla; also in supra-spinous fossa; rough respiration at base posteriorly. Right: percussion slightly dull; clicking sounds in supra-spinous fossa, and along spine; posterior base pretty clear. She has considerably lost flesh.

The following is her weight table:—

	st.	lbs.
Sept. 1.	6	13
„ 15.	7	4
„ 29.	7	8
Oct. 13.	7	13
„ 27.	8	1
Nov. 10.	8	6
„ 24.	8	7½

The progressive increase has been:—

	lbs.
1st fortnight gained	5
2nd „ „	4
3rd „ „	5
4th „ „	2
5th „ „	5
6th „ „	1½
Total gain in 85 days	22½

This girl is also now in a very comfortable condition, coughs little, sleeps well, and expectorates scarcely anything. The catamenia have not been re-established.

The physical signs in this case underwent an alteration coincident with the improvement in health. On November 12, a careful examination gave rough, dry inspiration, and prolonged expiration over left side, instead of the humid crepitus formerly noticed.

The points of resemblance in the two cases (Dr. Pollock said) were:—In both the disease was hereditary; occurred at the period of growth; in neither had there been hæmoptysis; the absence of fever, and the similarity of temperament (the lymphatic); the moderate amount of expectoration; the unimpaired condition of the digestive functions; the suspension of uterine activity; the limited amount of disease in the lung; and the characters of, and changes in, the physical signs denoting a deposit in the lung undergoing alterations rather of an absorptive than of a softening nature. A theoretical view of the two cases implies that, a slight injury having been sustained by the lung, not only did the deposit undergo changes indicating a tendency to dry up, and leave behind merely the inorganic elements of tubercle, but the still more important fact, that the impairment of nutrition, in which the morbid changes originated, had ceased, and that the tissues of the body were again being built up of healthy material. Such a condition may fairly be called an "arrest" of diseased action, and exhibits, hopefully to the Practitioner, clear evidence of the reparative powers and tendencies of the system.

HOSPITAL FOR SICK CHILDREN.

DIPHTHERIA — TRACHEOTOMY — CALOMEL INTERNALLY — TRACHEOTOMY-TUBE FINALLY REMOVED FIFTEEN DAYS AFTER THE OPERATION—ALBUMINURIA EIGHT DAYS—RECOVERY —CLINICAL REMARKS.

(Under the care of Dr. HILLIER.)

M. A. G., aged 4½ years, a tolerably healthy child, was in usual health till Sept. 5, 1862, when, towards evening, her mother observed "a wheezing at her chest" and slight cough. She passed a restless night, tossing her arms about. The next day she seemed better, till towards evening, when she again became worse, and her breath appeared tight. There was no heat of skin or thirst, and no pain.

On the afternoon of the 7th she first complained that her throat was sore, and had some difficulty of breathing; threw her arms about, and stretched her head backwards. An antimonial emetic was given to her, but towards evening she got worse, and passed a very restless night, with great difficulty of breathing and noise in her throat.

On the 8th she was ordered by a Physician some ipecacuanha wine and carbonate of ammonia. The next day she was brought to the Children's Hospital. The mother stated that the child had been getting worse since the previous day, the difficulty of breathing had increased, and she had frequently complained of pain in her throat. Bowels relaxed to-day, having been previously confined. (In the same house in which she lived a little boy died of croup on August 30, and a girl died in the opposite house, on September 2, also of croup.) She was admitted an in-patient, under the care of Dr. Hillier, at 4 p.m., when the following notes were taken by Mr. T. Jones, the Registrar:—The prominent symptom is difficulty of breathing, with moderately loud laryngeal inspiration. There is recession of all the soft parts (supra-sternal and clavicular, intercostal spaces and ensiform region) during inspiration. Pulse 160, quick, soft; respirations 50. The arches of palate, uvula, tonsils, and pharynx are of a dull red colour, and covered here and there with yellowish-white exudation. Small but distinct membraniform patches are seen on the sides of the uvula; on the posterior wall of the pharynx a larger patch is seen. The exudations and surrounding parts were carefully brushed over with strong hydrochloric acid and syrup in equal proportions, and a strong mustard poultice applied to the throat. At 5.30 a powder containing a grain of calomel was ordered to be taken on alternate hours, with one consisting of a grain of calomel and a quarter of a grain of compound ipecacuhana powder. A mercurial belt was applied round the body. Diet, milk and beef-tea.

Towards night the laryngeal symptoms became worse, the recession of soft parts of the chest-walls had much increased, and the little patient was extremely restless and distressed for want of air. The consent of the friends was now obtained for the performance of tracheotomy, which was decided on by Dr. Hillier as affording the best chance for the child. It was accordingly performed by Mr. Gee, the House-Surgeon, at midnight. The head was thrown back, with the neck and shoulders raised, and a line in ink was traced from over the centre of the cricoid to the middle of the sternal notch. A fold of skin over the trachea, the middle of which corresponded to a point half an inch below the cricoid, was transfixed; the subcutaneous fascia was then divided; the muscles were then seen and separated; the plexus of thyroid veins and the isthmus of the thyroid body were then seen. The isthmus was kept up and the veins kept out of the way by blunt hooks. A sharp hook was then passed into the upper part of the trachea, and the point of a scalpel was pushed in below, and made to cut up to the hook. A tracheotomy forceps was then introduced to the wound, and artificial respiration was kept up by compressing the lower part of chest for a few seconds until the child took a full inspiration, and the breathing then became easy. A full-sized double canula was introduced, and fastened by a tape round the neck. The diameter of the inner tube was $\frac{3}{8}$ths of an inch. The colour of the cheeks, which had been livid, now rapidly improved, and the child was evidently comfortable. The pulse soon after the operation was 160, and respirations were fifty in the minute. The bed was now placed near the fire, and blankets were put over the bed, supported by rails, and forming an enclosed tent. The air was kept constantly moist by a steaming apparatus. Care was

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taken not to let the temperature rise above 70°, and the side of the bed near the fire was frequently open for ventilation. After the operation, considerable quantities of thick yellow mucus were coughed up through the tube. Beef-tea was given *ad libitum*, as well as milk. In an hour after the operation the patient was comfortably asleep, and slept at intervals through the night, occasionally sitting up to drink beef-tea.

10th.—Breathing easy; skin warm; pulse 146; respirations 48. The calomel has been continued. In the twenty-four hours since admission eight grains have been given. The powders are now to be taken every six hours only. Urine yesterday was not albuminous.

11th.—Pulse 124, respirations 44. Passed a quiet night. Every now and then coughed up some thick mucus, and the inner tube required to be frequently cleared. Bowels have acted once; stool slimy and offensive. Urine last evening contained a trace of albumen. A small patch of exudation is now visible on the left tonsil. The powders now to be taken night and morning. From the operation until the tube was finally removed, the patient was incessantly watched by Mr. Gee, or else by an experienced and able nurse. The greatest difficulty in the treatment was to induce the child, who was very obstinate, to take sufficient nourishment. It was given very frequently.

12th.—Passed a quiet night. Has coughed up, this morning, some thick mucus, tinged with blood, and a small piece of membranous exudation, whitish, a quarter of an inch square; continues to take beef-tea and milk; is now ordered, for the first time, wine, three ounces in twenty-four hours; gums rather spongy; tongue clean, moist; urine, to-day, free from albumen. 3 p.m.—Coughed up another piece of false membrane, three quarters of an inch long by half an inch wide. Calomel powders three times a-day.

13th.—Passed a comfortable night. Tube was removed to see if patient could breathe through the larynx, but it was necessary immediately to reintroduce it, as little or no air appeared to enter by the natural passage. The edges of the wound were, this morning, covered with a film of diphtheritic exudation, and touched with nitrate of silver; has taken six ounces of wine in twenty-four hours; takes more nourishment than she did; her spirits are good; intimates that her throat feels better. A larger tube was introduced to-day, the inner tube being nearly a quarter of an inch in diameter.

14th.—Pulse 124, stronger; respirations 30; much mucus expectorated through tube; wound looks more healthy; calomel omitted, and a mixture, containing ten minims of liquor cinchonæ, ordered to be taken every four hours; a saturated solution of chlorate of potash to be applied to some aphthous spots on lips and gums. On closing end of tube, a little air passes through larynx on full expiration. Urine slightly albuminous.

15th.—Passed a good night. Has had several beef-tea enemata yesterday and to-day. Urine more albuminous. Five minims of dilute muriatic acid added to mixture.

16th.—Pulse 120, firm, and of good volume; urine less albuminous.

17th.—Had more difficulty in expectorating mucus through the tube than usual last night. The mucus is, however, much thinner than it was. Was sick once in the night. Beef-tea injections are continued every eight hours, and they appear to cause a tendency to relaxation in the bowels. The bed is still converted into a tent by blankets, and the temperature is kept at about 70°, and the air moistened by occasional steaming.

18th.—Last night was the best since the operation. The tube was taken out, and the wound brought together by plaister. The patient breathed through the larynx with difficulty, and coughed up a little mucus. As the dyspnœa continued, the tube was replaced. Ordered quinæ disulph., gr. ij., with dilute sulphuric acid, every four hours.

19th.—Has eaten fish yesterday and to-day. The tube is to-day again removed. The sides of the wound in the trachea came together on removal of tube, and seemed quite free from irritation. It became necessary again to introduce the tube.

21st.—Has eaten a good meat dinner.

23rd.—Tube again removed. Patient can expire, but cannot inspire through the larynx. A smaller tube now inserted.

24th.—Tube finally removed; breathing partly through the larynx and partly through opening in trachea, which is small. Spoke for the first time since the operation.

25th.—Seems languid to-day. To take four grains of the ammonio-citrate of iron, with tincture of calumba, three times a-day.

27th.—Has not taken her food so well lately. Wine increased to four ounces daily.

October 1.—Continues to improve, but slowly; was sick twice yesterday.

3rd.—Pulse 132; respirations 34; was sick again yesterday, bringing up a quantity of thick mucus; still requires much coaxing to take food; there is still a small fistulous aperture into the trachea, through which a little air escapes.

4th.—Was very sick for several hours, from four to eleven o'clock last night; after that was ordered ℥iss. brandy every hour, since which she is better; is now ordered a calomel and rhubarb powder.

6th.—She got up and was dressed for the first time to-day; she is dull and languid.

8th.—The beef-tea injections have been again resumed, as she takes too little nourishment by the mouth; no air now comes through the wound, which is nearly healed; is more cheerful than she was.

13th.—Slowly improving; she was sick again on the night of the 11th; can now stand without assistance.

20th.—Improving; now runs about the ward; to take Ol. morrhuæ, ℥j., and quinine, three times a-day.

27th.—Improvement has continued since last note; no sign of paralysis anywhere; there is now only a small cicatrix where the trachea was opened; sent to Brighton for change of air.

Remarks by Dr. Hillier.—This case may be taken, together with one reported in the *Medical Times and Gazette* (July 5, 1862), in which tracheotomy was performed for diphtheria in a child, as a proof of the expediency of resorting to this operation, in certain cases of diphtheria, even in children. In this case, as in the other, there was no probability of the child surviving more than a few hours unless the air-passage was opened. The older the child, the greater the chance of a successful result, owing to the greater size of the trachea, and the less danger of collapse of the lung, which so often occurs in young children. In cases of considerable rickets, I would not advise the operation, owing to the great flexibility of the anterior walls of the chest, and the consequent danger of pulmonary collapse. In this case, there was some tendency to spread of the disease below the seat of operation, as manifested by the false membrane coughed up; I believe this was arrested by the use of calomel. It does not appear to me to be true, as stated by M. Trousseau, that the operation of tracheotomy in itself has any tendency to arrest the progress of exudation; and one of the most frequent causes of death after tracheotomy is the extension of exudation into the trachea below the wound. This exudation I know of no way of arresting except by the use of mercurials, which may with great advantage be resorted to in most cases. The remedy is one, of course, which must be used with great discretion and caution.

A few years ago this case would have been called croup; but now, as there was some exudation on the uvula and back of the fauces, and the dyspnœa set in gradually, we call it diphtheria. The two diseases cannot, I think, be distinguished. The occurrence of two fatal cases of "croup," one in the same house, and the other in the immediate neighbourhood, just before this child was attacked, is interesting. The successful results in these two cases were due very mainly to the extreme care, assiduity, and skill of Mr. Gee, the House-Surgeon, by whom both the operations were performed, and under whose eye they were incessantly kept. The convalescence was, as is always the case in diphtheria, protracted, but the debility was not greater, nor the after symptoms more serious than in other cases of the disease which have I seen treated by tonics and stimulants in large amount throughout. It will be observed that stimulants were not used to any great extent, but only as the debility of the patient appeared to demand them. I am inclined to think that the profuse employment of stimulants in this disease favours the renal congestion and albuminuria with which so many of the secondary symptoms are connected.

YORK DISPENSARY.

CASE OF CROUP COMING ON AFTER THE CURE OF SCABIES — EMETICS OF SULPHATE OF COPPER—RECOVERY—CLINICAL REMARKS.

(Case under the care of Dr. SHANN.)

On Saturday, November 21, 1863, about 11 a.m., Dr. Shann

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was sent for to see a girl, 4 years of age. She was breathing with difficulty, with a noisy, croupy respiration; the pulse feeble and irregular both as to rhythm and force and fulness; the countenance pale, and more or less mottled, with a livid hue, and the limbs hanging loosely on her mother's lap, in an attitude of extreme muscular prostration, the head and hair bathed with perspiration.

The child had been under Dr. Shann's treatment for scabies at the Dispensary for some weeks; in truth, she had had the complaint upwards of two years, the real character of the complaint never having been discovered. The usual treatment cured this affection; and when she came to the Dispensary on the Monday, she was said to be suffering from a cold and cough; but at that time there was no apparent threatening of croup. On the Friday, her mother thought her better, the cough having entirely left her; but, in the afternoon of that day, the difficulty of breathing came on.

When Dr. Shann first saw her, there was manifestly great obstruction to the passage of air through the larynx, but the breathing had not that shrill ringing sound often met with in the asthenic form of croup. There was, however, so much narrowing of the larynx, that little or no air could be heard entering the lungs, only here and there a deep droning râle in some of the larger bronchial tubes. The sound heard on placing the stethoscope on the back of the neck indicated clearly the larynx and upper part of the trachea as the seat of obstruction. Having seen the patient an apparently strong child at the beginning of the week, and considering the collapsed state the result chiefly of threatened asphyxia, Dr. Shann ordered five leeches to the upper part of the sternum, and gave a mixture containing the potassio-tartrate of antimony, desiring it to be given in quantity equivalent to half-grain doses of the antimony till it produced vomiting, and then to be reduced. Dr. Shann ordered, at the same time, a grain of calomel and four grains of grey powder every hour; and to apply steamed flannels to the feet and legs, and hot fomentations to the throat.

On seeing the child at 10 p.m. in the evening, there appeared to be some slight improvement; the leeches had bled pretty freely, and the vomiting afforded considerable relief for the time. The child dozed at intervals, and the respiration was not quite so noisy. Ordered a tolerable-sized blister to the back of the neck.

Sunday morning, 9 o'clock.—The child had varied much during the night; the respiration sometimes very difficult, at others less so; the blister had taken hold well. The respiration was certainly less noisy, but the whole surface was more livid, the fingers especially so; the chest generally was less resonant than it should be, and no air could be heard to penetrate the lungs, so far as examined, at the upper part of the front of the chest. A mixture was now ordered containing a grain and a-half of sulphate of copper and a small quantity of syrup of orange-peel in each tablespoonful, to be given every half hour till free vomiting was produced. The mixture contained ten grains of the sulphate, and the whole was taken. As soon as this had had its full effect, she was to take a stimulating mixture containing aromatic spirits of ammonia and spirits of nitric æther every hour or two: to have large mustard plasters applied to the legs, and also hot steamed flannels. 5 p.m.—The effect of the emetic had proved most satisfactory; the breathing was comparatively free, and the obstruction in the larynx, as indicated by croupy respiration, much less strongly marked. The cough, which now reappeared when she was disturbed, was slightly ringing, but the air could be heard to traverse the lungs freely.

23rd.—The improvement still continued. The patient had slept at intervals and seemed refreshed, and had taken some tea. Previously, she could not be induced to take anything except cold water. Ordered some more nourishment to be given.

24th.—The child was in every respect better; had taken nourishment, and was much improved in appearance. The countenance of a natural hue, although the hands and arms still retained a mottled, rather livid colour. Had a constantly troublesome short cough, but the croupy sound was quite gone. Ordered a mixture of compound infusion of roses, nitric ether, and sulphate of magnesia.

27th.—Found the child convalescent.

Remarks by Dr. Shann.—Croupy affections are often met with in connexion with acute skin diseases, scarlet fever, measles, erysipelas, and not unfrequently originate about the time of the declination of the eruption. I cannot but believe that in this case there was a close connexion between the disappearance of the long-continued chronic disease of the skin—scabies persisting for one-half of the child's life—and the setting up of this croupy form of disease. The treatment by sulphate of copper is recommended by a German—Dr. Schwabe—and is mentioned in Braithwaite's "Retrospect," vol. viii., 1843. I had formerly tried it in similar affections, but not with the same satisfactory results. Where time was allowed for the use of mercury, I should not be disposed to trust to the copper till the action of mercury in modifying such affections of the mucous membranes had first been brought to bear on the complaint; but where, as in this case, immediate suffocation is threatened, I conceive the remedy may prove very valuable in removing, by its emetic action, the morbid secretion obstructing the air-passages, and possibly in modifying the action of the secretion itself. In this congestive form of the complaint, the secretion is of a soft, albuminous, rather than a fibrinous character.

THE HULL INFIRMARY.

TRACHEOTOMY FOR FOREIGN BODY IN THE AIR PASSAGES—DEATH—AUTOPSY.

(Under the care of Dr. KING.)

[Reported by Mr. EVANS, House-Surgeon.]

CATHERINE S., aged 1 year and 9 months, was admitted, at 11 a.m., on February 18, 1862, having, an hour or two previously, swallowed a pea. It had lodged, apparently, in its windpipe. The breathing was laboured and wheezing, and there was evidently some obstruction to the free entrance of air into the lungs. The finger, passed as far back in the mouth as possible, met with no foreign body. The chest sounds indicated that the foreign body was situated in the right bronchus or one of its branches. The symptoms were not very urgent, but the child was sent up into a ward.

At one o'clock she was seen by Dr. King, and an emetic of sulphate of zinc was administered. While the throat was being explored by the finger, symptoms of suffocation came on, and it was necessary to open the trachea at once. There was a good deal of bleeding, and before an opening could be made in the windpipe the child apparently died; but by compressing the chest, however, for a little while, after Marshall Hall's method, respiration was restored. During the operation a portion of what appeared to be a pea came up, and a few minutes afterwards a quantity of brown viscid fluid, containing portions of peas, was ejected from the stomach. The child continued pretty well during the day, the inner tube having frequently to be removed for the purpose of being cleaned. Milk was taken freely. About the middle of the night respiration became laboured, with mucous râles all over the chest, and the countenance pale. Ordered one-fourth of a grain of tartar emetic in solution every two hours. The symptoms became aggravated, and death took place at 4 p.m. on the 19th, twenty-seven hours after the operation. She took a little wine previously.

Autopsy.—The whole of the larynx, trachea, and thoracic viscera were removed entire. Both lungs were much congested, especially the right; mucous membrane of larynx not congested, that of trachea and bronchi redder than natural. In the right bronchus (which was shorter than natural), close to its commencement, was lodged a portion of pea, and in one of its primary divisions another smaller portion was found. No pieces were found in the left lung. The stomach contained a quantity of solid, white, curdy matter (coagulated milk), with a little fluid, but no peas or portions of them.

CATCHING EELS.—One morning a man was missing, and could not be heard of for a fortnight. His wife was in such distress that when at last his body was found in a fishpond near the house no one liked to tell her, more especially as the discovery of the body was accompanied with what people thought would shock her dreadfully—namely, that when it was pulled out of the water a great quantity of eels fell on the grass from it; the body was, in fact, full of them. At last some one had the courage to tell the widow, and to add the circumstance about the eels. The widow replied, amid her tears, "Send home the eels—*and set him again.* I am very fond of eels."—*Life in Normandy.*

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SATURDAY, JANUARY 24.

THE PURIFICATION OF THE THAMES.

Last week we stated the probability that the Metropolitan Board of Works would, at the recommendation of their committee, abandon the plan of pouring the more or less deodorised sewage of the western area of London into the Thames at Fulham. What was expected has taken place, and both eastern and western sewage are now to be conveyed by intercepting tunnels to Barking Creek, there to be discharged. The plan of deodorisation being thus given up, it remains to be seen in what degree the present proposal will accomplish the main end to which the Board has pledged itself—the purification of the Thames. The atrocious waste involved in the entire scheme is patent to every one. Parliament and the nation have determined to throw away wealth to the amount of £500,000 per annum, or the interest of £10,000,000 of capital. The London sewage would amply suffice to raise the annual value of 50,000 acres of land £10 per acre. This enormous amount of material must now go to form a fresh stratum in the estuary of the Thames, which, in ages to come, may yield an interesting field of research to a future development of geologists, but will be irrevocably lost to the English nation.

Leaving, however, except as a secondary consideration, the question of profit and loss, we, on the part of the Profession most deeply interested in the health of the metropolis and the purity of its river, are bound to examine how far the entire project is likely to benefit the one and to secure the other. In a small town it may be allowable to mix the rainfall with the sewage, and to carry them away together, though such a proceeding is open to grave objection on economical grounds; but in the case of the vast area of London, such an admixture is itself a blunder which must defeat alike the ends of the sanitarian and the economist. It requires no argument to show that the purity of the Thames will be best secured by diverting from it the sewage, and by directing to it the rainfall to aid its scour. This was pointed out by Mr. F. O. Ward in an able letter to Mr. Coningham as long ago as 1858 (a). The Metropolitan Board have chosen to ignore the necessity of keeping these two objects separate. By adopting the plan of mixing the sewage with the rainfall, they render them both useless for the purpose for which nature destined them—the maintenance of the fulness and pureness of the river and the fertilisation of the soil. The sewage spoils the rainfall by pollution—the rainfall the sewage by dilution. In the letter above referred to, Mr. Ward describes the sewage of London as consisting of the 50,000,000 gallons of water supplied by the water companies, enriched by the matters which this water takes up in the dwellings of the people. Estimating the latter at two ounces per diem for each man, woman, and child, it would represent a daily total of 139 tons, containing, at 17 per cent., 23½ tons of nitrogen, equal to 28¼ tons of ammonia, of the value of £1597. The weight of the sewage proper thus calculated is only 223,000 tons, an amount, Mr. Ward observes, only requiring a couple of moderately sized sewers (not several colossal tunnels) to convey it away, and which might be pumped this way or that by steam power as easily as a lady pours tea into this or that cup at her pleasure.

Turning now to the rainfall, if the area of London be taken at only 59½ square miles, and if due allowance be made for evaporation and absorption, it may be set down as 80,000,000 or 90,000,000 tons annually—an amount about equal to the annual total of sewage. But the rain does not come down equably; it only falls on 152 days, and two-thirds of it in about one-eighth of the entire year. It must also be remembered that the rain of any day is not uniformly diffused over its twenty-four hours; it frequently descends in a very small part of the time, so that, for instance, 7,000,000 tons of rain—equal to a month's sewage—will at times fall on London in a single hour. The mixed streams of rain and sewage liable thus to be increased are too enormous to be diverted from the river; and there is no mechanism at our disposal which could direct them to the soil. In the great sewage tunnels which are now being built, Mr. Ward argues that the current will, in rainy weather, be torrential; in dry, a slender streamlet, too weak to scour the containing culvert, and to prevent the accumulation of putrescent material.

The accumulation in the underground cesspools and sewers of London, Mr. Ward estimates at twelve months' excreta, or an amount equalling one day's evacuation of the entire population of Europe and Asia, numbering 800,000,000. Suppose that a sudden rain-storm sweep into the river eight or nine days of this accumulated filth, it would be equivalent to polluting it with one day's excrement of the entire population of Great Britain. The money-loss of every such occurrence will, in ammonia alone, be nearly £16,000, whilst the river, as far as the tide extends, will be discoloured, and, in hot weather, putrescent for days. The proposed plan of deodorisation has been most rightly relinquished, but the new one will add enormously to the evil. In avoiding Scylla, the Board have rushed into Charybdis. Twenty-five more miles of rain-gathering surface have been added to the area, to make the days of overflow more frequent and the masses of filth discharged vaster.

It is at the point where the pipes conveying the rain from roof and area, and the sewage from closet and sink, meet, that the grand error is committed. Whilst the two streams are separate they can be each used—the one for scouring the river, the other for enriching the land. Mingled, they are unmanageable and useless, and, directly or indirectly, become the fertile source of pestilence and death. If the silver stream of our poets and dramatists is to be restored to the nation pure and full as it was in the days of the Tudors and Stuarts, it must be done by modest tubes bearing to it the unadulterated showers of heaven, not by gigantic tunnels deluging it with the offal, the mire, and the excreta of London. But mankind are seldom convinced by argument: experience is a more severe, but a more successful, teacher; and from it the ratepayers of London, and the nation at large, will learn that public interest is not always represented by a cabal of engineers, and that the teachings of nature and common sense are identical with those of the highest social and sanitary science.

(a) "Purification of the Thames: a Letter, by F. O. Ward, Esq., addressed to William Coningham, Esq., M.P." Second Edition. London: H. Renshaw.

THE WEEK.

ST. THOMAS'S HOSPITAL.

The Governors of St. Thomas's Hospital have met, but have left the question of the site of the new Hospital still undecided. Six sites have been submitted to their consideration

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—viz., the ground now occupied by Bethlehem Hospital, a piece of land belonging to the Fishmongers' Company on the eastern side of the Walworth-road, the Surrey Gardens, a tract of open ground at the back of Newington Church, Myatt's ground at Camberwell New-road, and a piece of land about to be reclaimed by the proposed southern embankment opposite the Houses of Parliament. It seems to have been the general opinion of the meeting that the site of Bethlehem would be the most suitable were it not for the enormous expense of removing the Lunatic Hospital and rebuilding it elsewhere. Next to Bethlehem, the ground near Newington Church appears to have obtained favour. The grand committee have finally abandoned their intention of a country Hospital supplementing a town one, and have come to the determination to have a central Hospital in a central spot, without division either of the establishment or school. The report, which was only passed after considerable discussion, contained a long exculpation of the committee from the charges, during the past year, constantly reiterated against them. Mr. Tite, who was the principal spokesman on their part, made the following statement in reference to the chief accusations. In this it will be seen that he directly contradicts the assertions that they had wasted money in litigation, and had refused an offer from the Charing-cross Company of a larger sum than the Hospital ultimately obtained:—

"It had been stated in the public press that the grand committee had been litigious; but, speaking on their behalf, he declared that there had never been any feeling of litigation in their minds. All they desired was to be left alone, and that no railway should be permitted to interfere with the Hospital (hear, hear). It was further asserted that they had wasted 30,000*l.* in prosecuting their parliamentary opposition, whereas the fact was that they had spent only 3000*l.* on that account, and that was forced upon them and unavoidable. The cost of reference was 8500*l.*, but a great portion of that would be borne by the railway company. So, too, with the Chancery suit, the costs of which came to 828*l.*; a portion of that would likewise fall upon the company. They were also charged with employing an unheard-of number of counsel in opposing the company's bill; but, in truth, they had employed no more than they were advised they ought to have; and surely if the railway company deemed it right to have three counsel to support their interests the Hospital had a right to be represented by an equal number. Then, with regard to the number of witnesses who were called, the company had not less than ten surveyors in that capacity; and how were they to be met but in the same way? Whilst, however, the company called ten, the counsel for the Hospital called only six. He appealed to the meeting, therefore, whether there was any ground for the accusations that had been heaped upon the committee (hear). There was one other statement which he should notice before concluding. It had been said that, in some mysterious way or other, the company had intimated their readiness to pay the Hospital an infinitely larger sum that it got. When the matter was before parliament the company had a valuation made for the whole Hospital; and he knew what was the amount of that valuation, and that it was consistent with the character of the evidence given before the umpire. Now, the highest valuation made by anybody on the part of the company was that of his friend, Mr. Shaw, and it was 179,550*l.* for the land. Mr. Norton's amounted to 175,000*l.* Mr. Ryde's to 149,000*l.* (he was the adviser of the company), and Mr. Snook's 126,000*l.* On the other side Mr. Hunt's valuation was £267,000, Mr. Marrables' £286,000, Mr. Gurney's £297,000, his (Mr. Tite's) £296,000, and Mr. Clifton's £306,000. The umpire had been censured for the decision he had arrived at; but he had known Mr. John Stuart for forty years, and there was not an abler or more honourable man in the kingdom; and he contended that there was nothing unreasonable in the judgment which that gentleman had come to upon the figures that were placed before him (hear). With reference to the value of land in that neighbourhood, he had his own notions upon the subject, and perhaps it was not fair to cite the value of land let to a bank as a guide to the price of land required for a railway; but he took upon himself to say that, in this instance, the land which the company wanted to take was, the whole of it, of the character of the land which the bank had taken. This showed, therefore, that when the grand committee refused the offer, they only did their duty in following the recommendations of those to whom they were bound to listen; for if they allowed the Hospital to be interfered with by the railway, it must be destroyed. He had entered into these explanations in order that the public might thoroughly understand that the committee had no motive in the course which they had pursued but that of a desire to do their duty in a situation of extreme difficulty, and fraught with enormous danger to a charity with which many of them had been connected for the greater part of their lives. In conclusion, the hon. member moved, 'That the report be received, and that the several sites mentioned in the surveyor's report, produced this day, be referred back to the grand committee for further consideration, with a view to obtain more particulars and information in reference thereto, and again to report thereon to this court.'"

In the discussion which followed,

"Mr. Deputy Elliot characterised the whole of the report to page 9 as a 'brief for the defendants,' and declared that its statements were but imperfectly true, and ought not to be accepted as a full and fair record of the proceedings of the grand committee. He had been requested by one of their Medical officers, Mr. Simon, to state that he considered the grand committee to have made a singularly unfair and disingenuous use—a use which very closely bordered upon misrepresentation—of his letter written, in 1856, to the treasurer. This was a protest from one of their Medical officers, and, if time had admitted, he believed there would have been a protest from nearly all of them, as to what they regarded as an unfair use of their communications to the treasurer, by giving only portions of what they had written instead of the whole."

Many people think, and with reason, that allowing themselves to be written and talked out of the plan of having a country Hospital, in addition to a town one, is not the smallest error into which the committee have fallen.

ALCOHOL FROM COAL GAS.

M. Colette, of Paris, has recently announced a process by which he manufactures alcohol from coal gas. It is said that it can be effected at a very cheap rate—so cheap, indeed, as to permit of its commercial competition with alcohol derived from saccharine substances. Of this, however, the only proof to be afforded will be the results of the manufacture upon an extensive scale. We will take an early opportunity of laying the details before our readers. At present the possibility of this mode of producing alcohol is simply proclaimed as the result of experimentation in the laboratory. The subject will doubtless attract the attention of innumerable chemists. Should anything come of it, and the price of spirit be cheapened in consequence, we shall not be disposed to regard the discovery as an unmixed good.

PHYSICIANS' FEES.—CASE OF GIBBON v. BUDD.

The Medical Act and the now by-laws of the College of Physicians have together had the effect of unsettling the previously-received principle on the subject of physicians' fees, at least, as regards the members of the London College. We confess that we think this is to be regretted. We know that it is the opinion of a large body of practising Physicians that fees should be strictly *honoraria*, and should not be reduced to the level of charges to be haggled over and disputed in courts of law. We believe it to be better for the Physician to put up with an occasional loss than to forsake the 'vantage-ground which his position, with regard to remuneration for his services, has hitherto given him. Yet, on the other hand, there are so many cases in which unfair advantage is taken, that we readily concede that those who adopt the opposite view have some ground for their opinion. The case of "Gibbon v. Budd," which will be found in our "Legal Intelligence," is one in which a departure from the rule might be almost said to have been forced upon the plaintiff. The patient, a rich miser, dies, and his executor, who comes by his decease into half a million of money,

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actually refuses to pay Dr. Gibbon the sum of twenty guineas for visits to the deceased, on the ground that, there having been no special contract, Physicians are unable to recover under any circumstances by the by-law of the College. That by-law, however, only refers to Fellows, and the plaintiff's case, it was therefore argued, was not affected by it. For our own part, we hold that, in so framing the by-law, the College committed an error. If it befits the dignity of Fellows that their fees should be strictly honorary, the non-extension of the law to members may be supposed to place them in a different position as Professional men. Mr. Baron Bramwell seems to doubt whether, under the Medical Act, which provides "that Physicians registered under it may recover reasonable charges subject to such by-laws as might be passed by the College of Physicians," that College "has a right to make a by-law referring to one portion of their body only." It certainly was never the intention of the Fellows of the College to place the whole body of members, a rank through which alone they themselves arrive at their present dignity, in another *status* outside the College. The law should, we think, if enacted at all, have comprehended both divisions. In the present instance, Dr. Gibbon gained a verdict, leave being reserved to the defendent to move the court above as to the construction to be placed on the Medical Act. It is, however, a good thing, apart from the question at issue, that such cases should occasionally be brought to light. The general public are little aware of the injustice and ingratitude which too frequently are meted out to the Medical Practitioner. But we repeat that, in our opinion, the old principle was the better. The position of the Bar would be manifestly lowered if fees to Queen's counsel *only* were *honoraria*, and the remuneration of the junior barrister were reduced to the same category as the attorney's bill.

THE MEDICAL DEPARTMENT OF THE UNITED STATES ARMY.

The annual report of the Surgeon-General of the United States' Army for the year ending June 30, 1862, has appeared in a recent number of the *American Medical Times*. The number of general Hospitals is thus seen to be 150, and the total number of patients in them 58,715. During the past year the health of the troops has been remarkably excellent. No epidemics of any severity have appeared among them, and those diseases which affect men in camp have been kept at a low minimum. Scurvy has been almost entirely prevented, and yellow fever, from which much was feared, has had but few victims. This immunity is due, says the report, to the excellent hygienic arrangements instituted, and to the cordial manner in which generals in command have co-operated with the proper authorities. At present, the total number under the charge of officers of the Medical Department is not short of 70,000, and immediately after the battle of Antietam it was over 90,000. In the discharge of their duties, Medical officers have been very much aided by the contributions of the people of the country, and by the efficient co-operation of the sanitary commission and relief associations. The Surgeon-General is satisfied that never before were the sick and wounded of an army so well cared for as are those who have suffered for their country in the present rebellion, He considers the Hospitals to be a credit to the nation. He informs us that, prior to June, 1862, in the examinations for admission into the service, the standard of attainments required for success was much lowered, and that out of eleven candidates only two were rejected. At the present time the standard has been raised, and he adds that the gentlemen now entering the Medical staff have been found fully competent to undertake the important trust with which they are charged. Appended to the report is a series of recommendations calculated to increase the efficiency of the department, the necessity for which, together with the confession as to the admission of candidates, goes far in our mind to neutralise the rose-coloured account of the manner in which the unfortunate sufferers from the war have been hitherto cared for. First, he recommends the establishment of a Hospital and ambulance corps, after the model of those in the European armies. Secondly, an increase of the Medical corps, since the service in Hospitals has been hitherto filled by the employment of "contract" Physicians. Thirdly, he wishes to do away with the five years' probation as assistant, before promotion of an officer to the full rank of Surgeon; adding, that the number of Medical cadets is altogether too small for the necessities of the service. Fourthly, he recommends the institution of a corps of Medical army inspectors. Fifthly, an annual grant for an army Medical museum, and the establishment of an army Medical school. Then follows a series of recommendations as to an increase in the number of Medical storekeepers; an improvement in the laundry arrangements of the Hospitals, etc.; and one to the effect, that the Medical department should be charged with the duty of building the Hospitals which they have to administer. He tells us that, in the matter of transportation, the interests of the service require that the Medical department should be independent. Much suffering has been caused by the impossibility of furnishing supplies to the wounded, when those supplies were within a few miles of them in great abundance. Passing on to the recruiting and equipments of the army, we are informed, that the minimum age for recruits is now fixed at eighteen years, and it is not uncommon to find soldiers of sixteen years old. Youths of these ages are not developed, and are not fit to endure the fatigues and deprivations of military life. They soon break down, become sick, and are thrown upon the Hospitals. As a measure of economy, then, he recommends that the service age of recruits be fixed by law at twenty years. The present manner of supporting the cartridge-box is, he says, productive of hernia; and he recommends that, instead of being carried by a belt round the waist, it should be supported by a shoulder-strap.

VENTILATION OF NEW BUILDINGS—A FIX.

The editor of the *Builder*, a journal heartily devoted to sanitary progress, informs us that a district surveyor, of twenty-five years' standing, has been suspended for three months by the Metropolitan Board of Works—a punishment equivalent to a fine of £100—for non-performance of his duties, under the following circumstances:—The 29th section of the Building Act requires, that unless all the rooms of a new house can be lighted and ventilated from a street or alley adjoining, it shall have in the rear, or at the side thereof, an open space exclusively belonging thereto of the extent of at least 100 square feet. This provision is habitually evaded by persons constructing buildings of a low class, and it so happened that an attempt of the kind was recently made. Two small houses, it appears, each having two rooms on a floor, front and back, were erected at Stepney, with a large open area behind. When the houses were built, the enclosure walls at the back were put up in such a way as not to give to each house the requisite area of 100 square feet. The district surveyor complained to the builder, and, in consequence, he removed the doors by which the front and back rooms communicated, and made an opening of about 4 feet 6 inches in width, so as nominally to turn the two rooms into one "lighted and ventilated from the street." The district surveyor ought to have carried this case before the magistrate, but did not do so, because the builder had complied, if not with the spirit, yet with the letter of the Act, and for this failure of duty he was suspended. The Metropolitan Board, then, who have the control of their officers, interpret the Act as any other reasonable people would, and insist on the object of the framing of the clause referred to being maintained. But suppose the officer had proceeded criminally

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against the builder. He would have been met with the argument, that this was a penal clause, and must, therefore, be strictly and literally interpreted, and, before the magistrate, he would most certainly have lost the day. This is no imaginary result. "Magistrates have already stated, that although the Act requires rooms to be lighted and ventilated from a street or alley adjoining, the clause is not contravened if the back room be so lighted and ventilated through the front room." In the case of the district surveyor of Bethnal-green against Baum, who had not provided the required area at the back, Mr. Hammill, the sitting magistrate, suggested that the builder should remove the partition which divided the front room from the back room on the different floors, so as to meet the requirement of the Act, and this was done. In a more recent case, in Marylebone, the district surveyor having summoned a builder for not providing the proper area, the sitting magistrate suggested to the builder to get over it by substituting a glass door for the deal one between the two rooms." Still, while we think that the district surveyor in Stepney ought to have proceeded in his duty, in spite of these adverse decisions, we are of opinion that the fault he committed would have been fully met by a reprimand. At the same time, with magisterial decisions such as have been referred to, it is clear that, if this most wholesome law is to be carried out, no time should be lost in the ensuing session in obtaining such an amendment of its provisions as will prevent evasions of this kind for the future being sanctioned by the magisterial bench.

THE POPULATION OF MEXICO.

THE expedition to Mexico, and the avowed intention of the Emperor to restore to the Latin race on the other side of the Atlantic all its strength and *prestige*, by erecting a Mexican monarchy, have turned thither the eyes of all Europe. A Medical journal, the *Gazette Hebdomadaire*, has lately published an admirable series of letters from M. Buez, *Aide-Major* attached to the expeditionary force, descriptive of the Medical aspect of the country. The fourth of this series contains a graphic description of the population. From every paragraph may be gleaned matter favouring Dr. Knox's cherished faith in the immutability of race, and the impossibility of superseding and supplanting autochthones by foreign immigration. The modern Mexican is the Spaniard deteriorated. He has retained all the faults of his European ancestor—his vanity, his sloth, his poverty, and indifference, but, with them, something of his gallantry and his abstemiousness. Civil war and gambling are his only passions, and, the latter, the only honest institution which is honestly practised. The Mexican gains or loses with an *insouciance* remarkable, never uttering a sound. After his last coin is gone he will stake the gilt serpent which garnishes his sombrero, and the silver buttons adorning his nether habiliments. All lost, he borrows a few piastres with an air of *dignité* that it is impossible to resist—it must be added, that he will scrupulously repay when the fickle goddess proves favouring. The Mexican *senorita* is inactive, slothful, and an unbridled coquette. Visiting, cigarettes, and *les bains* are her only occupation. But yet she, at times, can exhibit noble qualities. Often has M. Buez admired the courage and devotion of the wife of the *arriero* under a burning sun and the fatigues of a frightful route. But the only working population are the children of the soil—the primitive Indians. It is they who bring to the towns the produce of the country. On market-days, they come in, men, women, and children, with feet and legs bare, carrying their large baskets, fastened in front by means of a girdle, the mother bearing her infant suspended at the side of her pannier. Often, for the sake of a few piastres, do they accomplish five or six leagues, under these conditions. Prescott, in his "Conquest of Mexico," relates the marvellous feats of walking performed by the couriers of Montezuma: the same qualities of endurance and docility are exhibited by their scattered and degraded descendants. The Indian's respect for religion and its ministers is extreme. As soon as he hears the tinkling of the bell which announces the transport of the host to some sick man, he prostrates himself, and continues kneeling until the sound has died away in the distance. The Indian mother hastens with her recently-born infant in one hand, and an enormous candle in the other, to dedicate her child to heaven. This veneration, which spent itself in the gorgeous worship of the Teocalli, is still to be recognised under the leaf-covered huts of the aborigines of Anahuac. Forms of religion and forms of government change but little the enduring lines, moral and physical, which nature has imprinted on the races of Man.

PROVINCIAL CORRESPONDENCE.

GRADUATION WEEK AT ST. ANDREWS.

By One who was There.

ON December 24, 1862, I found myself once more in Edinburgh—once more looking at its castle,

"Grey in arms, and marked with many a seamy scar,"

loitering near *that* monument, peeping into the dingy closes of the High-street, "cannily keekin ben," and dreaming of the glorious suppers of long, long ago! I climb the Calton-hill, my heart panting, towards the crags, Arthur's seat, and Antony's chapel, and proudly looking on this, Scott's own romantic town, could not keep from exclaiming—

"Where's the coward that wouldn't dare to fight for such a land?"

But from high poetics to the dull, common prose of life there is but one step. The train starts at half-past two, and I must be off to St. Andrews. Of course, you know this same St. Andrews is situated in the kingdom of Fife, North Britain, and washed by the waters of the German Ocean; that its university is a very ancient seat of learning, and the town and neighbourhood closely associated with the early history of Scotland; and tales of thrilling interest hang around its crumbling walls! Here, some of the best and the worst men Scotland ever knew drew their first intellectual breath; here, the men of the Covenant did their bloodiest deed (?); but our business at present is with the living and not with the dead; so, if you please, we will say—

"The knights are dust, their swords are rust,
But their souls are with the saints, we trust."

Here we are at the station called St. Margaret's, a motley crew drawn into this little point, as a focus, the Medicals being recognisable at once by, shall I say, our jaded, missionary look, martyr's eye, and lofty scorn of external appearance. The voyage to Burntisland is made in safety, "that lonely spot by the sea," and we are in the heart of Fife, rushing past the "lang town" Markinch, and other villages associated with the wanderings of the eccentric James V., who, as the guid man o' Ballengeoch, did higgelty-pigelty justice there!

Hitherto, we have been a black mass of human beings moving to St. Andrews, but individual peculiarities are beginning to appear. Here is a beardless young man, not quite finished at Guy's, who has come up, like a trump, determined to take his degree, and not lose this last chance.

Yonder man, with the portly frame and great gold chain, talking so loud and sonorous, is a well-known London quack. Of course, he thinks the *thing* is to be bought, and has brought lots of *tin* with him; but is astonished to learn that there really is to be an examination. "Who is Penny, and Struthers, and Buchanan?" he is continually asking. "Why, I thought Day was to do it all." "Oh, not at all; it is a very stiff examination. Heddle is worse than Penny; fifteen were plucked yesterday." And so our fat fellow traveller is left to draw comfort from the fifteen of yesterday, and to mark more clearly the shadow that is beginning to fall around his huge form.

Here is a quiet man who tells me he comes from Wigan, and who is silently listening to the Babel that rattles around. It is clear that he does not like all this, and has more than once looked sternly at a swarthy young man who is making a Jack of himself; but he, from the land of the sun, scorns advice, and swaggers on with defiance in his eye.

"Thornton," shouts the guard—"Thornton," and into our

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already choked compartment presses a wayworn traveller from Crewe, who had missed his track in the morning, and been carried round by Perth, and now, at the last hour, has joined the great body of recruits for St. Andrews.

The first time one sees and carefully looks at a particular person, we endeavour to index the inner from the form and expression of the outer man. We are all continually doing this, and continually failing, because man is a complex being, and has springs of action unknown even to himself. The soul is too subtle to be measured by anything material, and all attempts to arrive at but a very general idea of what a man is by looking at him, have failed, and must fail. Notwithstanding, we cling to our habit, and peer into men's faces, and look into their eyes, which poets say are the windows of the soul, and imagine we see truth and beauty—a life devoted to virtue, reflected from those wonderful orbs; or fastening on a lip, grasping a hand, staring at a neck encompassed it may be with "a white choker," we declare the unfortunate possessor of the thick lip, stumpy fingers, and short neck, highly dangerous to society—an inflammable mortal little above the brutes that graze the field. It is needless to say that in all this we err much, and frequently do grievous wrong to worthy, most excellent people, and should not be guided too much by these first impressions. The worst man I ever knew was a plausible scoundrel, with a fair face and handsome exterior; and some of the best men I have met—large-hearted, noble fellows—were dumpy and most unpromising at first look. However, I must confess "some souls by instinct to each other turn," and we three, that is, the gentlemen from Wigan and Crewe and myself, who were entire strangers, agreed to lodge together, and a few minutes more found us, as old friends, over a towsy tea, in excellent quarters at the Post-office, St Andrews. One sentence more before the curtain drops for the first night. At the Post-office we found an Irishman, also a candidate, who gave us a hundred thousand welcomes to the ancient city. He had lived in it three days, and was full of information concerning the coming struggle. But love is the soul of a neat Irishman, and with one or two of Moore's songs, and a glass of *poonsh*, we drowned all cares, and went to bed as happy as kings!

Christmas morning broke beautifully: the atmosphere was clear and bracing; and the streets of St. Andrews, clean and shining, animate with the black-coated strangers, gave the old town quite a gay appearance. Among the first persons we met, on emerging from our lodgings, was the portly gentleman from London. He had been to the secretary, Mr. McBean, and was evidently disconcerted at the reception. Things were beginning to assume rather a serious aspect, and the joke was becoming a little painful. There was to be an examination after all, and no mistake! Two days ago, a military gentleman, covered with clasps, had got plucked. The most aged among us must submit to this ordeal: really it is too bad to bring middle-aged gentlemen so far and use them thus; why, it is shameful!! "I go back to London," said the man of pills, "but Day shall hear from me!" and, saying this, he drew a long breath! In vain I looked admiringly at the gold chain! In vain I attempted to "smooth the raven down of darkness till it smiled." It would not do. Hope came not here that comes to all. In vain I rested my eye on his round corporation, and splendid pectoral region, assuring him his appearance was sufficient to make him pass, and that such a jolly-looking fellow had no cause to fear; all would not do. "Go in," I exclaimed, "it is glorious to fail!" but my fat friend had no idea of such glory, and, looking unutterable things, he waived adieu, and we parted never to meet again!!

On reaching the secretary's, we found a host registering, and Mr. McBean quietly and methodically doing his work, handing to each gentleman a card containing a programme of the examinations, which, upon reading, looked formidable enough, and made "the boldest hold his breath for a time." It now became apparent to the most thoughtless that there was work to be done; that those who had prepared for it were alone likely to succeed; that the time was short and incapables were sure to go to the wall; and that those who came here, believing it to be an asylum for the destitute, would very soon awaken from their dream. To the strong and healthy, this was rather invigorating; for what is a victory without a struggle? Sandford, on looking at his card, muttered, "On, Stanley, on!" while Barwise more philosophically exclaimed—

"Come what may,
Time and the hour run through the roughest day."

Our Christmas dinner at the Post-office went off cheerily, for our chairman, the good man from Queenstown, was lively as Sheridan and brilliant as Burke; and while the wine-cup shone in light, with the songs of Moore and Burns, and libations to distant friends, the night passed gloriously, and we thought not of the morrow.

The ball opened on Friday morning, in St. Mary's Hall, by each candidate being admitted in the alphabetical order of his name; and, on walking forward, I found my address distinctly written at a seat in the front rank, with a request that I was to keep it during the examination. The large hall soon filled, and the "Chemistry" paper was before us. For the first five minutes I could do nothing; the seats swam around me, and I could only hear a rustling of paper and the noise occasioned by gentlemen taking their seats behind. Presently I began to look at the paper, for my neighbours on both sides were busy at it. The first question, "What compounds does hydrogen form with nitrogen, with chlorine, and with sulphur?—Give the processes for the preparation of these compounds," appeared very beautiful, and not very difficult, and I knew who constructed that question. But still I could not go on with it; my hand trembled; I could not think, and once more I looked up to see what was passing around. The examiners were moving about, silent as ghosts, handing papers, and assisting men to find their places. There were among those examiners strange faces, but others I had seen before. That little man, whose hand, no doubt, drew the questions we were to answer, is one of the great chemists now living: as a teacher, I do not know his equal; and as a toxicologist, Taylor alone may be named before him! That other gentleman, with a fresh and ruddy complexion, has an historical name, and, if you look carefully at his face, you will be reminded of a remarkable man, who bore the same appellation, whose phiz is well known to the readers of "Ebony." He is the worthy son of an honoured sire, and well qualified to take part in this examination.

That venerable old gentleman, with the long flowing beard, I do not know; he is evidently a descendant of some of the cardinals—perhaps of John Knox himself.

There is Tulloch, with sunshine in his look, and a spring in his walk, which gives the world assurance of a man.

Who is this gentleman with the pale, womanly face and spreading forehead, so calm and still in his motions? That is Struthers, a well-known name in Surgery, under whose mild exterior lies a nerve of iron. Other men of mark are moving about, but we will speak of them again.

The venerable gentleman with the beard has just been saying, "There is but half an hour left to finish the first paper," and I see some of the candidates have already got it finished, and are busy at the one on "Materia Medica."

The tremulous feeling has now subsided, and each man is doing his best to answer the questions. All is orderly, not a *whish* is heard, and the work goes on. The Latin paper reaches me at last: by this time some had got it over and left the room; and with it closed a long round of three and a-half hours. On getting into guid bruid daylight, who should I run against but an old fellow-student from Fort William, whom I had not seen for many years, when we congratulated each other on round No. 1. I was the first of our lot who arrived at the Post-office; Joseph was too exhaustive in his replies; and the others, like myself, had felt a little queerish, but had stuck in to the last; so, with old Jack Falstaff, believing in a cup of sack, I warmed my heart until their arrival, consoling myself with the thought—"He that does his best, does well, acts nobly—angels can do no more." The other gentlemen soon arrived; and, after mutual congratulations, we prepared for bout No. 2, which passed off with less excitement than the first, and consisted of the Anatomical and Physiological papers, with the questions on "Surgery," and extended fully over two hours.

In the evening, along with a batch of others, I found myself, by special request, waiting on Dr. Day, in a crowded room of that gentleman's residence. Each man held in his hand his diploma, or evidence of it; and as, one by one, we drifted into the presence chamber, there was a pause as though some of us had suddenly sunk out of sight or passed into some dangerous vortex. It was curious to observe how the various gentlemen conducted themselves on emerging from the scrutorial chair, one declaring Day had treated him most savagely, lacerating his muscular system, tearing through the arteries, and making sad havoc at the base of the brain. From this description I was made to fear that a bear

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was in the other room. The next arrival would tell us how gentlemanly and kind Dr. Day was; while a third would say, "Why, he did not ask me many questions; I told him I had not studied 'comparative anatomy,' but was familiar with the workings of the microscope, and he was kind enough to pay a compliment to the educational institutions of my native town." And so, after many departures, my turn came at last. I found a middle-aged gentleman, evidently an invalid, partially reclining on a couch, who, with searching eye, scanned me as I entered, courteously inviting me to take a seat. Dr. Day is a practised hand at operations of this kind, and I need not say how very soon he dissected me, making the humble narrator of this interview once more acutely feel the truth of Bacon's aphorism, "Knowledge is power." With a smile he bade me "Good night," and I felt I was not quite killed, nor inclined, like an unfortunate fellow-traveller, to run away. One poor fellow, who had waited in the ante-room for some hours, and found at last that he was not wanted, but that he ought to have been with Drs. Heddle, Craigie, etc., in the hall at the university, became fearfully agitated, and in despair asked me "where he could get a refreshment?" I pointed to an hotel over the way, and he vanished from my sight. Next day I saw him in a still more pitiful plight. Evidently he was a doomed man, for there he was, hat in hand, gravely talking with the examiners in the body of the hall, while the written questions were being answered. Now, it was clear he was no longer one of us; and, no doubt, the two p.m. train saw him on his way for the great metropolis, sadly thinking—

"Hither, as to their fountain, other stars
Repair, and from those urns draw golden light."

Saturday morning found us at the "Practice of Medicine" papers, and we finished the day with those on "Midwifery." Many gentlemen had taken their departure "in sorrow, grief, and woe;" and pale, anxious faces were to be seen about South-street, dreading that fatal letter, and trembling lest Fletcher should honour them with a visit. It came to I do not know how many, but certain the rejections were numerous, and, I believe, some good men were plucked—great lament being made for a promising young man from a metropolitan Hospital.

Sunday gave us a breathing space. Wandering among the ruins of the cathedral and Cardinal Beaton's palace, inhaling the saline breezes, and "wondering what the wild waves were saying," the day passed. Monday brought the orals. There I met, for the first time, Dr. Sellers, a mild, benignant man, with whom I spent a very agreeable quarter of an hour; passed to Dr. Buchanan, and from him to Dr. Keiller, a gentleman evidently of high Professional acquirements. At last I found myself sitting opposite my old master, Dr. Penny, who blamed me much for forgetting my chemistry, and was only prevented from murdering me outright by the shortness of the hour,—

"Glad to escape, I stumbled to the door—
Confound your symbols and your atoms more."

And so ended my "heckling" at St. Andrews.

The rest of the day we spent lounging about Fletcher's, where considerable excitement was kept up by hearing of these fatal letters, the report being "still they come;" and as no man could say one of these little billets might not come to him, each was asking others the news, and looking out for the wounded and the fallen, and those who were likely to go.

A rollicking sailor, fresh from the *Hogue*, once splendid at a dissection or an examination under Moses, now full of health and mirth and jollity, would come up into our lodgings and alarm us all by the terrible work that was going on, telling us old Dr. Craigie was biting like a snapping turtle; that nothing but the crotchet and perforator were used by Wilson; that that white-haired fellow, Edwards, was scalping them, and Heddle finishing the work with oxalic acid! "No doubt," continued Arthur, "the deaths are numerous, and, gentlemen, the mortality will be great." The big fellow would then extend his sides and roar like a hippopotamus.

This, and some things more, brought Tuesday, but "the havoc did not slack," for Arthur was still swearing, "'Tis as bad as the cholera,—every third man is plucked who goes in to-day." However, calling on Mr. McBean, he desired us to sign the oath—and so, we had passed.

The capping took place on Wednesday, December 31, at three p.m., in the large hall, when not less than 130 gentlemen received the honourable title of "Doctor Medicinæ," after a protracted examination extending over eight days, the feeling among each and all of us being that we had been thoroughly tested, and that the gentlemen who passed as men of honour and ability are themselves a guarantee that no man received the degree that day who did not deserve it. And now, fellow graduates, farewell. We can never all meet again; most of us will never see each other more; but each of us have a certain influence as individuals, and that influence is for good or for evil. Every profession is affected, to a certain extent, by the character of each individual member of it. Let us, then, under all circumstances, endeavour to do the right, so that St. Andrews may not be disgraced in our persons. Let us, above all—

"To ourselves be true,
And it must follow, as the night the day,
We cannot then be false to any man."

GENERAL CORRESPONDENCE.

DISSECTION WOUND — TWENTY-ONE DAYS AFTERWARDS, INFLAMMATION AND SUPPURATION OF MIDDLE FINGER OF RIGHT HAND; SUBSEQUENTLY PALM OF LEFT HAND—RECOVERY.

LETTER FROM DR. CHARLES DRYSDALE.

[To the Editor of the Medical Times and Gazette.]

SIR,—The following case of dissection wound is so singular, from the long period of incubation, that I have thought it, perhaps, not unworthy of insertion in your pages:—

On November 11, 1862, in company with Mr. L., a brother Practitioner, I made a post-mortem examination of a young woman, aged 23, who, during life, had suffered from albuminuria with anasarca, upon which disease symptoms of phthisis latterly supervened, leading to emaciation, and, immediately before death, to peritonitis.

Post-mortem Examination Twenty-four Hours after Death.—Notes:—Rigidity well marked; body emaciated; on pressing the abdomen, there are felt hard, roundish bodies, about the size of a hen's egg, in the epigastric region. On opening the abdomen, these bodies are discovered to be enlarged mesenteric glands. The mesentery, from the number of them, presents the appearance of a hen's ovary. There is about a pint of fluid in the abdominal cavity; no adhesions of intestines. Kidneys enormously enlarged, weighing together one pound eight ounces; on section, the tubular portion presents the feather-like appearance common in such cases. Thorax.—Both lungs have their apices consolidated with recently-deposited tubercle; each pleural cavity contains a small quantity of fluid. Pericardium and heart not abnormal.

Twenty-one days after this post-mortem examination, at which Mr. L. pricked his finger, the finger began to swell.

December 2.—Mr. L. showed me his finger; it was much swollen, and threatened deep abscess. I advised incision, and Mr. Allingham opened the swollen part, pronouncing the case to be a dissection wound.

6th.—Finger suppurates freely; red line along the course of the right axillary vessels; pulse 90; tongue clean; appetite good; rigors.

11th.—Palmar surface of left hand is inflamed, and there is a deep abscess; pulse 95; tongue clean; Mr. L. has an anxious look, and is thinner.

16th.—Mr. Allingham opened the abscess in the left hand; small pustules near the inflamed part; Mr. L. is very weak; pulse 95, weak.

19th.—Confined to bed; left hand much swollen, and suppurating very slowly; pulse 95; haggard.

30th.—Much better; wound closing.

January 10.—Convalescent; fingers stiff; health excellent.

The treatment of the case was simply analeptic, with a moderate amount of stimulants. I have not found in works upon necroscopic poisons any instance of such a long interval (twenty-one days) between the inoculation and the outbreak of symptoms; and would be glad to hear if this has been observed. I am, &c.

CHARLES DRYSDALE, M.D.,
M.R.C.P. Lond., F.R.C.S. Eng.,
Hon. Sec. to Harveian Society, London

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THE ARMY MEDICAL DEPARTMENT.

LETTER FROM AN ARMY SURGEON.

[To the Editor of the Medical Times and Gazette.]

SIR,—The Medical officers of the army will feel a debt of gratitude to you for bringing their grievances before the students, as it is only by pressure which can be brought to bear on the Horse Guards, by no candidates offering themselves for the appointment of Army Surgeon, that justice will ever be done to the Medical service.

The columns of the Military and Medical papers have all of them frequently expressed how the authorities have, in every possible way, thrown over the Warrants of 1858, and how they have seemed to delight in snubbing their Medical department by all means in their power. It is well known that in every rank of the Medical department there is deep dissatisfaction; in fact, that Medical officers of fifteen or twenty years' service cannot now afford to throw away their service, or they would resign in large numbers. I well recollect, about a year ago, that a petition was signed by nearly all the officers of the Medical department, to memorialise the Secretary at War concerning the abrogation of some of the benefits conferred on us by the Warrants of 1858. This was laid before the Secretary at War by General Peel, who, as a former Secretary at War and a military officer, was not likely to espouse a cause that he did not consider was just and fair. A short time after this, the *Globe* and other daily papers stated, that all the grievances of which we then suffered were to be redressed, and the *Globe* published a leader on the subject. As this paper is supposed to be the Government organ, the department felt convinced that what it stated was true, and took no more steps in the matter. From that time to this, nothing has been done; and, as you justly remark, the whole body of Medical officers is disgusted, and feel that faith has been broken towards them.

Whether it is advisable that so large and useful a body of gentlemen should be thus insulted and discouraged, I think is a matter worthy of the attention of the public; and I hope, as soon as Parliament meets, that steps will be taken, so that, without delay, some pressure may be put upon the Horse Guards, and our rights at once be granted. But, above all, we look to your columns to lay before the Medical students and young Surgeons the manner in which we have been treated, and how they may expect to fare when they have once donned the now degrading costume of the army Medical officer. Let them recollect that, not content with qualifications that are sufficient for a man to rise to the highest position in civil life, special acquirements are insisted upon; besides which, before an Assistant-Surgeon can obtain his next step, he must undergo a second examination; and then let all aspirants for military surgeoncies ask themselves whether the "game is worth the candle?"

I am, &c.

AN ARMY SURGEON.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 13, 1863.

Dr. BABINGTON, President, in the Chair.

A PAPER, by Mr. JOHN DIX, was read, on the

WIRE COMPRESS: A SUBSTITUTE FOR THE LIGATURE.

The wire compress—the subject of this paper—is a modification of the method of arresting hæmorrhage devised by Dr. Simpson, of Edinburgh, and introduced by him, about three years ago, as a substitute for the ligature. This "acupressure," as it is called, has been tested by but few Surgeons of note; and in London, especially, it is almost unknown and ignored. Although, probably, a real improvement on the ligature, it undoubtedly labours under certain inherent disadvantages, most, or all, of which (it is believed) are obviated by the use of a fine wire of iron or of silver, instead of the steel needles of Dr. Simpson. This idea was first promulgated in a paper on "Acupressure," published in the *Medical Times and Gazette* of June 2, 1860; and first put to the proof in a case of amputation of the finger, September, 1860. In this operation two arteries were secured by wire, which was removed on the third day. The case did well: there was no bleeding, and very slight suppuration. In the next case—Chopart's amputation, performed April 26, 1861—five wires were applied on as many arteries: four of these were removed in forty-eight hours, and the other on the fourth day. It was found that the wire was easily applied, as easily withdrawn, and entirely effectual for the purpose it was intended to serve, namely, the arrest of the bleeding from the cut vessels. This patient, being the subject of constitutional syphilis, did badly. There was sloughing of the entire surface of the wound, and the flap was totally destroyed, notwithstanding which there was no hæmorrhage; but she died, on the thirteenth day after the operation, of pyæmia. *Case* 3 (September 21, 1861).—In an amputation of the thigh, done after Mr Luke's method, there were seven bleeding arteries. Upon five of these the wire was used, and, with the femoral artery, the femoral vein was intentionally included; two very small branches were treated by torsion. This case did well. Seventy-two hours after the operation, four of the *prime artery* wires were withdrawn with perfect ease and without bleeding. The one on the femoral remained five days, when it, too, was removed without any difficulty and without a trace of blood. There was but little suppuration, and an excellent stump was the ultimate result. These cases prove that this mode of securing arteries is practicable, efficient, safe, and manageable. It is also believed to possess a certain positive superiority over the ligature, as the following comparison shows:—A ligature in a wound impedes union and induces suppuration. Cure, by primary adhesion, of a large wound—as, for instance, an amputation—is an event of extreme rarity, and this because of the ligatures. A thread of silk is, in fact, a miniature seton, and the whole number required in an operation make up one of considerable size, and can scarcely fail to lead to the formation of pus. Again, the ligature of necessity excites ulceration of the artery upon which it is tied; it cannot in any other way be got rid of. This is another unhealthy process, antagonistic of repair. In applying a ligature, the end of the artery is drawn out from its sheath, by which its natural connexions are disturbed, and its vasa vasorum broken up; its coats also are lacerated and bruised. The ligature remains for an indefinite time, long after it is useful or necessary, and it is not unfrequently pulled at by the dresser before it has become detached. Its knot, often deeply buried between the flaps, cannot be withdrawn without tearing through adhesions, or damaging the granulations. All these are serious obstacles to the healing process both in the stump and in the artery itself, and must protract the period of cure. Moreover, the following is an interesting and noteworthy formula: Pyæmia is the offspring of purulent accretion, of which the ligature is an efficient and probable cause. Bleeding arises solely from ulceration of an artery, of which again the *primum mobile* is the ligature. From one and all of these objections to the ligature the "wire compress" is almost or altogether free. Thus, in accordance with a well-known pathological law, it, being a metallic substance, is freely tolerated by the living body, and has little or no tendency to excite suppuration or irritation. Neither does it cause ulceration of the artery. This is positively affirmed from actual observation of its effect as witnessed in the sloughing stump before alluded to. It is applied without interference with the natural relations and vital connexions of the vessel. It is removed at any time, according to the will and judgment of the Surgeon, without disturbance to the reparative action going on in the artery and in the rest of the wound, without futile premature attempts, and almost without pain to the patient. It is not liable to lose its hold, or to become detached too soon, as not unfrequently happens to a ligature applied upon a brittle or sloughing artery. Twigs of nerve accidentally included in the embrace of the wire are not injured and excited as by the tight strangulation of the ligature, and, if thought advisable, the veins are easily and safely occluded, along with the arteries. Although this has been spoken of merely as a modification of acupressure, yet it is believed to be a decided and important improvement on "Simpson's skewers," as the needles have been irreverently called, and which are fairly open to the following objections:—When several of them are required, the stump resents, as it were, being thus pierced through and through in various directions. From the injury thus inflicted, and from the

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obstruction to the capillary circulation caused by the pressure of the unyielding steel, arise much tension, œdematous swelling, and great pain; the pain, especially, has been found a very serious evil. Again, their projecting ends, and the puckering they cause in the substance of the flaps, interfere very much with that accurate adjustment of the cut surfaces and edges which so greatly aids the chances of union by adhesion. The wire is free from all these shortcomings. It is thus applied:—Take a piece of Surgical wire six or eight inches long, and thread each end thereof upon a straight needle. Seize the bleeding mouth of the artery with forceps, and pass one of the aforesaid needles close on each side of the artery just mentioned, about a line above the point of the forceps, directly down through the substance of the flaps, so that they emerge at the cuticular surface, about half an inch distant from each other. Draw them both through together till the curve of the wire compresses the artery on the face of the flap. Now get rid of the needles by clipping through the wire close above their eyes, and also detach the artery forceps. Place a piece of cork, cut for the occasion, upon the skin, between the points of exit of the wire, and over this twist the wire tighter and tighter until the bleeding is arrested. Lastly, cut off the superfluous wire. All which is done quicker than described. Two or more arteries lying near together may be embraced by one wire, and, as has been said, the veins may be included or excluded at will. The wire should be either of silver, or, what is much cheaper and equally manageable, of the finest and softest passive iron. The generality of wire as used for sutures is too hard and stiff. The needles are about three inches in length, straight, and three-edged, with an eye adapted for carrying wire. Special care is necessary in threading the wire that it is kept perfectly free from all twisting. The forceps are used, not to draw out the artery as when a ligature has to be applied (this, indeed, is to be particularly avoided), but merely as a guide to mark the exact position and course of the vessel. The cork is necessary to protect the skin from the pressure of the wire. The withdrawal of the wire, which at first sight appears an insuperable difficulty, is perfectly simple and easy. It is thus effected:—Clip the wire close to the edge of the piece of cork, and straighten out the curve it has formed, at its exit from the skin. Remove the cork, and apply instead the tip of one finger, with which press firmly upon the flap, making traction gently and gradually upon the other end of the wire. If this were roughly and hastily done, it might break up the adhesion which it is presumed has taken place between the surfaces of the flaps, and it is quite possible that a flexure in the wire might lacerate the artery in passing over it; but it is certain that none of these evils need happen with ordinary care and tact. As to the period of withdrawal, further observations are desirable; but it has been clearly shown in numerous cases of acupressure, that for small vessels a few hours of compression is sufficient, and for the largest arteries a much less time than might be supposed. However, as a general rule, it is not desirable to disturb a wound in any way for from twenty-four to forty-eight hours; at the end of which time all wires commanding the secondary branches may be safely removed, and probably also from the large arteries; but, as a matter of prudence, it is well to keep a check upon such a one as the femoral for three or four days at least. The descriptions hitherto given apply particularly to amputations; but the wire is equally applicable to many other operations. In a postscript to this paper was related a case of excision of the testicle, in which it was used most satisfactorily upon the vessels of the cord. Two wires were required, and they were removed on the fourth day. Also a case of excision of the breast, in which three wires were applied, and removed in twenty-four hours. The wound, which was six inches long, healed kindly and rapidly—almost without suppuration. Suppose the femoral artery needs to be secured for popliteal aneurism. The wire would be passed under the artery by means of a tubular aneurism-needle made for the purpose, brought out through the integument at a convenient situation, and then twisted upon a cork in the usual way. This same artery, cut in amputation, is securely closed in three or four days by the action of metallic pressure; consequently, in three or four days the wire might be removed. Meanwhile, it has not caused suppuration, or impeded the union of the wound, which ought, therefore, by this time, to be completely healed; and more important still, the artery is not cut through, as by the ligature, but its coats remain intact, and bleeding is impossible. It will probably be found that the pedicle in ovariotomy may be conveniently dealt with by this method, the arteries being secured individually, and the entire stump also fixed to the abdominal wall by another wire. This idea has been already promulgated by Mr. Spencer Wells. The paper was illustrated by models.

Mr. Fergusson said that the author's paper ought not to pass without remark, as the subject was novel to the Society, though not new to the Surgical department of the Profession. The paper (he said) was very interesting and very clever, and yet the materials of it were not sufficient to prove the author's point, as five cases only were reported. These, if the subject had been quite new, might have been brought forward. From the cases adduced, he had not learned that there was, in the smallest degree, any advantage over the ligature, which, as a practical Surgeon, he was not disposed to set aside. It had been brought forward by a gentleman of great talents, but he (Mr. Fergusson) had not seen, nor heard, nor found anything to induce him to imagine this process superior to the ligature. The cases related were very few, whilst ten times that number of the employment of other means might be brought forward. As regards the amputation of a finger, every one knew that such cases would do perfectly well with the ligature. In the case of partial amputation of the foot, he did not suppose that the sloughing was due to the wire; but the fact, that there was no hæmorrhage, did not prove that the wire was better than the ordinary method of securing bleeding vessels. As to the plan adopted with regard to the thigh, that was not new. Professor Handyside had tried this method. The history of the case did not vary from the ordinary run of such amputations. He had tried this plan repeatedly, but should require much greater proof of its value than he had yet heard before he should attempt to secure large arteries, as the femoral or the brachial, on this plan. He noticed that in this paper, as also in many others on the same subject, there was a constant attempt to decry the ligature, one of the grandest things in Surgery. Great pains had been taken to test the value of the ligature, and he thought that the ligature had been set at rest. One point urged against it was, that it gave rise to suppuration, and thus favoured pyæmia. Of this he was doubtful, as he had often observed that patients, after operation, had feverish symptoms which gave rise to great anxiety, but which passed off as soon as suppuration set in. In fact, he always calculated on suppuration as a relief to the patient. He thought that the ligatures acted as vents for the discharge of pus; and, as regards their preventing healing by first intention, he would say that the advantage of this kind of union were overrated. Suppose the stump did heal by first intention, it could not be used for weeks—for months, as it was, in a great measure, new material, which would not bear pressure. In fact, the ligatures were of advantage in this way, that they prevented the patient using his limb too soon.

Mr. Barwell said that the great compression the tissues must necessarily undergo would interfere very much with the circulation of the part, and in the case of partial amputation of the foot recorded by the author, he feared that the sloughing might be due to strangulation. Pyæmia might follow without the previous local formation of pus. He had tried acupressure in small vessels, and had found it as useful as the ligature, but would not like to try it with such arteries as the superficial femoral.

Mr. Holmes said that the great advantage the author hoped to gain by his method was a freedom from suppuration, and yet in not one of his cases was this result obtained. He thought as Mr. Barwell did, that the wires would tend to strangulate the tissues included in their loops.

Mr. Maunder said that he was not aware that cases of pyæmia occurring without the existence of a breach of the surface of some part of the body had been undeniably observed, and, therefore, thought that, until such fact was established, and while pus was deemed to be a fruitful source of pyæmia, any means suggested to favour the closure of wounds by primary union should be willingly accepted and tested by the Profession. He had always been taught that the early healing of wounds was a great desideratum, by saving time, pain, and inconvenience to the patient, and by diminishing the risk of pyæmia, erysipelas, etc. The author's arguments in favour of the wire, and in preference to the silk ligature, were, at any rate, theoretically sound, and based upon indisputable physiological and pathological grounds. Notwithstanding the preference for the silk ligature which

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had been expressed by the first speaker, he (Mr. Maunder) was of opinion, that the principle of controlling arterial hæmorrhage, advocated by the author, whether needles or wire were used, was a good one, and should be fairly and honestly tried.

Mr. Barwell would refer Mr. Maunder to "Virchow's Pathology" for facts in support of his opinion, that suppuration did not necessarily precede pyæmia.

Mr. Spencer Wells trusted that the respect with which Fellows of the Society must receive the remarks which fell with such authority from so experienced an operator as Mr. Fergusson would not induce them to regard the suggestion of Mr. Dix as either unimportant or unworthy of a full and fair trial. The tendency of modern Surgery was towards simplicity in all things, and as compression seemed to be a simpler mode of stopping bleeding than the ligature, by all means let us see if it were equally effectual. In the treatment of aneurism nobody thought of using the ligature in a case where compression could be used, unless compression had failed. It was much simpler to stop the current of blood in an artery than to destroy ever so small a portion of the coats of that artery; and, if this were true in the case of aneurism, it was equally so in the closure of a divided artery. If compression for twenty-four hours were enough to seal or plug up a divided artery, it must surely be better simply to close it in that way, without the additional complex process of destruction and separation of the strangulated portion of the vessel which necessarily followed the use of the ligature. The objection raised by Mr. Barwell, and supported by Mr. Holmes, seemed to him (Mr. Wells) to be very unimportant, for it must be perfectly easy to apply such a degree of pressure as would compress a vessel enough to stop bleeding, without the slightest fear of injuring any of the parts pressed between the vessel and the skin. It was probably of little or no importance whether wire or silk were used; and silk would seem to offer many advantages over wire, especially as to the facility of removal. At any rate, Mr. Dix had brought sufficient evidence before them to render a fair trial of his method not only advisable, but necessary. If not on man, this was a case in which experiments might with perfect propriety be made on the lower animals. The subject was too important to be passed over without a careful investigation, by experiment, whether the advantages of the compress over the ligature were or were not real.

Mr. Dix said that he rose with much diffidence, and especially so because his reply must be chiefly directed to the remarks of Mr. Fergusson. "Of course (he said) I feel myself quite unable to cope in Surgical discussion with so great a Surgical authority; nevertheless, it is somewhat encouraging to find that such an opponent, though uncompromising and inclined to be severe, finds so few real and substantial objections to the subject of my paper. His lengthened argument amounts simply to this, that he is content with the ligature. In support of this position, he tells us that he thinks it a matter of little moment, whether a wound heals by primary union or by suppuration. In fact, of the two, he seems to prefer the latter. Sir, I have come a considerable distance to attend this meeting, and I certainly shall not return without having gained a new idea. This doctrine is altogether novel to me. It is utterly subversive of all I was taught as a student, and is entirely opposed to my own somewhat extensive observation and experience. I think it will find but few supporters in this room, or amongst the Profession at large. We have been told that, as regards the time at which a stump becomes useful, little is gained by primary union, and, in the same breath, it is somewhat inconsistently stated that suppuration is inevitable—that an amputation cannot be healed without it. This, Sir, is a fallacy. Primary union is rare, no doubt, but not impossible. I have seen it myself, and others have here and there met with an isolated case. About five years ago I amputated the leg just below the knee. In this case, although ligatures were used, there was never a trace of pus; in about six days this stump was entirely and soundly healed. I must say that I thought this a very good thing, and, with all deference to the great authority in opposition, I must still retain my humble opinion, that it is far better than a suppurating stump. I am fully persuaded that the chief reason why this good result does not oftener occur is, that those Surgeons who doubt its possibility do not adopt the best means to favour its occurrence. He who hopes most and attempts most will attain most, and I have given reasons for believing that there is no surer step in this direction than the disuse of the ligature. Pyæmia, we have also been told, is not necessarily connected with the presence of pus. This may be so. It may be that there is such a disease as idiopathic pyæmia, but it is a doubtful point and difficult of proof. A far more certain thing it is that pyæmia can mostly be traced to a pyogenic source, and it is well-known by fatal experience that it occurs most frequently in conjunction with an unhealthy suppurating stump. Hence I have argued in favour of endeavouring to prevent or to lessen the duration of suppuration. My cases, I grant, are few, because my opportunities are not frequent, but I may claim for them that they have been carefully and anxiously worked out under considerable difficulties and with a weighty responsibility; and I am perfectly convinced that they afford good ground for believing that this little device is likely to be of real practical utility, or I should not have appeared here to-night. But I plead not guilty to the charge of having exaggerated the evils of the ligature, or of having made too much of my own cases. I have expressly and emphatically stated that I have as yet obtained no better results than might have been obtained by the use of ligatures, though I hope ere long to do so. That the ligature is an old friend, well-tried and trustworthy—has been successfully used for years, and does well enough—that somewhat similar attempts to find a substitute for it have failed—belong to that kind of reasoning by which all abuses are defended, and all attempts at improvement are ignored and abolished; they are not of much weight on the present or any other occasion. Mr. Barwell also seems to have a friendly leaning towards the ligature; but his dread of sloughing, from the strangulation produced by the wire, is, I can assure him, purely imaginary. If he will try the experiment, he will probably be surprised to find how little pressure is needed to stop the bleeding from even a large artery. The needles of Dr. Simpson do produce injurious and inconvenient compression, but the wire compress does not, and it is one of the advantages I have claimed for it over the needles. I have fully shown that it is safe, and effectual, and manageable; and I have no doubt, from the attention which has been given to my humble efforts to-night, and from the ventilation which the subject has here received, that the wire compress will soon be put to the proof by others who have better and more frequent opportunities than I have; it may be, perchance, to the advancement of the science of Surgery, and to the benefit of suffering humanity."

THE PATHOLOGICAL SOCIETY.

Tuesday, December 16.

Dr. Copland, President, in the Chair.

Dr. Gibb showed the drawing of

A SPLEEN WEIGHING FIFTEEN POUNDS, REMOVED FROM A LIVE DOG

in the year 1850. This was exhibited in consequence of the suggestion made at the previous meeting by Mr. Spencer Wells, of removing enlarged spleens from the human subject. The animal from which Dr. Gibb removed the tumour was five years old, and was narcotised with sulphuric ether in a few minutes. The splenic artery and fifteen other vessels were tied. Very little hæmorrhage occurred. The dog lived five days, and died from cold. The tumour consisted chiefly of coagula within a large cyst formed by the capsule of the spleen, probably originating in a kick; the gland itself was embedded in its upper part. Dr. Gibb remarked that Dr. Crisp and others had removed the healthy spleen from dogs, and there was no reason why the diseased organ should not be so also.

Dr. Gibb also exhibited a sketch of

PARALYSIS OF THE LARYNX AFTER DIPHTHERIA, PERMITTING OF A VIEW OF THE BIFURCATION OF THE TRACHEA.

The patient was a man, aged 33, who contracted diphtheria from his three children, one of whom died. He subsequently had more or less general paralysis, and possessed the nasal twang; fluids came through the nose; the limbs tottering; he was a little deaf, and had anæsthesia of the fauces. There were ulcers on the tonsils and pharynx. The laryngoscope showed the larynx much expanded, the vocal cords completely relaxed, and the trachea seen throughout its length,

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terminating in the bifurcation, which was quite distinct. The tube above the left bronchus was bulged inwards. He recovered well.

Mr. Hutchinson inquired whether the patient's ocular accommodation was not also defective?

Dr. Gibb replied that it was, and that the man could only see objects held at considerable distances. In reply to another question, Dr. Gibb stated that in cases of operation for the removal of growths from the larynx he always prepared the patient by administering the bromide of ammonium. The dose used was from fifteen grains to a scruple every four hours for a day or two before the operation. It usually had the effect of inducing the patient to complain of numbness in his tongue and palate. It was, however, difficult to extinguish the irritability of the epiglottis.

Dr. Gibb also showed a

FIBRO-CELLULAR POLYPUS OF THE LARYNX, THE SIZE OF A PEA, SUCCESSFULLY REMOVED

from a gentleman, aged 42, with dysphonia and hoarseness for ten years. He had had rubeola at 24, pertussis at 30, and variola at 40. The voice was a sort of hoarse whisper and constrained, as if the trachea was tied. The laryngoscope showed this to depend upon a polypus, the size of a pea, growing immediately below the origin of the two vocal cords. This was removed with the most satisfactory results on December 10.

Mr. Hulke exhibited the

RIGHT HIP JOINT REMOVED FROM THE BODY OF A PATIENT WHO HAD RECENTLY DIED IN THE MIDDLESEX HOSPITAL,

where he had been many months, under Mr. Moore's care. He always lay on the left side, with the right thigh strongly flexed and adducted. Whether the joint was anchylosed was not positively determinable without chloroform; but the extreme suffering which the gentlest examination gave him rendered a slight mobility probable. Behind and below the great trochanter were two sinuses, which discharged a large quantity of pus. In August he was for a short time in Mr. Hulke's charge, who, thinking suppuration was kept up by the presence of a sequestrum detained in the acetabulum, would have removed the upper end of the femur, had not Surgical inteference been forbidden by the enlarged state of the liver (at the post-mortem it was found to be lardaceous, and weighed 7 lbs.) The preparation showed the femur acutely flexed on the pelvis, adducted and rotated inwards, so that the lesser trochanteer was lying against the ilio-pectineal eminence. The head and neck of the femur were absent. The great trochanter covered in the acetabulum, and prevented the escape of several sequestra, which had been thrown off from the floor of this cavity, and were floating upon, or lying embedded in, granulation tissue. Some of these were thin films of bone, but two or three involved the whole thickness, and there were corresponding perforations which communicated with a large subperiosteal sinus on the pelvic side of the innominatum. Outside the hip-joint were several sinuses which emptied into those below the great trochanter, and also communicated with other sinuses running into the pelvis along the tendon of the external obturator muscle, through this muscle and the fascia, closing the foramen ovale; along the tendon of the internal muscle of the same name, through the lesser sciatic foramen; and along the tendon of the iliacus internus muscle. Inside the pelvis these sinuses were connected with abscesses in the muscles just named. The muscular tissue was wasted and in an advanced stage of fibrous and fatty metamorphosis. The tendon of the iliacus internus contained a bony *plaque*, where it turned over the brim of the pelvis, and there was a second large piece of bone within a dense fibrous mass in the situation of the insertion of the pectineus and adductor brevis muscles. The back of the femur in connexion with the sinuses of outlet was studded with osteophytes. The formation of abscesses in the pelvis by the extension of suppuration from the hip-joint along the tendons is the interesting feature in this case. These abscesses were quite distinct from those caused by perforation of the acetabulum.

Mr. Hulke also showed a specimen of

OVARIAN CYST REMOVED BY OVARIOTOMY.

The specimen had, he said, no special pathological interest, but he brought it forward because, as the case had ended fatally, he did not wish to come under the criticism sometimes made, that operators made public their successful cases, but concealed their fatal ones.

Mr. Callender showed a specimen of

FRACTURE OF THE BASE OF THE SKULL.

The man from whom it had been removed had been under the care of Mr. Paget, in St. Bartholomew's, and had died with all the symptoms of severe concussion and fractured base on the eleventh day. During life, considerable quantities of clear fluid had escaped from his left ear. At the autopsy, a starred fracture was found passing across the foramen magnum, and in several directions into the adjacent bones. It crossed the internal auditory canal, and involved the aqueductus and hiatus Fallopii; it also crossed the course of the eighth pair of nerves. Nowhere was there any separation of the fractured portions, the injury consisting of a fissure without laceration of the dura mater. The latter point was of great importance, and was carefully made out both by Mr. Paget and himself. They felt quite certain that the fluid which escaped from the ear had not proceeded from within the skull, since the dura-matral investment of the bones was everywhere entire. It could, therefore, only be supposed that the fluid in question was the perilymph or liquor Cotunnii.

Mr. Hutchinson exhibited an

OVARIAN CYST WITH EXTRA-CYSTIC GROWTHS.

The specimen had been successfully removed by ovariotomy from a woman aged 65. Its peculiarity consisted in the development, external to the large cyst, of a considerable number of smaller ones, and also of numerous pedunculated solid growths. The solid growths looked like small masses of cauliflower buds, being developed in minute lobules. Under the microscope they showed numerous cells arranged after the pattern of glandular growths. They were quite solid and very firm. Some of the extra-cystic cysts were large enough to contain an egg, others much smaller, and within these, in many instances, were solid growths resembling those just described. During the operation, one of these cysts on the outer wall of the parent had, at first sight, been mistaken for an adherent coil of intestine, which it remarkably resembled in appearance. The tumour consisted chiefly of one large, thick-walled cyst, which contained a dark-brown dense fluid. At the back of the larger one numerous secondary cysts were found.

Mr. Hutchinson also showed a specimen of

DISEASE OF THE KNEE-JOINT.

It had been removed by amputation from a lad of seventeen, who had suffered relapses of inflammation for five or six years. Persevering attempts had been made to save the limb, and also to avoid resection of the joint, and the lad had been for more than a year under care in the London Hospital, with a few months' interval at Margate. At one time he had greatly improved, and anchylosis was hoped for; but a relapse occurred, and indications of periostitis of the femur became developed. It was at length determined to excise the joint, and then amputate or otherwise, according to the state of things disclosed. This was done. On opening the joint, the ends of the bone were found completely denuded of cartilage, but everywhere covered by granulations, and firm and quite free from caries. Thin sections were now sawn from the ends of the femur and tibia, and in both bones above the epiphysal line (which was still represented by a thin layer of cartilage) a condition of extensive red softening was found. In the case of the femur it almost amounted to abscess, the soft cancellous bone being infiltrated with lymph, almost resembling pus. The epiphysis itself in each bone was hardened and whitish, the diseased condition commencing immediately above it. In both bones there was evidence of periostitis of the shaft beginning just above the epiphysis, and causing thickening of the membrane and the deposition of rough layers of new bone. Such being the condition of things, amputation was at once performed.

The lad had made a good recovery.

Professional Photographs.—The Council of the Medical and Chirurgical Society have determined to add to their valuable library a collection of photographs of subjects having Professional interest, to be mounted in suitable portfolios, and accompanied by descriptions of the cases or preparations thus illustrated. The Assistant Librarian of the Society (53, Berners-street) will receive any contributions towards so valuable and interesting a collection from members of the Profession.

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LEGAL INTELLIGENCE.

(*Sittings at Nisi Prius, at Guildhall, before Mr. Baron* BRAMWELL *and a Common Jury.*)

GIBBON *v.* BUDD.

THIS was an action brought to recover the sum of £21 as Physician's fees. The defendant pleaded never indebted.

Mr. Serjeant Parry and Mr. H. T. Cole appeared for the plaintiff, and Mr. Dowdeswell and Mr. Shaw represented the defendant.

A question of great importance to the Medical Profession arose during the trial. The plaintiff was a Physician residing in Finsbury-square, and the defendant was the executor of a Mr. Henry Budd, now deceased, formerly living at Albany Chambers and 45, Piccadilly. According to the plaintiff's case, Mr. Budd, having met with an accident to his foot, consulted him upon the subject, as well as with reference to his general health, which was much impaired. Mr. Budd died in January, 1862, upon which the plaintiff sent in his charges for attendance to his executors, who disputed the amount.

Mr. Dowdeswell, at the conclusion of the plaintiff's case, submitted that there was no case made out on the part of the plaintiff. Previous to the passing of the Medical Act, the 21st and 22nd Victoria, cap. 90, sec. 31, the universal rule was, that Physicians were assumed to attend gratuitously, for which they expected an *honorarium;* they could not recover the amount of their charges for attendance unless there was a special contract. In the case of "Veitch *v.* Russell" (3 Queen's Bench Reports, page 936), Lord Denman, in delivering judgment, said: "It must be assumed as clear, that Physicians and counsel usually performed their duties without having a legal title to remuneration. Such has been the general understanding. To prevent that from operating, some express agreement must be shown; but, in considering whether such an agreement existed, we cannot lose sight of the general understanding." The Act of Parliament enacted that Physicians registered under it might recover reasonable charges, subject to such by-laws as might be passed by the College of Physicians. Now, the College of Physicians had passed a by-law which directed that they should not recover, even if there were a contract; so that Physicians were unable to recover under any circumstances.

Mr Baron Bramwell: You say that the Act of Parliament has merely put a further difficulty in the way of a Physician's recovering the amount of his charges for attendance?

Mr. Dowdeswell replied in the affirmative, contending that such a course had been adopted for the purpose of rendering the payment of the Physician's fee immediate.

Mr. Baron Bramwell: I should think that the Act was drawn up by a person who was no lawyer.

Mr. Cole pointed out that, although the Act of Parliament stated that the right of the "Fellows and members" of the College of Physicians to recover the amount of their charges should be subject to by-laws to be drawn up by that body, the by-law in question only referred to the Fellows, and not to the members, and, therefore, did not apply to the present case.

Mr. Baron Bramwell: Does not that give rise to a curious question, whether under the Act the College has a right to make a by law referring to one portion of their body only? I am sure I do not see any great magic in the word "Physician," which should distinguish him from the General Practitioner, so far as to prevent him recovering the amount of his charges. The Act states that all reasonable charges are to be recovered, which could not relate to charges to be made under a contract, and, therefore, it must be supposed that the intention of the Act was that the Physician was to recover the charges for his attendance like any other professional man. If the statute meant merely to say that, if registered, you shall have a title to sue in cases where you could otherwise sue, it would have merely said, "You may sue," in place of saying, "You may recover reasonable charges." By the word "reasonable" being used in the place of the word "fixed" charges, one would think that the Act meant to take away the disability that Physicians formerly laboured under. However, I think that there is sufficient difficulty to make it right to reserve the question, the difficulty of which is much increased by the manner in which the Act of Parliament is drawn up.

Mr. Dowdeswell observed that his client as executor felt it to be his duty to protect the estate by taking the opinion of the court above upon the matter.

Mr. Serjeant Parry: Why, your client is a legatee under the will to the extent of half a million. (Laughter.)

Mr. Dowdeswell then addressed the jury on behalf of the defendant, and observed that there was no proof beyond the plaintiff's own word that he had attended upon the deceased as a Professional man. He should call witnesses who would prove that the deceased was a man of miserly disposition, who would not have thought of paying a Physician a guinea a visit; that during the time Mr. Budd was ill he was attended by other Medical men; and that during a portion of the time when the alleged visits took place no Medical attendant whatever saw him.

Several witnesses were called in support of the defendant's case.

The learned counsel having addressed the jury on behalf of their respective clients,

His Lordship, in summing up, left it to the jury to say whether in their opinion the plaintiff had established his case. Was the plaintiff attending the deceased as a Professional man or as a friend?

The jury returned a verdict for the plaintiff for the amount claimed, leave being reserved to the defendant to move the court above as to the construction to be placed upon the Medical Act.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary Examinations for the Diploma, were admitted Members of the College, at meetings of the Court of Examiners, on the 20th and 21st inst.:—

Edward Chandler, L.R.C.P. Lond., Chester-place, Kennington; James Lattey, Upper Phillimore-gardens; Thomas Franklin Baker, Doncaster; George Hurlstone Elliott, Chichester; James Dixon Roberts, Shipley, near Leeds; Philip John Simpson, Gower-street; John James Saville, Sunderland; Archibald Moggett, Scarborough; Edward Ellis, M.D. St. Andrews, Fitzroy-street; Edward Benjamin Randell, Carshalton; Joseph Willes, Brighton; Thomas Smallhorn, Dublin; William Arthur Bracey, Birmingham; William Matthews Bobart, Ashby-de-la-Zouch; Arthur J. Graham Cross, New-street, Spring-gardens; J. Blount Fry, Edgbaston, near Birmingham; Eitham Wood, M.D. Toronto, Toronto; Chas. Spurway, Tiverton, Devon; John Wilkins Williams, Paddington; John Wilson, Musselburgh; John Mottershead, L.S.A., Macclesfield; Isaac Baker Brown, Connaught-square; James Bruce, Islington; Thomas Lewis Brittain, M.D. Edin., Chester; George Albert Muskin, M.D. St Andrews, York-road, Lambeth; George Fenise Sargent, M.D. St. Andrews, Camberwell; Thomas Cargill Nesham, Newcastle; William Montague Hall Welby, L.S.A., Newark, Notts; Henry Cartmel, Manchester; Samuel Bains, Manchester; Thomas Lawson, Cranleer, Leeds; Frederick Robert Clarkson, Leeds; Thomas Leigh, Chiswick; William Row, Cispham-road; George Vint Wright, M.D. Edin., Edinburgh; John Davies, Coleshill, Warwickshire; Samuel Edward Walker, Warwick; Arthur Newman Turner, Bermondsey-square; Robert Hay, M.D. Queen's Univ. Ireland, Belfast; Richard Thorne Thorne, Leamington; Robert Sidney Stone, Bath; Alfred Agassiz, Bradfield, Essex; Henry Ebenezer Richards, M.D. St. Andrews, Sloane-street, Chelsea; Henry Albert Pattinson, Penrith, Cumberland; Charles Addams Buckmaster, Piccadilly; John Reddrop, Tiverton, Devon; Alfred Wadsworth, Leeds; and Albert Meeres, Thame, Oxfordshire.

NAVAL SURGEONS.—The following gentlemen passed their Examinations for Naval Surgeons, at a meeting of the Court of Examiners on the 20th inst.:—

Thomas Williams Hughes, diploma of Membership dated June 13, 1856; William Roche (H.), of the Royal Naval Hospital, Plymouth, May 24, 1858; Thomas Dunlop Allison, M.D. Glasg., M.R.C.S., June 25, 1858; Patrick Keelan, of H.M.S. *Neptune*, M.R.C.S. Irel., November 4, 1858.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise on Thursday, January 15, 1863:—

John Reynalds, St. Bartholomew's Hospital; George Eugene Yarrow, 8, Central-street, E.C.; Benjamin Whitehead Parker, Farington, near Preston, Lancashire; Henry Corpe Selwood, The Hospital, Birkenhead; George Stokoe Elliot, Southwell, Notts; Edward Leeds, Stretford, near Manchester.

The following gentleman also on the same day passed his First Examination:—

Carey Pearce Coombs, St. Mary's Hospital.

APPOINTMENTS.

BELL, J., M.D., has been appointed Assistant-Surgeon to the Eye Infirmary, Edinburgh.

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EASTLAKE, HENRY E., has been appointed Physician-Accoucheur to the St. Marylebone General Dispensary.

EVANS, CALEB, M.R.C.S. Eng., has been appointed Surgeon to the Hospital, Birkenhead.

FOX, WILSON, M.D., has been appointed Assistant-Physician to University College Hospital.

HARLEY, GEORGE, M.D., has been appointed Assistant-Physician to University College Hospital.

PALFREY, JAMES, M.D., has been elected Physician to the Surrey Dispensary, Great Dover-street.

PETTIGREW, Dr. JAMES, has been appointed Assistant in the Hunterian Museum, Royal College of Surgeons, England.

SELWOOD, HENRY COBBE, M.D., M.R.C.S. Eng., has been elected House-Surgeon to the Hospital, Birkenhead.

STANTON, W. DURNETT, M.R.C.S.E., has been appointed Assistant to the House-Surgeon, Sheffield General Infirmary.

WRIGHT, FREDERICK, W., M.R.C.S.E., has been elected Resident Surgeon to the Birmingham and Midland Counties Lying-in Hospital.

DEATHS.

BRIGGS, JOSEPH, at Maesteg, Glamorganshire, on January 10, aged 33.

CHALMERS, ANDREW, M.D., at Tavistock-buildings, Port Adelaide, South Australia, on October 5, 1862, aged 42.

GARDINER, ROGER GILBERT COOPER, M.R.C.S. Eng., at St. Leonard's-on-Sea, on January 17, aged 51.

HARRISON, T., M.R.C.S.E., of Lancaster, on January 4, aged 57.

HARVEY, HENRY HOPE, at Melbourne, Australia, on November 10, formerly of Bristol.

LANE, THOMAS BAGOT, A.M., M.D., Dublin, at Sidney Avenue, Blackrock, Dublin, on January 16, aged 86.

MOIR, GEORGE D., at Dudley Colliery, Northumberland, on January 2, aged 24.

ROSS, REV. R., M.D., at Sydney, Australia, on November 2, 1862, aged 71.

SCOTT, ROBERT T., M.D. Edin., at Leuchars, Fifeshire, on January 7.

SMITH, RALPH, M.D., at Yankalilla, on September 22, 1862, aged 54.

STUCKEY, HENRY, M.R.C.S.E., at 50, Wellclose-square, London, on January 12, aged 36.

SYKES, JOHN, at New Swindon, Wilts, late of Leeds, on January 12, aged 74.

TURNER, THOMAS WILLIAM, M.R.C.S. Eng., at Deddington, Oxfordshire, on January 8, aged 62.

WARBURTON, THOMAS J., L.R.C.P. Edin., at Market Drayton, Salop, on January 1, aged 37.

WHITFIELD, FREDERICK F., M.R.C.S.E., at Thornleigh, Longford, Tasmania, on October 10, 1862, aged 49.

THE COLLEGE LECTURES.—Professor Huxley, F.R.S., will commence his course on "Comparative Anatomy," in the theatre of the College, on Tuesday, February 17, at 4 o'clock, when he will deliver an inaugural lecture on the "Skeleton of a *Glyptodon*," recently presented to the Museum of the Royal College of Surgeons by Senor Don Maximo Terrero. The lectures will be delivered on Tuesday, Thursday, and Saturday, at 4 o'clock.

A ROYAL ACKNOWLEDGMENT.—Mr. Grove, the Medical student who was fortunate enough to render assistance to her Royal Highness the Princess of Hesse when she was thrown from her carriage in the Isle of Wight a few weeks since, has been presented with a valuable memento of the adventure—consisting of a gold pin and a set of studs.

THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND, AND THE TITLE OF "DOCTOR."—We understand that the University of Dublin, acting on the opinion of Sir Hugh Cairns and Dr. Twiss, is about instituting proceedings by which the right of the College of Physicians in Ireland to confer the title of "Doctor of Medicine," will be submitted to the decision of a competent legal tribunal.

DR. HARLEY, Professor in University College, London, has just been elected Corresponding Member of the Royal Academy of Sciences of Bavaria. This is the second time, in the course of the last twelve months, that Dr. Harley has had an honour of this kind conferred upon him, having, within a few months, been made Corresponding Member of the Royal Academy of Medicine of Madrid.

UNIVERSITY OF ST. ANDREWS.—At the recent examinations at this institution 379 candidates presented themselves for the degree of M.D., of which number 336 passed, and 43 were rejected. The amount of fees, at £26 5s. each, arising from those who were *capped*, amounted to the large sum of £8820; and if to this amount be added the four guineas forfeited by each of the rejected candidates, making another sum of £180 12s., and added to the larger amount, it will give a grand total of £9000 12s.

NEXT in importance to the inaugurative meeting of the Pathological Society, and the address of Mr. Prescott Hewett, the Chloroform Committee of the Medico-Chirurgical Society seems to progress in its very useful labours. A large number of most useful documents not previously published have been sent this week to the Secretary, so that it is expected the subject of the administration of chloroform, and its various uses in Surgery, Medicine, and Midwifery, will undergo a very complete examination, and chiefly in a practical point of view, as the more abstract physiological speculations as to anæsthesia, apnœa, asphyxia, have already been exhausted, or nearly so, in France, Germany, and America. The committee, we hear, were engaged this week chiefly with the practical views of Dr. Richardson on apnœa, anæsthesia, etc.; and some very interesting facts were also elicited as to the uses of chloroform in Midwifery, eye Surgery, amputations, and general Surgery, during a congressional discussion or examination of views of Dr. Charles Kidd in a *viâ voce* series of questions to that gentleman, by Mr. Paget, Mr. Curling, Dr. Priestley, Mr. Bryant, and others of the committee. We are told that a visit of Mr. Marion Sims to the Societies this week has proved very opportune, as the recent experiences of chloroform in the war in America, and notably of ether, such a favourite in America, have been made incidentally available.

THE HUNTERIAN MUSEUM.—From the annual report of the conservator of this collection to the council of the College of Surgeons, and which is just published, it appears that, owing to the large concourse of persons from the country and abroad, attracted to London during the past season by the International Exhibition, the council had ordered the Museum to be opened on additional days and hours, and had thus afforded unusual facilities for viewing the collection by 6825 persons against 3669 visitors in the preceding year. It is gratifying to add, that the conservator, Mr. W. H. Flower, had not discovered any instance of damage to the delicate and costly preparations. The new edition of the very interesting "Synopsis of the Contents of the Museum," prepared by the conservator, has been of great use to the visitors, who had purchased upwards of 500 copies. Mr. Waterhouse Hawkins, so deservedly well known as the restorer of the extinct animals in the Crystal Palace at Sydenham, has been engaged by the council to reconstruct the skeleton of one of those gigantic forms of the animal life of the ancient world, now only represented by the diminutive armadillo of South America. This unique specimen consisted of many thousand fragments of fossil bones, which Mr. Waterhouse Hawkins has, with singular facility, called out of chaos, collated and re-united in their natural form and relative situation. This work is nearly completed, much to the satisfaction of the council and the palæontological section of the scientific world, who have taken great interest in this noble donation of the Chevalier Terrero, who is the son-in-law of the Dictator Rosa, of Bolivia, now residing in dignified retirement at Southampton.

LONGEVITY.—On Monday evening last, the first of two lectures was delivered in the Metropolitan Hall, Dublin, by the Right Hon. James Whiteside, on "The Life and Death of the Irish Parliament." It is an interesting fact, that the chair was, on that occasion, occupied by Sir Thomas Staples, Bart., who himself represented the borough of Knocktopher in the Irish Parliament. He has thus survived the legislature, of which he was a member, by upwards of sixty-two years. Though in his eighty-eighth year, Sir Thomas walks the streets of Dublin with a quicker pace and a more elastic step than many men by sixty years his junior. He is, moreover, still a keen and active sportsman. The only other former member of the extinct Parliament who yet survives is the Earl of Charlemont, who sat in both Houses: in the House of Commons as Viscount Caulfeild, for the county of Armagh, and, after the death of his father, the "great" Earl of Charlemont, on August 4, 1799, in the House of Lords. Lord Charlemont, who is in his eighty-ninth year, is, owing to the infirmities of age, now seldom seen beyond the precincts of his demesne. The Right Hon. Thomas Lefroy, Lord Chief Justice of the Queen's Bench in Ireland, was called to the Irish Bar in Easter Term, 1797, and still presides daily, during Term, much to the advantage of the suitors in his court.

PROFESSIONAL "CARTES DE VISITE."—The employment of *cartes de visite* is extending every day. Every one has his album; and we now find the Dean of the College of Doctors at Prague issuing a circular, stating that the Faculty of Medicine of that city have determined to establish an album of all living members, and requesting any of these who have not already done so to forward their *cartes de visite* to the Deanery at Prague, before the end of April, 1863. Surely,

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this is carrying the thing to an absurd length; for, however desirable it may be to have the effigies of celebrated characters or personal friends, what useful end can be served by collecting a huge book of nobodies?

EPIDEMIC ERYSIPELATOUS OPHTHALMIA AT VIENNA.—For some time past there has been observed a great number of cases of catarrhal ophthalmia at the Vienna Eye Clinic. There is a slight swelling of the eyelids, and ecchymosis of the ball of the eye, accompanied by the usual symptoms of catarrh. Professor Arlt regards the affection as an epidemic due to atmospheric influences, and believes it intimately connected with erysipelas, which has also been unusually prevalent. He refers to the fact, that one of Beer's forms of ophthalmia is termed "*ophthalmia catarrhalis erysipelatosa.*" At all events, Beer's description of erysipelatous ophthalmia exactly agrees with that of Arlt's epidemic, catarrhal ophthalmia. The affection is rapidly cured by the application of a solution of nitrate of silver, five grains to a drachm of water.

A MARTYR TO SCIENCE.—The Jamaica papers announce the death of one of our best rising geologists, under circumstances of the most peculiar and painful nature. Mr. Lucas Barrett, F.G.S., Director of the Geological Survey of the British West Indies, with a view to carry on scientific observations at the bottom of the sea in the harbour of Port Royal, descended in a diver's dress. Contrary to the advice of his servants, he neglected to attach the rope round his body, but preferred to retain it in his hand. After the lapse of about twenty minutes, the negroes were horrified by seeing the corpse of the deceased floating on the surface. Life had been long extinct. Mr. Barrett was well known as the original discoverer of the evidence of bird remains in the greensand of the neighbourhood of Cambridge. His name will, however, survive, imperishably linked with that of the remarkable fossil *Hipparite*, from the limestone of Jamaica, described by Mr. S. P. Woodward, F.G.S., who named it *Barrettia monili-fera*. This shell, although essentially that of an acephalous mollusk allied to *Hipparites*, yet by its peculiar radiated structure would have lead almost any person to consider it to be a coral. Many other interesting fossils owe their discovery to the late Mr. Barrett, whose untimely death has filled geological society in England with a universal sentiment of regret.

LIFE OF AN IRISH DISPENSARY DOCTOR.—A correspondent of the *Dublin Medical Press* gives the following graphic account of an incident in the life of an Irish Dispensary Doctor. An article in our First Volume for 1862 will show what the trials of these gentlemen are, and likewise what are the dreaded "scarlet-runners":—"To give some idea of the constitution necessary for a Dispensary Medical slave, I will just mention what occurred on yesterday in my neighbourhood, much more to the sunny south than Drumshanbo. At ten a.m. a Medical Officer received a scarlet-runner, running him six miles to a midwifery case, the woman two days ill. On making an examination, he found the head well-descended, quite free, and unimpacted. He told them that the sooner the woman was delivered the better chance of saving mother and child. The women or friends would not consent. After some hours, finding matters had not improved, he again impressed on them the danger to both mother and child by further delay. All to no use: 'God was good,' and he should not be in a hurry. He then said he should return home to see other patients and get some refreshment, as he had breakfasted at eight o'clock, and that he would be back in the evening to deliver the woman. No, he should stop and look on until the woman was dead or better, but use an instrument he should not. After spending the day in close confinement, and fearing he should pass the night in the same state, he wrote a line with pencil on the cover of a note, requesting I would go and liberate him, sending back the car and driver he had taken out in the morning. I started at 8 p.m., the night foggy and bitter cold. I arrived there at nine, and confirmed the opinion of the poor prisoner, that the woman would be lost if she was not promptly delivered; then, indeed, we should wait until they would send two or three miles for a clergyman to give her the last rites of the church. I told them that they had time enough to do that, but that I could not nor would not wait, and that on my way home I would report the matter to the police, and have them made accountable should anything go wrong. They then consented, and the woman was delivered very promptly and without any trouble, but the child was dead, and had been so for some time; thus, after a fast and confinement of fourteen hours, the Doctor was set free! We then set out, to walk about a mile of a lane, all sloughs and ruts, frequently half-leg deep in the mire, to where the car was on the high road. We got back our six miles, as well as a jaded and starved horse and driver could. I then assisted down the victimised Medical Officer, who retired with a heavy heart and an empty stomach; but as it was past midnight, he might take a light breakfast to prepare for the next day's work. Some may suppose this to be a rare and exaggerated case; but I assure you it is neither the one nor the other."

BOOKS RECEIVED.

The Domain of Medical Police: Abstract of a Paper read before the New York Sanitary Association, February 6, 1862. By Louis Elsberg, M.A., M.D.

On the Chemistry of Digestion. By W. Marcet, M.D., F.R.S.

Ninth Annual Report of the County and City of Worcester Pauper Lunatic Asylum, Worcester. 1862. Pp. 76.

Bulletin de l'Académie Royale de Médecine de Belgique. Brussels. 1862.

Third Annual Report of the Cranley Village Hospital. London. 1862. Pp. 16.

Statement of the Medical Officer of the Cranley Village Hospital. London. 1862. Pp. 10.

Quelques Rectifications Apropos d'un Jugement porté sur l'Industrie Coutelière Chirurgicale a l'Exposition Universelle de Londres de 1862. Par F. Charrière. Pp. 30.

PAMPHLETS.

On the Evils resulting from Rising too Early after Childbirth. By Obstetricus. London. 1862. Pp. 15.

On the Pathology of Hepatic Abscess. By F. N. Macnamara, M.D. Calcutta. 1862. Pp. 11.

Kent Lunatic Asylum, Barming Heath, Maidstone. Sixteenth Annual Report. Maidstone. 1862. Pp. 36.

English-woman's Journal.

Defects in the Moral Treatment of Insanity in the Public Lunatic Asylums of Ireland; with Suggestions. By John A. Blake, M.P., etc. London, Dublin, and Waterford. 1862. Pp. 102.

Practical Notes on Diagnosis, Prognosis and Treatment in cases of Delirium Tremens. By Thomas Laycock, M.D., F.R.S.E., &c. Edinburgh: 1862. Pp. 27.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dublin.—Dr. Quinlan's paper is in the printer's hands.

Anser.—Write to the President of the University of Medicine, Paris.

An Outsider.—In the last St. Andrews graduation list, *for* "Thos. Stainthorpe, M.R.C.S., L.S.A.," *read* "Thos. Stainthorpe, L.R.C.P. Ed., M.R.C.S., L.S.A."

F. T. Y.—Quain and Sharpey's "Anatomy," which, besides descriptive anatomy, gives a full account of the microscopic anatomy of the tissues, including the dental.

Weston.—The account received of the point at issue between the Surgeons and Governors of the Weston Dispensary, as it only gives one side of the case, and that imperfectly, does not furnish the data necessary to give an opinion.

A Meat Pudding writes to us in rather a greasy hand, complaining of certain slanders that have appeared in a weekly Medical journal of eminence, against his near relative, a meat pie. If, as the pudding justly observes, a pie is poisonous (as is alleged) if it have no hole in the crust, how is it that the pudding, if well boiled, is so nutritious, and savoury, and deservedly popular? The alleged "hole in the crust" must surely be in the head of the person who makes the accusation.

Death from Burning? (Mem. from a correspondent.)—*Carbonic acide* is a poisonous gas, and one that makes the blood preternaturally florid; it produces death quickly, and it exists where carbonised matters are highly heated with insufficient oxygen. Surely, then, Mr. Buzzard is in error in ascribing the deaths of those children in Portland-street to burning; for burning would not kill so many persons right out: carbonic oxide is quite capable. Ask Mr. Buzzard to reconsider the question.

Medicus, F.R.C.P., etc.—There is no doubt but that the present fee system is horribly illogical, inconsistent, and absurd in theory, but that it works well, when it is applicable. But, like every thing else, it has its limits, and out of these is, as may be expected, a ridiculous failure. Of course, it can only work well in a highly-refined and wealthy society, where the Medical attendant is looked upon as a gentleman, and not as a tradesman, and where the patients have plenty of ready money, and are in the habit of spending it freely. It is advantageous to the Phy

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sician, inasmuch as it gives him payment promptly, in a gentlemanly form, without the trouble of book-keeping, the risk of bad debts, and protracted payments, and the unpleasant feelings which always attend the *commercial* element of transactions, the counting up the visits, and comparison of the sum charged with the value received. If patients were classified, we believe they might be ranged into two grand kingdoms:—1st. The solvent, *i. e.*, those who pay or are presumed to pay. 2nd. The insolvent, including the large and increasing class of Dispensary and out-patients of Hospitals, etc. The first kingdom comprises two grand orders:—1. Those who pay *gratuities*: and 2, those who liquidate *accounts*. Of order 1, we have genus *a*, the people who present a fee at each visit; *b*, they who send a cheque at the end of an illness; *c*, they who ask the Physician to name the amount of his fees at the end of an illness, or after a certain lapse of time. But in each case the sum received is a gratuity, is accepted as such with thanks, and no stamped receipt is required. Even if a Physician for valid reasons sees fit not to accept the whole amount of his usual fees; if, as is sometimes the case, he may choose to devote unusual time, pay unusually frequent visits, or take extra trouble, either to satisfy his own spirit of scientific research, or to satisfy the claims of humanity, it makes no valid difference. The other order of patients make their own arrangements, and pay accordingly. But either order may be afflicted with a kind of moral *mange*—a desire to get what they can, and evade payment. The Physician, who receives *gratuities*, is thus left on his beam-ends: the Practitioner, who sends in a bill, can appeal to law. But the hardship to the Physician is less than it would seem at first sight. A man may be cheated once or twice in his life, rarely oftener. Then it may be a question whether it may be a duty to society to pillory the offender by means of an action; yet most prudent men will pocket the affront. The instances which usually come into court are usually those of Physicians who practise as General Practitioners; or else who practise amongst a class of people to whom one Doctor is the same as another, and the gratuity system is incomprehensible. The rule is always to have an understanding with your patient. If Mr. Grubb, who is taken ill at an inn, tells the waiter to fetch a Doctor, how is Grubb to know whether it is a Physician, who receives gratuities, or a Practitioner, who sends in a bill? The Physician should take care to let Grubb know what gratuities he expects, and not have to bring in a bill for guineas against a poor devil who would think a visit dear at 3s. 6d. After all, the present system is so based upon personal character, that even if Physicians were able to recover reasonable and usual charges, matters would go on pretty much as they do now.

Puckett Fund.—Mr. Griffin requests us to state that he has received from A. Keppel Read, Esq., Garrison and Civil Surgeon, Attock, India, £22 13s. 4d., as a subscription towards the Puckett Fund, from the following subscribers:—

	Rupees.		Rupees.
Baillie, Assistant-Surgeon . .	10	M. M. R.	3
Blackall, Mrs., Attock . .	10	Morrison, Mrs.	3
Blackall, Capt., Attock . .	5	Morland, Lieut., Murree . .	5
Church, Murree, Offering Fund .	35	Olpherts, Col., Murree . .	5
Carlston, Col., Royal Artillery .	5	Powell, Mr., Murree . . .	3
Colton, Sir S., Major-General .	10	J. B. C.	5
Dyer, Mr., Murree Brewery .	5	Reed, A. K., Assistant-Surgeon.	21
Drake, Lieut., 32nd N.I. . .	5	Reade, J. B., Assistant-Surgeon	5
Elliott, Capt., 94th Regt. . .	16	Stuart, Rev. Kilbee, Murree .	15
Finn, Mr., Public Works . .	2	Sandilands, Major, Attock .	10
Green, Mrs., Mean Meer . .	5	Urniston, Capt.	5
Green, W., Esq., Punjab Police .	5	Ware, Capt., 51st K.L.I. . .	5
Heyland, Capt., A.D.C. . .	10	Wright, Jas., Esq., C.E. . .	10
Kindlerides, Lieut.-Col., R.A. .	16		
Laugmore, Capt., Bk.-Master .	5	Total Rupees . .	244
March, Lieut., Sappers & Miners	5		

Mr. Griffin wishes us further to state that the list is now closed, £1074 8s. 10d having been received, and the handsome provision of £52 per annum made for the widow, the capital ultimately to be divided amongst the children.

Is Quinine (Sulph.) Aperient or Purgative, "per se?"

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Dr. Laycock, in his lecture on "Points in Practical Therapeutics," alludes to the action of "quinine on the nervous system facilitating the action of purgatives." I should like to ascertain from Dr. Laycock, or any of your correspondents, whether he has found quinine, *per se*, act as a smart purgative? I have had lately an attack of neuralgic lumbar pain, and I determined on trying the effect of quinine, combined with Dover's powder. I took one night 3 grains of the former, with 6 grains of the latter, and, next morning, the bowels were freely acted on. The next night I took 5 grains each of quinine and Dover, and the following morning I was briskly purged, the dejections containing large quantities of bile, and with relief to the pain from which I had been suffering.

Quære.—Was it the quinine which thus acted, no aperient having been taken?

I am, &c.

January 20. M.D.

Remarkable Case of Apoplexy—Condition of the Pupils.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I beg to send you a few notes of a case of apoplexy, which occurred to me last month, for publication in your Journal, if you should deem it worth that consideration:—

I was called, on December 10, 1862, at 11.30 p.m., to see Mrs. T., Gilmour-street. The history which I got of her was, that she had a fit of apoplexy two years ago, which had left the left side of her body almost completely paralysed. On the evening I saw her, she had been sitting on a chair, speaking to a neighbour, about eight o'clock, when she suddenly fell from the chair; she was lifted up, undressed, and put to bed, being, all this time, quite insensible. No twisting of the face was noticed. When I saw her, she was lying in bed on her back; pulse moderately strong, and 75; breathing stertorous; surface cold; and the patient quite insensible. On examining her pupils, the right iris was found to be completely paralysed, the pupil being very large, irregular, and not affected by light. On examining the left pupil, it was found to be very much contracted; and, on the application of light, it dilated considerably. On closing the eyelids for about a minute, and again examining the pupil, it was found to have regained its original contracted size; but, on a reapplication of the light, it again dilated. This process of contraction and dilation was repeated about six or eight times, when the pupil seemed to lose its power of dilatation, and remained contracted. I ordered the patient to be kept quite quiet, with cold applications to her head. I called again next morning early, but found she had died a short time after I had left her. No autopsy was allowed.

I am, &c.

Edinburgh, January 15. R. Lawson Tait.

The Liquor Question.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Truly may it be said that "the spirit of the age" is *pro bono publico*. Science, art, philanthropy, religion, are all brought to bear upon the problem—how can the people be made better? By common consent we sustain a crusade against social evils of every description; and drunkenness being recognised as a very potent one, much credit is due to the social reformer for his efforts to remove or mitigate it. But however desirable the success of his mission, it does not necessarily follow, that the means intended for its accomplishment are entirely unobjectionable.

The political and commercial bearings of the present scheme of highly intelligent and humane temperance reformers, *i.e.*, to seek the aid of the legislature in their efforts, I profess never to discuss, nor care for; but as a member of the Medical Profession, of somewhat lengthy experience, I feel justified in expressing opinions, founded upon the observation of fact, not totally unimportant in considering the question of suppressing by statute the trade in liquor.

I believe that, up to the age of 45 or 50, except under especial circumstances, alcohol as a beverage is not a necessity; but after this period it very frequently becomes indispensable to security against defective nutrition; whilst in old age, health can be materially insured, and life protracted, by the daily discreet use of alcohol as a beverage: that in practice cases are constantly occurring when life depends upon the prompt administration of alcohol in its more potent forms, for which we possess no substitute; such instances are frequently emergencies, and the alcohol has to be supplied to the patient at the nearest public-house: that, for the successful treatment of the zymotic fevers, typhus, typhoid, scarlet, small-pox, &c., we have no agent equal to brewers' yeast; further, that in those diseases it is an unfailing antidote.

Bearing upon the question under consideration, the following facts, well known to all those who have investigated the subject, may be advanced. Whenever the use of German yeast has superseded brewers' in the making of bread, etc., a marked increase in digestive derangement has followed; further, I have seen innumerable cases of a peculiar form of secondary indigestion directly referable to the use of German yeast.

Surely it is not unreasonable to ask the advocates of compulsory abstinence from alcoholic beverages, previously to depriving the working man of his beer—what is he to drink?

I am, &c.

January. L. F. Crummey.

Case of Psoriasis Inveterata.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The following case of psoriasis of seven years and four months' duration, may not, I trust, be undeserving a place in your columns. It may be interesting to your younger readers, and its publication may, perhaps, influence the Profession to pay greater attention to the cause as well as to the treatment of this class of diseases, which, in many instances, have the effect of disfiguring the beauty of the human face and of shattering the strongest constitution, in consequence of being so much subjected to mental disquietude. The history of this class of diseases is also important, as they not unfrequently appear to be indicative of a scrofulous diathesis.

History of the Case.—A gentleman, aged 25, consulted me in March last for a scaly disease of the face and forehead. The disease had also extended to the head, and, in consequence of the falling off of the hair, a periwig had been worn for the past two years; and the feet, particularly from the knees down, were covered with scaly patches; similar spots were diffused over the chest and arms; while the cuticle on the hands and feet resembled tanned leather in hardness, as well as in colour. The disease first appeared as a spot on the left cheek, next on the forehead; after some time it appeared on the head, and then it became diffused over the body. During the period of his illness he received a merely temporary relief from consulting some of the ablest men in this country, amongst whom I may enumerate that bright ornament of our Profession, the late Sir P. Crampton, as well as a host of provincial Physicians. Recourse, too, had been had in no small degree to Turkish bath institutions. I am aware that forty of these baths were taken in succession. It might here be a fit subject of inquiry, if this novel method of purification or of cure is as deserving of that degree of praise which the general public, as well as some members of our Profession, are willing to assign to its use—men who, while they are ready fairly to extol, do so without taking into consideration that the majority of those who use, or accustom themselves to their use, have no need to use them at all; and, while forming a hasty conclusion, they, perhaps, venture to deprive nature of her own remedial powers. *En passant*, I must remark, from my own experience as well as from the opportunities I have of judging of others, that I am a sceptic regarding their curative powers: whether on good grounds or not we may hereafter have an opportunity of deciding. This case of psoriasis was not improved by their use; and I have reason to believe, if their use had been persisted in, that hypochondriasis would have been the result. The disease seemed to have a kind of periodicity in its attack, usually appearing in spring, while it abated (but never got well) during the summer season, to reappear with October's chilly blasts. The beginning of the attack was ushered in with all the symptoms of dyspepsia, flatulence, acid eructations, feeling of lassitude, etc. After the administration of a warm antacid draught and rhubarb aperient, I began to give ten minims of Fowler's solution, four times a-day, in an infusion of gentian, together with six grains of quinine. I directed a mild cantharadine liniment to be applied with a feather over the seats of the disease. This treatment was persisted in for three weeks, at the end of which time the quantity of Fowler's solution was reduced to six

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minims a-day, while the quantity of quinine was increased to twelve grains, together with the use of the hot bath every second day; sherry wine was given as a drink. At the end of the sixth week I dismissed my patient, ordering him to take a few alterative pills every week, and twenty minims of liquor potassa, twice a-day, in broth or milk. Some weeks afterwards he writes, in quaint terms, to tell me that he is as "good as new." I saw him in September, when there was no other trace of the disease than those indelible stains on the feet; the hair on the head was sufficiently abundant to dispense with the wig.

From long observation, I have come to the conclusion, that the only medicines deserving of a trial in this disease, as well as in lepra, are Fowler's solution and quinine. In all the cases I have ever seen, a distressing flatulency had been complained of. We are told by writers that flatulent dyspepsia may generate scrofula. It is from this fact that I am induced to remark, that the occurrence of this disease is indicative of a scrofulous diathesis. I have given a fair trial to creosote ointment, oil of tar, tincture of cantharides, and most of the other carbo-hydrogens, but I forego their consideration in consequence of the beneficial results obtained from the use of Fowler's solution and quinine. If carbo-hydrogens are useful at all (and I doubt much their individual utility), they will be found useful in combination with the hot bath. I have never seen those black stains, alluded to by Professor Laycock (*Medical Times and Gazette*, June 20, 1862), so well marked as they were in this case, particularly those on the feet. On the whole, this dinginess was best marked on the left half of the body.

The interest attached to this class of cases may, I trust, serve as an excuse for engaging so much of your columns. I am, &c.

Limerick, January 17. T. B. Moriarty, A.B., M.D., etc.

The Composition of Milk.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The *Lancet* of the 3rd of this month contained an article on the above question, evidently written by Dr. Hassall himself, as it is a counterpart of his letter in the *Times* of the 5th, relative to Dr. Boedecker's supposed discovery, that the evening's milk of a cow was, as a rule, the richest, and which Dr. Hassall claims to be the discoverer of in 1851. Knowing that others had mooted the subject a considerable time before either Drs. Hassall and Boedecker had written on it, and that it was by no means to be depended upon, I wrote the following to the *Lancet*, which I hope you will do me the honour of publishing, as I consider it has done me an injustice by not publishing it, at the same time making strictures on my communication, which you will at once see are at variance with the truth: for instance, I did not call in question the "scientific accuracy" of either Dr. Hassall or Professor Boedecker; I merely stated that they were not the first observers, and that, as a rule, it could not be depended on, and gave my authorities; yet the *Lancet* has the assurance to state that my letter, "though strong in assertion, is singularly destitute of facts and proofs in support of his position."

I think, Sir, in the mind of any unbiassed reader, it will be at once seen that I gave authorities sufficient to support my position without the necessity of (as I am entirely an obscure and unknown man) making my own name public. I could have multiplied and given ample "numerical results" from other men's labours had I desired to have encroached on their space; but I thought that my giving names and dates of those who had been working in the same field as Drs. Hassall and Boedecker would be sufficient to have insured the insertion of my communication, though "shielding myself from all responsibility under the shelter of an assumed designation." I may mention that neither my own cows, nor those whose milk Dr. Voelcker analysed, were "artificially fed."

January 12. I am, &c. An Agriculturist.

"TO THE EDITOR OF THE LANCET.

"Sir,—I am a member of the Medical Profession, but, for the last fourteen years, have been practically pursuing agriculture and agricultural chemistry; but as I like to know what is going on in the Profession I still take in the *Lancet*, and through it must beg to inform you that Drs. Boedecker's and Hassall's assertion with regard to the morning's and evening's milk does not hold good as a rule; and that, so far from either the one or the other having discovered that the morning's milk is richer than the evening's, I may mention that it was noticed, not as a positive fact to be depended upon, but as a variable occurrence, by Boussingault, the eminent French chemist and agriculturist, in the *Quarterly Journal of Agriculture* for, I think, 1840. My own observations will not at all testify to the truth of Drs. Boedecker's and Hassall's statements, as it varies from such a variety of causes, that it would be next to impossible to lay down any law on the subject. My experiments are not at all satisfactory, being about evenly balanced upon a very considerable dairy stock, which are changed from time to time, and their milk analysed under every variety of circumstance and condition; so much depends on the state of health of the cow, age, distance from the time of calving, whether frequent, and what period of her gestation, food, and time of giving it before milking, which would take up too much of your space to detail. However, I am corroborated in my deductions by Dr. Voelcker, professor of chemistry to the Royal Agricultural College: he states, taking thirty-two samples of milk which he analysed, that in eight the morning's milk was poorest, in four it was richer, and in the remainder there was no perceptible difference between the quality of the morning's and evening's milk; and he goes on to state that he believes the quality of the milk is affected by the food and the time at which it is given the cows, and that he could not say in a general way that the morning's was richer than the evening's, or that it was poorer—that it was impossible to generalise or come to any definite conclusion on the matter (a).

"Again, I recollect, in the year 1848, being the first year I became an agriculturist, hearing Mr. Hodson Rugg, a Surgeon, give a most interesting, eloquent, and thoroughly practical lecture on the adulteration of milk—the proper method of feeding cows, with regard to producing the constituent elements of milk in their entirety. At the same time he entered into the question of the morning's and evening's milk, and distinctly stated that no practical fact could be arrived at, giving, to my mind, most conclusive reasons why it could not; at the same time mentioning several labourers in the same field as himself, and who had arrived at similar conclusions.

"Dr. Hassall states that he made the singular discovery that the composition of milk varies still more at different periods of the same milking. This, Sir, has been practically known ever since cows have been milked; and, without troubling you with any lengthened account of why it is so, I will merely mention that Dr. Schübler, many years before Dr. Hassall made his observation, ascertained that the first-drawn milk contained only five, the second eight, and the fifth seventeen per cent. of cream. Besides, the last-drawn milk, or the strippings, has been from time immemorial practically known to have very much the largest percentage of cream. I hope, in justice to other scientific observers on this most important subject, you will, with your usual liberality, and in the system of fair play, allow both sides of the question a place in the columns of the *Lancet*.

"I am, &c. An Agriculturist."

(a) *Royal Agricultural Society's Journal.*

COMMUNICATIONS have been received from—

The Secretary of the Ethnological Society; Mr. L. F. Crummey; Mr A. M. Edwards; Mr. Tait; Mr. R. Griffin; Dr. Stainthorpe; Dr. Edmunds; Dr. Ramsbotham; Dr. Althaus; Mr. J. Chatto; Dr. McCall Anderson; An Agriculturist; Dr. Devenish; Y. Y. Y.; Dr. Drysdale; Dr. R. D. Thomson; Dr. T. B. Moriarty; Mr. F. Bainbridge; Dr Kidd; An Army Surgeon; Dr. R. G. Hardwick; Questor; Dr. Wright; Professor Gulliver.

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 17, 1863.

BIRTHS.

Births of Boys, 984; Girls, 947; Total, 1931.
Average of 10 corresponding weeks, 1853-62, 1758·6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	739	738	1477
Average of the ten years 1853-62	665·8	675·5	1341 3
Average corrected to increased population..	..	..	1475
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	..	11	16	3	6	7	..
North ..	618,210	7	10	21	4	12	8	4
Central ..	378,058	2	8	8	1	9	7	..
East	571,158	7	9	18	4	13	15	1
South ..	773,175	5	25	15	3	23	12	6
Total.. ..	2,803,989	21	66	81	15	62	49	11

APPOINTMENTS FOR THE WEEK.

January 24. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

Royal Institution, 3 p.m. W. S. Savory, Esq., F.R.S., "On Life and Death."

26. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

Medical Society of London, 8½ p.m. Mr. W. C. Calthrop, "On Spontaneous Closure of the Axillary Artery after Division (by a Gun-shot Wound), with Final Recovery of the Patient."

27. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal Medical and Chirurgical Society, 8½ p.m. Dr. Buchanan, of Glasgow, "On a White Fibro-serous Discharge from the Thigh." Dr. J. A. Marston, "On Syphilis as a Constitutional Disease."

Royal Institution, 3 p.m. Professor Marshall, F.R.S., "On Animal Mechanics."

28. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

Hunterian Society, 8 p.m. Dr. McDonnell, "On a Case of Disease of the Knee-joint, with Abscess and Necrosis of the Tibia."

29. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

Royal Institution, 3 p.m. Dr. E. Frankland, F.R.S., "On Chemical Affinity."

30. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Royal Institution, 8 p.m. Cardinal Wiseman, "On the Points of Contact between Science and Art."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday (to-day) at 2 p.m.:—

By Mr. Fergusson—Lithotrity (two cases); Removal of Epulis.

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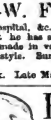

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ALTHOUGH physiological literature has long been full to overflowing about the red corpuscles, I found it, with the exception of a few short and excellent notices by Dr. Davy, an absolute chaos in the year 1846 as regards the coagulation of the blood. This seems the more remarkable in our country, where Mr. Hunter had been so strongly urging that the fibrin is the most important part of the blood, while his contemporaries and immediate successors were all, save Hewson, wedded to his views. Hewson, indeed, by whom the leading physical properties of the coagulable lymph had been previously and more exactly described, was more or less forgotten, and there was a general ignorance of the labours of their predecessors in the path of truth as concerns this subject. Even our own countryman, Richard Davies, was so utterly unknown that he was never mentioned as a worthy forerunner of Hewson in displaying the three parts of the blood; and this while Denis in France was asserting his absurd claim to the discovery of the fluid state of fibrin in living blood; Müller in Germany making experiments to prove, as if any such demonstration were wanted in Britain, that the red corpuscles are not essential to coagulation; and the Hunterian Professor, in reply, assuring us that it was not known, before Hunter discovered it, upon which part of the blood its spontaneous coagulation depended!

Indeed, we shall find this subject affording one of the saddest, most strange, and curious chapters in the great book of physiological history. We shall have to search for truth and justice long hid under such successive heaps of bewilderment and delusion as could scarcely be found in any other department. Let any one who may pursue science for the mere sake of fame—"that last infirmity of noble mind"—behold here what may be his fate, and accordingly resolve to go on his course supported by higher motives, and then he may, at all events, rejoice on his way, and make sure of the "fair guerdon" afforded by the virtue and pleasures of the occupation.

The ancients had more correct notions on the coagulation of the blood than those which prevailed in Britain and on the Continent during more than the first half of the last century. I say prevailed, because truth had peeped out and even walked abroad sometimes, only to be sent back to obscurity, scorned, neglected, or drowned by the Babel of rivals,—and so left to bide her time. Those errors remained longer on the Continent, where correct views had first appeared, than in Britain, where Truth, after all, was revived and established, though sorely bespattered and disguised at times.

Aristotle knew that the concretion of the blood is owing to a fibrous part, since he remarked, if this be removed the blood will not set. And his master, Plato, was acquainted with these fibres. Harvey described the blood as composed of a red portion; of a white, fibrous, tough part uniting the rest; and of an ichorous or serous one, in which the coagulum is wont to swim; adding that these parts severally have no existence in living blood. Dr. Willis, eight years later, described the filaments of the crassamentum as joined together or concreted into a parenchyma; and Lower gave a tolerably good account of the "glutinous fluid" to which the coagulation of the blood and some of its morbid appearances are owing.

In the year 1666, Malpighi obtained the fibrin separately, and of a whitish colour, by washing away the red part of the blood-clot in the same manner as we are now wont to do. He correctly insisted that the so-called polypi of the heart are composed of this fibrous matter, and not of coagulated serum, as was then generally supposed. He examined this matter with the microscope, both from the crassamentum and the polypi, and found them both made up of a fibrous texture or network; adding that the buffy coat of the blood has probably the same structure. And to him we owe the discovery of the red corpuscles of the blood. Thus we have the first approach to an accurate description of the blood-clot; and that in the memorable year of the great fire of London, and of the institution of the French Academy of Sciences at Paris.

But the observations of Borelli, published in his posthumous works just fifteen years afterwards, that is to say, in 1681, were still more precise. He described the compound nature of the clot, and of the serum: the clot as consisting mainly of white fibres, or reticulated membranes; the serum of matter partly coagulable by heat, and partly of water impregnated with salts. He examined the fibrin and capillary vessels microscopically, concluded that it is liquid in the living body, and described it as the white, glutinous, and spontaneously-coagulable matter of the blood. These just opinions prevailed for a few years afterwards in Italy, where Guiclinini and Michelotti distinguished the whitish tough fibres from the red globules of the clot, and as a result of microscopic examination. Meanwhile, Bidloo, in Holland, figured and described the tough and tensile network of fibrils and the red corpuscles in a drop of blood, and called the corpuscles "globosæ vesiculæ." This was in 1685.

In the same year Dr. Samuel Collins's great book of Anatomy was published in London. He gave such an excellent description of the blood clot, of the nature of the so-called polypi of the heart, and of the arrangement of the parts in buffy blood, as shows that he must have carefully examined the subject. He may have been more or less indebted to Malpighi and Borelli, but, undoubtedly, realized the facts by his own observations. This, then, is the advent of correct knowledge of this subject in England, at least, in a comprehensive form; for though Harvey, Willis, and Lower had described the fibrin here, the red corpuscles were unknown to them; or, at least, imperfectly by Lower. Collins's work appeared just thirty-four years after the publication of Harvey's observations. And yet, as if to assert the impotency of truth, when Bidloo's plate before mentioned was repeated by William Cowper, he disputed its accuracy, considered the fibres as accidental, and described the blood as consisting only of two parts, the serous and globular. This was in the year 1737, fifty-two years after Collins had given his correct descriptions, thirty since Ruysch had described and displayed the fibrin collected on twigs, and about the time when the delusions of hypothesis were obscuring the truths which had been so well demonstrated by Malpighi, Borelli, and Collins. We all know the Ruyschian membrane, how he whipped it out of the blood by sprigs of a plant, and had engravings made thereof and published in 1707. And it is probable that our forefathers, long before his time, had practised the same means of keeping the blood fluid for the purposes of domestic economy.

But the truth which even this simple and familiar experiment might have taught, and which, as we have seen, was proved, not only in Italy, but also in England, was about to be hid both in Britain and on the Continent, with certain illustrious exceptions presently to be noticed. In short, for a long while the fibrin was either lost sight of or confounded with the serum, and the coagulation of the blood attributed to an aggregation of the red corpuscles. I am disposed to attribute this error in great measure to the influence of Lecuwenhoek; for though he wrote a few years before the Ruyschian membrane was described, he had the advantage of such predecessors as Harvey, Willis, Lower, and, above all, Malpighi, and so should have avoided the error of regarding the red corpuscles as the spontaneously coagulable part. But this error he did hold, and seems only to have considered the blood as composed of the globules and serum.

And this opinion, modified in one way or other, prevailed, or was more or less current in Britain, for, at least, the first sixty years of the last century. Let any one read the writings of such men as Keill, Jurin, Thos. Morgan, John Cook, Arbuthnot, Langrish, William Northcote, Marmaduke Berdoe, and Huxham, all published in London from the year 1717-72, and he will find the coagulation of the blood considered simply as caused by a running together of the red corpuscles. And either this opinion or something more vague rules in the writings of Keill, Drake, and Verheyen, published in London during the year 1714, in the third and last volume of the "Bibliotheca Anatomica." In Edinburgh, Martine and Dr. Francis Home, and even Dr. Butt, partook of the prevailing

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errors. The terms "serum" and "lymph" were often used synonymously by the best authors in London and Edinburgh; and though Butt described the coagulable lymph, and so termed it, he confounded it with serum and with the white of egg.

We have already alluded to Leeuwenhock's speculations as the root of so much error. His observations were published in London, in the *Philosophical Transactions* of 1675, and afterwards; and a select version of his works was edited by Hoole in 1806, not at all improved as regards the coagulation of the blood. Indeed, it seems marvellous that the sharp-sighted and justly-celebrated micrographer should have overlooked the fibrin, and not described its fibres as the bond of the blood-clot, more especially after the exact and emphatic observations on this point by Malpighi and Borelli. But on the Continent, as well as in Britain, the errors were held by the best authors, such as Boerhaave, Van Sweiten, Haller, Marherr, Sauvages, and De Haen; and may be found also plentifully in the "Dictionnaire Raisonné d'Anatomie et de Physiologie," published at Paris in 1766. Yet some correct views peep out occasionally, especially in Quesnay's "Principes de Chirurgie," which appeared in 1746.

Indeed, as already hinted, there were more remarkable and illustrious exceptions at this dark period. In France, Petit and Senac, from the years 1732 to 1749, gave correct accounts of the formation and structure of the blood-clot, and of the agency of the fibrin, which they called the lymphatic part or coagulated lymph. Petit was remarkably accurate; while Senac retained a leaven of error, part of which he corrected after the publication of Hewson's "Inquiries." So perfect were Petit's views, that he even described the disposition of the parts of the blood in the heart and great vessels after death, and thus accurately observed, as Mr. Paget has lately done, that the relative situation of the fibrin and the red part might indicate the position in which the dead body had lain when the blood coagulated.

In England, William Hunter was acquainted with the three parts of the blood at the end of the year 1759, but certainly not before; and in 1762 his knowledge of the properties of the coagulable lymph in inflammatory exudations was crude or imperfect. He calls it a "mucus . . . a glutinous concretion or slough." The term "mucus" was then and had long been current in its modern restricted sense. By "lymph," he understood "the interstitial fluid of living bodies." Like Borelli and many others afterwards, he termed the spontaneously coagulable matter "gluten," and asserts that it was "formerly falsely called 'fibrous.'"

When then, and by whom, was the foundation laid in this country of a revival of the old and correct observations of Malpighi, Lower, Borelli, and Collins? Who established among us, and from open and direct proofs, the leading difference of the three parts of the blood, and especially of the fibrin, as taught and extended by Hewson, Fordyce, and John Hunter? This honour belongs to Dr. Richard Davies, whose "Essays to Promote the Experimental Analysis of the Human Blood" were published at Bath, in 1760, with a postscript dated March 1, 1759, and a statement that he had drawn the principal lines of these Essays full twenty-five years before; that is to say, when Dr. Hunter was only thirteen years of age, Mr. Hunter a still younger boy, and before Hewson was born. And, independently of Dr. Davies' statement, there is public proof that he was experimenting on the blood at least as early as the year 1748, in his "Tables of Specific Gravities," published in the *Philosophical Transactions* of that year, including his observations on the comparative weights of the serum, buffy coat, and crassamentum. He was old, it may be inferred, in 1760, when his Essays were published, as he expresses a hope that they may engage younger eyes and younger minds in such studies. We have seen that a correct knowledge of the subject was obscured by a general gloom long before, and for some time after, that date, which not even the fitful and beautiful lights of the eminent French physiologists, before mentioned, had been sufficient to dispel; but it was at last dispelled, and the current errors exposed, by the clear proofs of Davies, and the true outline of the facts thus fairly established again in Britain by this obscure, neglected, and excellent observer; and that after they had been forgotten, or put out for more than half the century which had passed since the time of Malpighi, Borelli, and Samuel Collins. I have found no notice whatever of Davies by any one of his contemporaries or successors; and yet he must have been a man of no mean position in his day, for he was a Doctor of Medicine at a time when any or every "M.D." did not pass current here, and was of Cambridge, as he describes himself "late Fellow of Queen's College" in that University. Why he has so long been consigned to oblivion, that it was left to me alone to rescue him from this indignity, and to solicit for him the common justice of that meed of praise to which he is fairly entitled, it might be vain or painful to inquire. There is a copy of his Essays in the library which Dr. Hunter left to the University of Glasgow, and another in the library of our College.

Dr. Davies having, as we have said, laid and proved the outline of the facts, and that at a time when there was a general ignorance of them in England, it yet remained to fill up, complete, and extend the subject, by such fair, simple, and plain experimental proofs as could not fail to convey conviction to the understanding of any physiologist who might undertake to repeat them. This was done by Hewson ten years afterwards, and he was then unrivalled, and has never been surpassed for the sagacity and skill with which he prosecuted the inquiry. His work on the "Properties of the Blood" is a model of its kind, in which point of view alone it would possess great value; for it has the high merits of experiments nicely devised, well executed, and clearly told; often original, ever instructive, and such a happy combination of perspicuity, precision, and simplicity, that the reader cannot fail to comprehend the importance and accuracy of the leading conclusions, and to feel the pleasure of learning from such a master.

With a tea-spoon he skims off from inflammatory blood the colourless fluid, and shows how it coagulates when thus completely removed from the red corpuscles, an experiment of great importance at a time when the coagulation had so long been attributed to a mere aggregation of them; and accordingly he varies it, ties up the veins of an animal just dead, lets the corpuscles sink, and then removing the clear, colourless, supernatant fluid, witnesses its coagulation as before. He retards the coagulation of human blood by neutral salts, and again proves that the clear, colourless fluid upper stratum, will coagulate at the temperature of the air, and quite independently of the red corpuscles. And he demonstrates in the most unequivocal manner, that these remain entire and unaltered in the clot, and that their form is preserved by the saline matter of the serum. Now, if any more perfect, conclusive, or beautiful evidence than this has ever been produced, that the spontaneous coagulation of the blood is alone dependant on the fibrin, and that totally independent of the red corpuscles, you would be glad to know where to find it—not for the want of further proof, but merely as a physiological curiosity.

But there was an old and discarded hypothesis entertained by Sydenham, Quesnay, and Berdenave, that the fibrin of the blood is formed of the colourless matter of the red corpuscles, or, at least, at their expense; a doctrine which has appeared again within the last twenty years from the independent observations of some of our best physiologists. Besides, in the Croonian lectures for 1818 and 1820, Sir Everard Home and Mr. Bauer had revived it in the more specious form, that the fibres of fibrin and of muscle are composed of rows of the nuclei of the corpuscles divested of their coloured envelopes. And when you look at the diagrams of the rolls of the human corpuscles in strings, and of the relative size of the same corpuscles deprived of the colouring matter, you will perceive how readily such an error might have arisen and been embraced then, and how pretty and seductive it must have been. And so no wonder that a similar doctrine was soon afterwards promulgated in France by Prevost and Dumas, supported by Professor Milne-Edwards, and adopted by such other eminent men as Dutrochet and Béclard. But it never was adopted, much less took root, in Britain; where, although Davies was unknown or forgotten, the accurate conclusions of Hewson remained current in the schools and among our best independent observers: while valid objections to the new doctrine were advanced by Tiedemann and Burdach in Germany, and even in France by De Blainville.

Still, it seemed as if the discussion never would cease on the Continent. So widely and deeply had it spread there, that, besides the writers before-named, Professors Müller, Wagner, and Milne-Edwards, three of the most illustrious foreign physiologists, state, that it was generally believed that coagulation was produced by a running together of the red corpuscles, before Berzelius had announced that the fibrin is liquid in the flowing blood, and becomes solid in the clot.

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How very old and very new this last and correct opinion was when that distinguished chemist advanced it as a novelty, we have already shown; but it seems hopeless to expect that it will ever be known as a fact established long ago; for we find an excellent French physiological chemist seriously proclaiming, in 1838, that he was the first to admit the liquidity of the fibrin in the circulating blood!

And so no wonder Müller was led, in 1832, to discover the facts again, so often discovered here and abroad before, but so long hid in the prevailing darkness on the Continent; this, too, in spite of the universal acceptance in Britain of the correct doctrine of Davies and Hewson; as well as of Dr. Babington's term "liquor sanguinis" for the spontaneously coagulable matter, as distinct from the red corpuscles. Müller witnessed anew the coagulation of that liquid apart from those corpuscles; but, as might have been expected, added nothing to the exactness or completeness of Hewson's demonstrations, and, indeed, only gave a needless confirmation of them. Hewson's "Inquiries" were completed and published in the *Philosophical Transactions* of 1770, the very year of his marriage to Mary Tickell; and he died within three years afterwards. Twenty years passed before Hunter's death, in 1793, when his great work on the "Blood" was in the press, the publication of which was superintended by Sir E. Home and Dr. Baillie in 1794. There is no reason to suppose that Mr. Hunter ever claimed for himself the discovery, either of any one of the chief parts of the blood, or that its coagulation is due to the fibrin. On the contrary, his great and generous mind would, doubtless, have revolted from any such injustice; for, whatever might have been his ignorance of the earlier writers, it is certain that he was well acquainted with Hewson's observations. But, as a final proof of the potency of error, and of how "confusion then had made his masterpiece," in 1835, the Hunterian Professor, referring to that posthumous book of 1794, seriously asserts that it was not known in Hunter's time upon which of the constituents of the blood its act of coagulation depended, claiming accordingly the discovery for him, and this on the credit of a mere repetition of one of Hewson's experiments; an error scarcely equalled even in this perplexed subject, and the more deplorable, as still standing, without correction by its author, in the preface to the concluding volume of the last edition of "Hunter's Works."

ORIGINAL COMMUNICATIONS.

CLINICAL MIDWIFERY.

By FRANCIS H. RAMSBOTHAM, M.D.

Physician-Accoucheur to the London Hospital, etc.

(Continued from page 5.)

I HAVE already related in these reports those cases of hæmorrhage before delivery, forceps, craniotomy, and transverse, which I was called upon to treat during the five years embraced between January 1, 1840, and the last day of December, 1844; and I will now proceed to detail those cases of convulsions and other indications of oppressed brain, which I witnessed within the same dates. The following three occurred in my practice during the three first months of the year 1840:—

Apoplexy at Five and a-half Months of Pregnancy—Twins.

Case 172.—On February 5, at 7 p.m., a Medical friend requested me to see Mrs. A., Artillery-place West, five months and a-half advanced in her second pregnancy. Two months after the birth of her first child she caught the small-pox; her infant took it from her and died. She had never been strong or healthy since. For a week before I saw her she had complained of intense pain in the head and frequent vomiting; however, on the 2nd she was able to receive a number of friends who had been invited to dinner, although she felt very ill; and her doing so was most injudicious. On the next day she was quite jaundiced, and kept her bed; the whole of the day before I saw her she was dull and stupid, in a semi-comatose condition, and only spoke in answer to questions; towards the evening she could not hold anything in her hand, and she gradually became more and more insensible till 2 a.m. on the 5th, from which time she never uttered a syllable. When I saw her I was told by the friends that "she had been in a sweet sleep all day;" but instead of that I found her apoplectic, with deep, stertorous breathing. Every now and again she gave indications of painful sensation, which was due to uterine action. The os uteri, indeed, was dilated to the size of half-a-crown; and the pains were coming on every three or four minutes. Twenty ounces of blood were immediately taken from the arm with some benefit; for some spasmodic twitchings and startings, which had been frequent before, entirely ceased. The os uteri opened rapidly, and before the lapse of an hour I was able to bring down the foot of one child which presented, rupturing the membranes at the time. I delivered this child most easily. There was a second, also presenting with the feet, which I extracted as readily. The placenta passed almost immediately. After her delivery she seemed more tranquil, and the stertor ceased; but she never became conscious, or spoke, and she continued gradually getting worse till 6 a.m. on the 6th, when she died. Each fœtus breathed for a few minutes. An inspection of the head was not allowed; but there is reason to believe that effusion of serum was the cause of death.

Convulsions before and after Delivery.

Case 173.—On February 25, 1840, at 4 a.m., I was sent for by a Professional friend to Mrs. H., Hackney, a strong, hearty woman, aged 35, in labour of her first child. She had been in very full health during her pregnancy, living highly, and taking scarcely any exercise. She had also much neglected the state of her bowels. She had been much harassed with false pains from the morning of the 21st. The os uteri began to dilate about noon of the 24th, and the labour progressed very well, though slowly, until 11 o'clock at night, when, without the least warning, she was seized with a violent convulsion. She was bled immediately to sixteen ounces; but this made no impression on the pulse, and apparently but little, if any, on the system. She became gradually conscious, however, after the cessation of the fit, but in an hour she had another equally severe as the first. When that ceased, she remained quite comatose, and suffered one every twenty minutes until my arrival. I found her perfectly insensible, the breathing very stertorous, the pupils much contracted, and dilating always on the application of light. The fits were as violent as any I ever witnessed. She was bled again to nearly twenty ounces. The pulse, which was hard and bounding before, now became softer and more natural, and the lips slightly pallid; but the coma remained as deep as before. With great difficulty she was made to swallow ten grains of calomel, and some strong purging mixture. The os uteri being nearly dilated, I was proceeding to turn the child, with the intention of delivering; but at the moment I was passing my hand into the vagina, which was preternaturally rigid, for that purpose, a very strong contraction took place, the membranes suddenly broke, the whole of the liquor amnii, very small in quantity, was evacuated, the head came to press strongly against the pelvic brim, and the funis prolapsed by its side, its vessels not pulsating. As, under these circumstances, it would have been difficult and dangerous to endeavour to introduce the hand with the intention of bringing down the feet, especially as the patient was very restless, throwing herself about on the bed in every direction, yet, as delivery was urgently called for, in consideration of the fœtus being already dead, I perforated the skull at once, and extracted the child with not more difficulty than I expected to meet. She seemed better after the child's birth, and, though still insensible, no fresh fit occurred for more than an hour. After that, they again came on every twenty minutes. Directly after delivery a turpentine enema was exhibited, which speedily acted, and brought away an immense quantity of very offensive fæces. The fits continued more or less frequent till 8 p.m., when they ceased; there must have been nearly sixty in all. She still, however, remained insensible. At my visit, 3 p.m. on the 26th, I found she was sensible enough to swallow by voluntary efforts, though she had never spoken, nor shown any other signs of consciousness. The bowels had been freely purged; but the abdomen had become tympanitic; at 8 p.m. she was evidently sinking, and she died at 8 a.m. on the 27th. No urine could be saved to ascertain whether albumen existed in it or not.

Convulsions before Delivery—Twins.

Case 174.—On March 26, 1840, at 7.30 p.m., a Professional friend requested me to visit Mrs. T., Old Street-road, at the close of her first pregnancy. I found that she had been seized at noon of the same day with a strong convulsive fit, without any premonitory symptoms, and that about sixteen ounces of blood had been taken immediately, with but little benefit; for,

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although she regained her consciousness between the attacks, the fits returned, becoming gradually more frequent, while in the intervals she became less conscious; twelve leeches were, therefore, applied to the temples. When I saw her, she was quite comatose, the fits were recurring every fifteen minutes, there was a slight sanguineous discharge from the vagina, and the os uteri was the size of a sixpenny piece, but there were no indications of uterine contractions. It was agreed that she should be bled again to the amount of sixteen or twenty ounces; ten grains of calomel were put on her tongue, and she was made to swallow some purgative medicine. After the second bleeding the attacks were less frequent, and also less strong. Uterine action was well established at 10 p.m., and she was delivered of one child at half-past one in the night, and of a second in twenty minutes after; both presented with the head, and both were born dead; the second was putrid. She had a fit whilst the head of the first was passing into the world, but none after. I saw her at 7·30 the next morning, when she was still comatose, but she had swallowed naturally, though she had not spoken; the bowels had acted copiously. From this time she gradually regained her consciousness, and the next day answered questions quite rationally. The uterus, however, was large, very painful, evidently congested, and there was no lochial discharge. Leeching, fomentations, and warm water injections, relieved these symptoms, and she gradually recovered.

N.B.—There are three circumstances connected with this case that are worth notice. The first, that it occurred under a twin gestation. Now, it is an established fact, not only that convulsions are comparatively more frequent when there are more children than one in utero, but that twin gestation predisposes to many other of the dangers to which lying-in women are exposed, particularly hæmorrhage; this might, indeed, have been expected, from the larger surface of placenta in contact with the uterine walls. But the inflammatory and other diseases of the puerperal condition are also more frequently found to follow plural than single births. The second is,—that it was a first labour. Women bearing first children are peculiarly liable to convulsive seizures. Thus, out of 127 cases reported by Clarke, Merriman, Collins, Meigs, and my father, 100 of them were first births; and of 111 cases of puerperal convulsions which I have myself personally attended, 79 were first births. These proportions are large. The third circumstance is, the occurrence of a congested or inflamed state of uterus. It has been remarked by Denman and Collins, that abdominal inflammation is a common sequela of puerperal convulsions, and Gooch gives a case in point. Indeed, Denman goes so far as to say, that in almost every case which he had seen there was evidently after delivery a greater or less degree of abdominal inflammation. Although it has happened to myself to meet with a few instances of peritoneal and uterine inflammation subsequent to puerperal convulsions, the number has not been by any means so great as to impress my mind with an idea that either of the latter diseases had any connexion with the former; nor would it have occurred to me to imagine such a connexion, had the remark not been made by high practical authorities. Perhaps this may be accounted for by its being the practice now to take blood more freely for the subdual of these frightful attacks than was the case when Denman wrote.

8, Portman-square.

(To be continued.)

Erratum.—In the remarks appended to the last collection of Dr. Ramsbotham's cases published in this Journal, *for* "Douglas and Denman thought," *read* "Denman thought." Dr. Douglas was the first to refute Denman's description of the process of the "spontaneous evolution."

NOTES ON CAUSES OF EARLY MORTALITY.

By J. WHITEHEAD, M.D.

No. IV.

Death-rate in Infancy.

As was assumed in the case of the intra-uterine tenant, so, also, would it seem to be in that of the independent being in regard to the uncertainty of its existence, namely, that its tenure of life is precarious in proportion to its helplessness, and the extent to which its supply of sustenance depends upon the skill and moral integrity of those around it, influenced, of course, by the nature and sufficiency of the means available. This law operates with a force proportioned to the degree of intellectual torpidity of the creature, the progressive steps of early development lessening its stringency as the faculties become awakened to a knowledge and appreciation of functional promptings and requirements.

Among those born alive, the highest rate of mortality occurs during the first few days—probably on the first, the day of birth; from which date it steadily decreases week by week during the first month, and month by month, with striking regularity, to the end of the first year; standing, for the first month, twice as high as for the second and third together; and as high for the first three months as, and sometimes much higher than, for the whole of the remaining nine months of the first year, as shown below.

Table representing the average death-rate at different periods during the first year of life, for the six years ending with 1844, in England:—

Months.	Deaths to 100 Births. Males.	Females.	Total.
0 to 1 . . .	2·68	1·96	4·64
1 to 2 . . .	0.97	0·76	1·73
2 to 3 . . .	0·48	0·54	1·02
3 to 6 . . .	1·59	1·27	2·86
6 to 9 . . .	1·31	1·05	2·36
9 to 12 . . .	1·17	1·02	2·19
	8·20	6·60	14·80

To express the above results more concisely, they may be conveniently arranged in two groups, for the first three and the following nine months respectively, thus:—

Months.	Deaths (first year) to 100 Births. Males.	Females.	Total.
0 to 3 . . .	4·13	3·26	7·39
3 to 12 . . .	4·07	3·34	7·41
	8·20	6·60	14·80

Showing how nearly the respective events approximate in number for these two unequal periods of the first year.

The relative proportions here given, however, for the two periods specified are constantly fluctuating from year to year; but the item for the first period (first three months) is seldom so low as that of the preceding statement, although frequently much higher. The causes of such variation are not always sufficiently explicable.

It does not appear that the rate of infantile mortality has thus far been favourably affected by the praiseworthy efforts which have of late years been made with a view to improve the sanitary condition of towns and dwellings, and to better the material status of the people, as the item representing the first year's death-rate, as above quoted, for the sexennial period ending with 1844 (viz., 14·80) stands lower than that, fifteen years later, for the three years ending with 1860 (viz., 15·29), the most prosperous period that England has for many years known. The estimate was, of course, higher during the four years ending with 1849—the years of the Irish famine—than that of 1860; but even then the disparity was not very remarkable, except for the populations occupying the north-western division, where the scourge was much more severely felt than elsewhere in England.

To offer, in passing, a brief comment upon the character of this visitation, it may be remarked that, although the failure and deterioration of the crops began to be noticed in 1845, their effects upon the material condition of the populace were not inconveniently experienced until the year after, when the death-rate at all ages exhibited a considerable augmentation, and continued to be much above the general average throughout the three years following. The results denoting the effect of the panic upon infant life for these four years respectively stand as follows:—

	Months.	Deaths (first year of life) to 100 Births. Males.	Females.	Total.	
1846	0 to 3 . .	4·70	3·56	8·26	=16·34
	3 to 12 .	4·44	3·64	8·08	
1847	0 to 3 . .	4·68	3·56	8·24	=16·43
	3 to 12 .	4·48	3·68	8 16	
1848	0 to 3 . .	4·55	3·48	8·03	=15·36
	3 to 12 .	4·05	3·28	7·33	
1849	0 to 3 . .	4·59	3·50	8·09	=15·94
	3 to 12 .	4·30	3·55	7·85	
				Mean . .	16·01

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In illustration of the extent to which vicissitudes of this kind are liable to influence the death-rate in infancy, it may be convenient to compare the issues on this subject, of this and two other remote epochs, each contrasting, in a manner sufficiently striking, with the others in regard to circumstances which specially affect the health and well-being of the people at all times,—namely, the productiveness of labour, the price of provisions, and the quality of the articles consumed.

The first of these epochs represents a trade panic of at least three years' duration, comprising, indeed, the years 1839 to 1842, during which term employment was scarce, the price of provisions high—though unaccompanied by deterioration in quality,—wages low, with a state of chronic political agitation throughout the country. The second refers to the epoch comprised within the dates of the preceding table, and which was a veritable famine such as had not prevailed in this country for many years, attended by a pestilential infliction upon the health of many located within the sphere of its influence—the immediate result of a succession of faulty harvests, which were not only deficient in yield, but of bad quality. The third is an epoch of unwonted prosperity and abundance. The rate of infantile mortality for these three epochs respectively stands thus—both sexes included :—

	Deaths (1st year) to 100 Births.		
	0 to 3 mo.	3 to 12 mo.	Total.
1840, 1841, 1842 .	8·45	6·25	14·70
1846, 1847, 1848, 1849 .	8·57	7·56	16·13
1858, 1859, 1860 .	8·55	6·74	15·29

In contrasting the first and last items of the preceding table, and taking into account, at the same time, the prevailing circumstances of the labouring population under which they were furnished, the conclusion seems inevitable, that abundance of means is not necessarily conducive to the amelioration of the death-rate in infancy; seeing that the average fatality for the three prosperous years ending with 1860, is ·59 per cent., higher than that of the period of difficulty, comprising the three years ending with 1842. There was not, so far as I know, any unusually severe epidemic prevalent amongst children during either of the years comprised in the third—the prosperous epoch—which could account for the high rate quoted. The results for the respective years of this epoch certainly differ materially one from the other,—being, for 1858, 15·60; for 1859, 15·41; and for 1860, 14·86; showing a remarkable decrease of the early death-rate during these three years. But the year 1860, the most favourable of the three, was notably prosperous as well as healthy; yet was its death-rate for the first year of life higher by ·16 than that of the crisis ended 1842.

Hence it would appear, that mere limitation of means, provided this does not extend to actual and continued deficiency, and provided also the articles of common consumption be of sound quality, cannot be regarded as a chief cause of an increased mortality. This position is forcibly sustained by events which are now passing. It is especially noteworthy, for instance, that, during the present season of privation and depression, the class of diseases commonly met with in early childhood amongst the indigent, and brought under notice at public charities, have been both fewer and milder in character; and the death-rate, judging from the comparatively few fatalities which have occurred among the patients treated, within a limited experience, during the past twelve months, will probably be, for this year, below the general average. This cannot be owing to climatic agency, for the seasons this year (1862) have been even less genial than usual. The cause must, therefore, be elsewhere sought for, and may possibly be found among the attributes of domestic and personal hygiene.

Faulty diet and repletion, together with the intemperance of parents both in eating and drinking—vices which are most prevalent in times of prosperity—are much more pernicious in their effects upon infantile health and life than the spare and simple regimen which straitened circumstances impose: provided always, as before stated, that the quality of the food be sound, and want avoided.

The fatal pestilence which prevailed in the north-western division of the empire during the Irish famine crisis, was mainly due to the diseased quality of indigenous alimentary products, and not to actual deficiency alone, as a liberal supply of grain and other substitutes began to be poured in from foreign countries so soon as the want was made known; the prohibitive duties having been providentially removed, thanks to the efforts of a small knot of energetic philanthropists, during the early pressure of the panic.

It is to be regretted that the Registrar General's tables furnish no means whereby to estimate the actual amount of fatality, during this epoch, among illegitimate children as compared with that of those born in wedlock. Doubtless, the influence of badness, and at the same time of scantness of food, would tell with great severity upon such as were also deprived of the maternal sustenance. Even under ordinary circumstances, the death-rate of illicit offspring during the first year of life, according to the French records, is more than double that of the legitimate, and must be much higher in seasons of dearth and during the prevalence of devastating epidemics.

The rate of mortality in infancy, as well as generally, is referable to many causes, one of which, though not the only, nor even the chief, agent in this work is, according to general belief, overcrowding in the dwellings of the poor. The following table, bearing on this subject, represents the death-rate during the first year of life in each of the ten registration divisions of England (that of London being excluded), and the density of population, as indicated by the number of persons per acre in each division, ranged in the order of the preponderance of deaths :—

Divisions.	Deaths (first year) to 100 Births.			No. of Persons to the acre.
	Males.	Females.	Total.	
North Western .	9·36	7·26	16·62	1·46
York . . .	9·09	7·12	16·21	·55
Eastern . .	8·42	6·52	14·94	·36
North Midland .	8·61	6·27	14·88	·36
South Midland .	8·49	6·28	14·77	·40
West Midland .	8·37	6·42	14·79	·63
England . .	8·32	6·44	14·76	·52
Northern . .	7·70	6·22	13·92	·33
Welsh . .	7·44	5·87	13·31	·25
South Western .	7·09	5·37	12·46	·37
South Eastern .	7·00	5·39	12 39	·45

The influence of agglomeration, however, will be better understood, when examined in connection with the death-rate of town populations, an inquiry which must be deferred for an occasion hereafter. Suffice it to say in this place, that the agency in question—albeit demoralising and unwholesome—seems to hold in reality a less important *rôle* than is commonly assigned to it. It may be remarked, in passing, however, in reference to the share which over crowding undoubtedly has in the augmentation of mortality, that the division in which the highest death-rate occurs, namely, the North Western, has a population more than twice as dense as any other in England—London alone excepted; and the metropolis ought to be placed, when instituting comparisons of this nature, in juxtaposition with towns only.

(To be continued.)

CASE OF MALIGNANT PUSTULE.

By JAMES EDMUNDS, M.D., etc.

A FINE, tall, bulky man, 50 years of age, who had led an active business life, lived freely, and suffered from gout, and from symptoms which had been referred to disease of the muscular texture of the heart, was occupied on the 16th of last December in superintending the construction of a conservatory in his grounds at Hackney, and at 10 p.m. he took supper, and went to bed "as well as possible."

At midnight, he was seized with a rigor, and with severe pain across the lower part of the loins and through the hips. At 3 a.m. he found his "tongue greatly swollen," and his articulation very difficult; he became rapidly worse, and, early in the morning, sent for me, but I was unable to visit him directly.

At 11 a.m. I found him in bed, with a countenance indicating considerable distress and profound toxæmia. The mouth was open, the saliva was running over the lower lip, and the tongue was thrust upwards by a remarkable swelling in the sublingual space; there was the greatest difficulty in utterance, but no huskiness of the voice; the pulse was weak, and he was very feeble when out of bed. Only the under part of the tongue was visible, but, by means of a table-spoon, I managed to see that the roof of the mouth, the palate, and the pharynx were unchanged in appearance, as also were the

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lips, the cheeks, the gums, and the tongue itself. The tongue had a "dried beef" look about the tip of its upper surface, and, with the swelling beneath, looked as if it were mounted upon a small thick muffin, about as big as itself, and of the colour of the mouth. The swelling was symmetrical, and it completely filled that space within the lower jaw which is usually occupied by the tongue. The mucous covering was not obviously altered, but close inspection discovered an indistinct pallid mottling, analogous to that change of surface which precedes ordinary gangrene. Upon applying a finger the mass was not very sensitive; it was soft and yielding, as if it might contain pus infiltrated through its texture, but it was not quaggy, it did not pit, and it was utterly destitute of that brawny feel which attends ordinary carbuncular inflammation. Beneath the lower jaw there was some swelling and considerable tenderness.

I could scarcely believe that the patient had arrived at this condition in less than twelve hours; but he emphatically assured me that he "went to bed as well as I was."

Ten years' active practice had not previously presented a similar case to my observation; and beyond considering it as gangrenous cellulitis, I was at a loss for a designation; and beyond the risky procedure of making a free incision beneath the tongue, I was also at a loss for any effectual treatment.

I explained the nature of the case to the patient and family, and particularly guarded the latter against infection. I directed the patient to wash out the mouth frequently with a solution of nitro-muriatic acid, and to take a full dose of carbonate of ammonia immediately; and it was arranged by telegram for Dr. B. W. Richardson to meet me in consultation at two o'clock. At this visit the patient looked worse, and the submaxillary swelling and tenderness were greater, although the mouth and the utterance were about the same, and there was neither affection of the pharynx, nor huskiness of the voice. The only clue which we could obtain as to the origin of the malady was the fact that, three and four days before, the patient had eaten some jugged hare which was "high," and that beneath the tongue a ragged tooth in the lower jaw had produced a sore, through which a putrid infection might have occurred, and near to which he remarked that some of the meat had lodged until the next day. We decided that, at all hazard, a free incision must be made into the mass, and Dr. Richardson further suggested that some solution of iodine should be inserted into the incision on pledgets of lint, so as to permeate the diseased textures, and, if possible, prevent, by chemical action, any further blood poisoning. Our recommendations were at once acquiesced in, and a long bistoury was plunged by the side of the frænum linguæ downwards and backwards into the mass for an inch and a-half, when its point was turned outwards so as to emerge upon the end of the finger beneath the root of the tongue, and the knife was drawn forwards so as to cut its way out, and produce a most effectual incision. No bleeding ensued, and a corresponding incision was instantly made under the other side of the tongue. The mass did not cut like ordinary flesh, nor in the least like carbuncle, but like soft flesh, or ripe Stilton cheese; no pus exuded; and the cut surface presented a mottled pale and pinkish appearance. Pieces of lint, soaked in a solution of compound tincture of iodine diluted with three parts of water, were thrust into the opening, and were to be changed every hour; the surface of the mass and the contiguous parts were also to be frequently swabbed with the solution by means of a small sash brush. The room contained a good fire, and the windows were thrown open. Some fragments of iodine also were placed about the room to exhale into vapour, and, as Dr. Richardson thought, to produce an ozonising, and, perhaps, disinfecting effect upon the atmosphere. The patient was to take large doses of carbonate of ammonia, and champagne *ad libitum*.

At 10 p.m., Dr. Richardson and myself held another consultation. The patient's countenance was much improved, and he said he felt better. Articulation was easier, the tongue more movable, and the incisions were discharging copiously. There was no huskiness of voice nor affection of the pharynx, and the pulse was better. We congratulated ourselves and the family upon the possibility of recovery, as, notwithstanding the wonderfully rapid advent and increase of the disease, it appeared to have made no progress during the last seven hours. The treatment was to be continued, and we were to hold another consultation at 8 a.m.

In the night, however, a cab was sent for me, and, on arriving, I found that the patient had just died. I learnt that a second rigor had occurred at midnight, and that he became rapidly worse; the discharge was more profuse from the mouth, and began also to come from the nostrils; the swelling under the jaw increased enormously, and extended backwards to beneath the ears; the voice became husky and the breathing difficult; he became very restless, turned across the bed on to his back, and died at 3 a.m. The discharge was never really black (Dr. Richardson termed it sepia-coloured), and the odour, although exceedingly disagreeable, was never gangrenous. The throat swelling, which came on so rapidly after the second rigor, was examined by me just after death, and it precisely resembled, in external outline, the enlargement which accompanies the deadly forms of scarlet fever. There was, however, no rash upon the skin, and the commencement and location of the first symptoms had nothing in common with that disease. The body ran rapidly into putrefaction.

The room was disused, the linen burned, and other precautions were adopted. The patient's wife, who attended closely to him, was very prostrate and ill for a week or two afterwards, and she ascribed this to having "caught a whiff of his breath." The son, however, who applied the iodine and changed the pieces of lint, and helped the patient about in bed, is quite well, and no member of the family has since suffered in any way like the patient.

The onset of this frightful malady was marked by the midnight rigor, and at 3 a.m. appeared the difficulty of utterance. Precisely as midnight recurred there was a second rigor, and this again was followed by rapid extension of the local symptoms, and death at the recurrence of 3 o'clock. Profound toxæmia from the first stamped death upon this gentleman's countenance; and the immense scarlet-fever-like enlargement of the throat, which came on after the second rigor, only aided, by mechanical pressure upon the larynx, that vital prostration which had, as it were, already mixed up death with life.

Although I have classed this with cases of malignant pustule, yet it materially differs therefrom—while points of resemblance and analogy are presented by many other diseases, *e.g.*, scarlatina maligna, some rare cases of typhus, the plague, and cases of animal or venomous poisoning. I doubt not that many readers would like to have a paper from Dr. Richardson upon this case. I have not myself had time to look up the literature of the subject; but I have thought it well to at once put upon record as clear an account of the facts as I am able, and just to summarise, as remarkable points, the supposed origin of the malady, the deadly rapidity of its course (twenty-seven hours), the exact diurnal recurrence of the rigor and of the local exacerbation, the utter impotence of remedial means, and the impunity which attended the incisions. Although not unaccustomed to use the knife, I must say that, remembering the frequency with which free incisions in carbuncular cases are followed by troublesome bleeding, I did look with much anxiety upon the risk of cutting deeply into the sublingual space; but, in future, I shall have no hesitation in freely opening such a mass, inasmuch as in this case the incision was only attended with trifling pain, and was followed by no bleeding, and I am inclined to ascribe the temporary arrest of the symptoms to the use of the bistoury and the solution of iodine.

35, Finsbury-circus.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

ROYAL INFIRMARY FOR CHILDREN.

NOTES ON SCARLET FEVER.

(By Dr. WILKS.)

(Continued from page 65.)

On the Diagnosis of Scarlatina and Measles: Are they Distinct Diseases?—Illustrative Cases.

Another feature of interest in this disease, and one which is constantly presenting itself before us, is the diagnosis between scarlatina and measles. At one period in Medical history the two affections were confounded, but since that time a very broad line of distinction has always been made between them, and, as a rule, no difficulty exists in their separation.

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Every Medical man must, however, at times have been puzzled in his attempt to declare to which exanthem the particular case belonged; the difficulty arising from the apparent mixture of the two diseases rather than from the mere mildness of the case, although this constitutes a difficulty of another kind; for those who have witnessed an exanthem in a public school must know how differently children are affected, and how, in several cases, unless from a knowledge of the existence of the disease in the institution, they would scarcely have recognised the true character of the affection.

We now allude rather to cases where the patient is very ill, and the symptoms well marked, but partaking of characters belonging to both scarlatina and measles, so that it is with difficulty a decision can be arrived at concerning the true nature of the illness. A question, therefore, has often arisen whether Sydenham did right in drawing so distinct a line between the two affections—whether, indeed, they be not modifications of one another, or whether they may not be often combined. Some have thought, and such theory is held by many German writers, that the disease which constitutes the difficulty, and which is apparently made up of scarlatina and measles, is, in fact, a third affection of an altogether distinct character, and that three exanthemata should be recognised—scarlatina, morbilli or measles, and rubeola, the latter being the name given to the affection of which we are now speaking.

The method to be taken in forming a conclusion would be probably of the same kind as that adopted with respect to the controverted theory of the distinctions of continued fevers—that if belonging to the same species one would propagate the other, and the two would be found associated, but, if belonging to different species each would produce its like, and very distinctive characters would be preserved to them. So if it be found that the exanthemata of which we are speaking are found variously intermixed, occurring in all forms in the same localities or the same houses, it would be a strong argument in favour of their identity. If, on the other hand, they are found distinct, it would be almost a proof that they had a nature *sui generis*, and that, we think, will be found to be the case with respect to these diseases. Measles or morbilli is one form of disease, and scarlatina another, whereas, in all probability, the rubeola is a third affection, distinct from both, and thus explaining the difficulty arising from the apparent combination of the two, and explaining also the fact of the re-occurrence of measles or scarlatina.

Dr. Copland states that some authors believe rubeola to be a specific contagious disease. Some consider it a variety of one or other of the diseases which it so closely resembles—of either measles or scarlatina. Some consider it a variety of scarlatina, others allied to measles, and others that there is no essential difference between measles, scarlatina, and rubeola. According to this, rubeola should be regarded as the connecting link between measles and scarlatina; and Dr. Copland himself rather thinks that it is a combination of both, and not a disease *sui generis*.

The disease of which we speak may be characterised, in short, as an affection having the eruption of measles, with the throat of scarlatina. Our own attention was drawn to the subject many years ago, when attached to the Surrey Dispensary, and a difficulty occurred to us long before we knew that any similar trouble had been met with by others; as, for example, on visiting a child, and finding its skin covered with a measly rash, and, at the same time, a cough existing, with wheezing, coryza, and the general aspect of measles, we were just on the point of pronouncing the case to be measles, when the neck was observed to be swollen, and, on looking at the throat, it was seen to be injected, and the soft palate tumid, as in scarlatina. Always having been in the habit of regarding the throat affection as the most important feature of such a case, we changed our diagnosis to one of scarlatina, but then were rather annoyed to hear that the child had already had this latter disease, which was described in such an unmistakable way that there could be no doubt of the fact. The same difficulty has since often occurred; also the statement that children have had measles and scarlatina twice; as well as the announcement which one is obliged constantly to hear, of one disease rapidly following the other, as only lately, where we were told of the case of a child who was said to have had scarlatina before the rash of measles had entirely disappeared, —a most unlikely circumstance.

At the Infirmary for Children, our experience being gained mostly from the out-patients, an opportunity for seeing the diseases at their height is not so great as for witnessing its effects or the sequelæ; but in these we can every day see that the subject of which we speak requires further elucidation; for example, in the following cases:—

A child, 2 years old, was brought to the Infirmary with discharge from the ears, and enlarged glands in the neck. On making inquiries as to scarlatina, the mother stated that, four weeks before, the child had a fever, but which the Doctor said was measles. Was it not rather this third disorder, the apparent combination of the two, or rubeola?

A child, 8 years old, came to the Infirmary with renal dropsy; the mother said that a month before she was covered with a rash, like that of measles, and she had a cough; but, at the same time, the neck was much swollen, and the throat was sore. Soon afterwards the skin desquamated. Was this merely a mistaken diagnosis, or was it a case of rubeola?

A boy, aged 5, was brought to the Infirmary, with large suppurating glands in the neck, just as seen after scarlet-fever. On making inquiries as to the occurrence of this disease, the mother said that a month before the child had what was called measles. There was a cough, and a running from the nose and eyes. The mother said that the child had had measles before, and this was the second attack.

A girl, aged 5. Nine days before she was taken with a cough and cold, followed by rash, which both the Doctor and the mother considered to be measles. In a day or two there was great swelling of the throat. When she appeared at the Infirmary, there was no desquamation of the skin; but the neck was very much swollen, just as after scarlet fever, and there was some bronchitis, and in a few days there was discharge from the left ear.

The case showed an apparent combination of the two. Was it not rather an instance of a third disease?

A girl, aged 4, came to the Infirmary very ill, wasted, skin harsh, mouth aphthous, and lymphatic glands in neck much enlarged. There was ulceration of the gums of the lower jaw, and a portion of the alveolar process was exposed. This was subsequently removed, and the two incisors of the lower jaw fell out. The whole history suggested scarlet fever, but the mother said that the child had had measles three weeks before, and that one child in the house had died of it.

Although most Medical men would consider it an insult to suppose that they were unable to recognise a case of scarlatina or measles, yet the relationship of these two diseases remains in such obscurity, that we would suggest that some unprejudiced person, with a large field of experience, should commence the study of the exanthemata in children *de novo*.

GUY'S HOSPITAL.

MENORRHAGIA TEN MONTHS—DILATATION OF CERVIX UTERI—DISCOVERY OF POLYPUS—REMOVAL—RECOVERY.

(Under the care of Dr. J. BRAXTON HICKS.)

S. R., aged 36, single, servant, was admitted, under the care of Dr. Braxton Hicks, on September 17, 1862. She menstruated normally till ten months before admission. During the last ten months the periods have lasted fourteen days. She was found to have a rather bulky uterus; the cervix and os were healthy. Various styptics were given, but these were found to be useless. Secale, in small, continued doses, was also employed, but no benefit resulted, and the menorrhagia became more persistent. This state of things continuing, and no external cause having been found, Dr. Hicks thought a polypus might be the cause of the hæmorrhage. He determined, therefore, to dilate the os uteri. This was attempted by means of the stem of *Laminaria digitata*, recommended by Dr. Sloan, of Ayr. To a certain extent, it answered; but, after its application, irritation was produced, which subsided in a day or two after its disuse. Upon examining, a week after, a polypus was discovered protruding through the os, which was dilated to the size of a florin. After waiting a week for its further descent, which, however, did not take place, Dr. Hicks removed it by his wire-rope ecraseur whilst within the uterus. It was about two inches long, by one inch, at its greatest diameter, composed of fibrous tissue, and was tightly grasped by the uterus. It was found necessary, in order to pass the rope round the root, to use the guides. A slight irritation followed, but it soon passed off, and she left the Hospital quite well in about three weeks after the operation.

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In this case the effect of the dilator was rather to provoke the uterus to force down the polypus, than directly to bring it into view, as the os was not dilated more than one-third of an inch by it.

THE ROYAL PORTSMOUTH HOSPITAL.

REMITTENT FEVER, WITH EPILEPTIFORM ATTACKS—CLINICAL REMARKS.

Communicated by J. W. Moore Miller, M.D., M.R.C.P. Lond., Physician to the Hospital.]

G. D., aged 19, a Danish sailor, who had been attacked with rigors and fever during a very rough voyage from Dantzic to this port, was admitted into the Hospital under my care on October 31, 1862. He was of spare habit, and appeared to be labouring under general debility and depression, without any other marked symptoms. He stated that he had been ill ten days, and that he had received no other treatment than a saline draught, which was administered to him by the captain of the ship. His previous health had always been good.

The next day, while in the sitting posture, he suddenly fell down on the floor in an epileptic fit, in which he continued twenty minutes. When he recovered he was incoherent and sleepy. Several other attacks of a similar character followed in a few hours, and these left him unconscious and exhausted. I saw him a short time after—he was then insensible, lying on his back; if spoken to, he could be aroused for a moment. His pupils were somewhat dilated; pulse 100, and full; skin generally warm; tongue somewhat dry, very tremulous, and coated on the dorsum. The bowels and bladder having been freely evacuated, two grains of quinine and a quarter of a grain of extract of belladonna were prescribed every two hours. The head was ordered to be kept cool, and he was placed upon a diet of beef-tea and port wine.

November 2.—No return of the epileptic fits, but he has been very delirious and restless throughout the night. The febrile symptoms are marked by indistinct remissions.

3rd.—Patient has been very restless and occasionally violent. Pupils much dilated; voice husky; tongue dry; pulse 110, and soft; skin still variable, sometimes extremely hot. Head was now ordered to be shaved, and cold lotions applied. Quinine and chlorate of potash were given internally, and the bowels stimulated by a turpentine enema.

5th.—Delirium and restlessness continued the prominent symptoms yesterday. A blister was applied to the nape of the neck. This morning, about 4 a.m., a profuse perspiration broke out over the whole body. He became tranquil, fell into a sleep for some hours, and then awoke refreshed. From this time his recovery was complete, and exhibited nothing worthy of recording.

Remarks.—During the development and progress of fevers and other acute diseases, there is frequently a temporary susceptibility to convulsive seizures. A state of "increased reflex excitability" is induced, partly by the morbid condition of the blood, and partly by the congested state of the nervous centres. This was the associating link between the epilepsy and the fever in the case above. At the onset of the disease, the base of the encephalon, and the medulla oblongata—the centres of reflex action—were excited; but, with the increasing constitutional derangement, the irritation extended to the cerebral hemispheres, and produced a disturbance of those faculties which are manifested through them. The profuse sweat which occurred during the last stage of the fever, and which immediately preceded a marked abatement of all the symptoms, appears to have been one of the old-fashioned "critical evacuations."

During a residence of many years in Calcutta, this form of remittent fever, ushered in with epileptiform convulsions, came repeatedly under my observation; and, as a general rule, I have found quinine and stimulants, freely and persistently administered, to be the safest and most successful remedies.

HOSPITAL FOR SICK CHILDREN.

CASES OF EPILEPSY IN CHILDREN RELIEVED BY THE EXPULSION OF WORMS.

(Under the care of Dr. DICKINSON.)

A girl, 8 years of age, was brought to Dr. Dickinson, on May 29, for fits, of which she had eight in three weeks. Dr. Dickinson saw her in one, of an evidently epileptic character, in the out-patients' room. Treatment for worms was adopted, although there was no actual evidence of their presence. Dr. Dickinson directed that the child should go without food from breakfast-time until the next morning, and then take six grains of santonine in castor-oil. After the operation of this, quinine was to be taken. The draught brought away a large quantity of thread-worms.

A week later the patient still passed many worms, but had had only one slight fit. An enema, made with the tincture of the sesquichloride of iron and lime-water (in the proportion of half an ounce to the pint), was ordered to be used every night, and a little castor-oil was given occasionally.

A great number of these worms were passed after the injection. Except a slight feeling of faintness, she had no further fit, so long as she was under observation—*i.e.*, up to June 30.

In reference to the treatment of worms in children, Dr. Dickinson said that he adopted the following methods:—The injection of the sesquichloride of iron and lime water in cases of ascarides, the administration of santonine in round worm, and the oil of male fern in tænia.

A girl, aged 11½ years, pale, but looking fairly healthy, was admitted an out-patient on July 31. She had had fits for about two months. They began, the child said, by "a darkness," but there was no loss of consciousness until the end of the attack. She fell, and was much convulsed, but did not bite her tongue nor foam at the mouth. It was followed by sleep and headache.

She had a good appetite, but suffered pain in the epigastric region. Her bowels were constipated, but worms had never been noticed; there was no albumen in the urine. Santonine was given in the same way as in the other case.

On August 4, she was brought again. She had not passed any worms, and had had one fit, which, however, differed from the other, being, apparently, hysterical in character. Quinine, with valerian, was now given, and, on the 17th, another dose of santonine, with castor-oil. Having, after this dose, passed a small piece of tape-worm, she was ordered, on the 25th, a draught, consisting of half a drachm of the ethereal oil of male fern, two drachms of turpentine, and two drachms of castor-oil. This expelled a long tape-worm. She had no more worms or fits as long as she was under observation,—viz., to September 11.

HOSPITAL FOR THE EPILEPTIC AND PARALYSED.

CONVULSIVE SPASMS OF THE RIGHT HAND AND ARM PRECEDING EPILEPTIC SEIZURES.

(Case under the care of Dr. HUGHLINGS JACKSON.)

The following case is of interest as showing how slight may be the first symptom of a very serious case. If a patient were to consult us for symptoms so trifling as this patient had at first, even if we, as Medical men, suspected its very serious nature, as a part, so to speak, of an epileptic paroxysm, we should have difficulty in persuading the patient to agree with us. In very many cases of epilepsy, and especially in syphilitic epilepsy, the convulsions are limited to one side of the body; and, as autopsies of patients who have died after syphilitic epilepsy appear to show, the cause is obvious organic disease on the side of the brain, opposite to the side of the body convulsed, frequently on the surface of the hemisphere. Yet in this case the patient had good general health, and there was no evidence of syphilis. It has a general resemblance to the next case, in which there was a more definite history. Probably in few cases does syphilis produce nervous disorders by general impairment of the nutrition of nervous tissue, but rather by some obvious lesion, as deposit in the membranes on the surface of the brain, or in the brain itself.

The fact, that there is often an aura in these cases, is not contradictory to the idea that there may be organic disease, as an aura from a limb is present in epilepsy from tumour of the brain; and again, when there is obvious lesion, as in injury to the spinal cord in artificially-produced epilepsy in animals. It is not supposed that this organic disease produces epilepsy directly, but rather that it is some change of nutrition secondary to it, possibly in the medulla oblongata.

Seth W., a carpenter, 33 years of age, was admitted under the care of Dr. Hughlings Jackson, November 10, 1862.

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When sixteen or seventeen years of age, a chisel thrown at him struck him on the sacrum. He was ill with pain and weakness in the back for three weeks, and then felt no more of it. Eight or nine years later, at the age of 25, he had one day a feeling of pins and needles in the index finger of the left hand, and the finger "worked." Very naturally, he took no notice of it. It soon passed off, but came on again now and then. Soon it affected the whole hand, and gradually the arm as well, and at length the face on the same side. He has since had about one of these attacks every three or four weeks, but only five or six times has he become insensible. The first time was six months after the cramp in the hand. The fits in which he is insensible are always preceded by the symptoms above described, and it is clear that they will last for some time before he becomes insensible—on one occasion for half-an-hour.

He says that all the fingers of the left hand shake, and are gradually drawn into a sort of cone. Next the arm is drawn, and then the face, and "if it gets worse it causes a pain like tearing the sinews." Still to use his own words, "if the pain gets so that he cannot bear it," he falls insensible, and is convulsed, and in this condition he used always to bite his tongue on the left side; recently he has prevented this by putting a piece of wood in his mouth.

Sometimes he will have these cramps in the hand, arm, and face for two hours. It will "fly from the face to the arm, and then back again."

This patient is a clear-headed, intelligent man, but he says that his memory has failed "terribly" lately; yet he is able to attend to his business as well as ever.

METROPOLITAN FREE HOSPITAL.

SYPHILIS, FOLLOWED BY UNILATERAL CONVULSIONS FOUR MONTHS AFTERWARDS—TEMPORARY HEMIPLEGIA—PARALYSIS OF THE SIXTH NERVE ON THE SAME SIDE—RECOVERY.

(Under the care of Dr. HUGHLINGS JACKSON.)

BENJAMIN P., aged 32, was admitted an out-patient, under the care of Dr. Hughlings Jackson, on April 11, 1862. Eight months before he had a chancre, for which he was treated for nine or ten weeks; he then got well. Eight or nine years ago he had some kind of venereal disease. He says it was only a running, but it was followed by sore throat. He had, on admission, a suspicious-looking rash, which had come out recently.

He came on account of fits, the first of which occurred four months before. It began one day, whilst he was walking in the street, by a trembling in the right leg, which gradually extended to the arm, then, to use his words, "to the jaw and the sight as well." Probably, the confusion of sight was due to a spasm of the external rectus on the same side, as it was afterwards more permanently affected—the spasm passed into paralysis. He next fell insensible, and was convulsed, his mother said, on the right side only. He never bit his tongue. He had had eight or nine altogether, all preceded by an aura from the arm or leg. After each of the fits he felt weak, but was only paralysed after the last, which was a month before admission. He was, he said, in the fit for five hours, and for fourteen days he lost the use of the right side of his body, and, since, his sight had not been so good.

He came to the Hospital on account of pain chiefly in the right side of the head and face, not distinctly localised to any nerve trunks. It was worse at night. There was no pain at the vertex; no tenderness. He had a good deal of giddiness, and attacks of *petit-mal*, in which he would fall. At nights he slept badly. The right external rectus was paralysed, and it was to this, and not to the retina or cerebral part of the sense, that the defect in sight was due, as it was found that he could read small print easily, and see well in the distance with each eye. There was no difference of sensation on the two sides of the face. There was no notable paralysis of the limbs, but he thought the right arm and leg were weaker than the left, and at a future visit he said that the right leg "felt dead."

He was ordered fifteen grains of iodide of potassium three times a-day. He attended until September 5. The paralysis of the sixth nerve was quite gone, and he then felt well in every respect. The future progress of a case like this is very doubtful; probably he will have, if not epilepsy, further cerebral symptoms.

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Medical Times and Gazette.

SATURDAY, JANUARY 31.

THE FEVER PANIC.

AMONG the many fearful results of the want of food, fever holds a most conspicuous place. Death from actual starvation is rare, even in the poorest and the most destitute localities, but the train of diseases induced by deficient nourishment sweeps off a multitude of victims, who are thus mercifully spared the lingering pains of a gradual extinction of the vital powers. The poison of typhus, whatever may be its nature or essence, appears to be generated from the bodies of the dead or the dying, or from the exhalations of persons crowded together in unhealthy and ill-ventilated localities, and this poison, which is even noxious to the human system in a healthy and well-nourished condition, is especially malignant to those whose vital energies are depressed by poverty, mental anxiety, want, or dissipation. Under such circumstances, the blood, exhausted of its solid constituents, and wasted by the excess of excretion over repair, readily absorbs the poisonous miasmata floating in the surrounding atmosphere, or exhaling from infected sources, and thus typhus is communicated to an indefinite extent, and assumes a contagious or epidemic character. In proportion as a community becomes prosperous, cleanly, and sober, does typhus disappear, and under the opposite conditions it decimates the population it attacks. The fearful epidemic of this disease in Ireland at the time of the potato famine, and the more recent experience obtained from the military annals of the allied armies in the Crimean war, have tended clearly to point out both the sources of the malady, and the best measures to be adopted for its prevention.

Such being the causes of typhus fever, it might naturally have been expected that the appalling destitution which has visited many of the manufacturing districts of this country, would be accompanied or followed by an outbreak of this formidable epidemic, and too much praise cannot be bestowed upon the Government, for instituting inquiries upon the subject, and appointing a Medical Commissioner to visit the distressed districts, and to report upon the sanitary condition of the inhabitants. For this service Dr. Buchanan has been appointed, and a better choice could hardly have been made, for he is, from long experience, thoroughly well acquainted with the phenomena of fever, and is, besides, a zealous and energetic Physician. He has, accordingly, visited the localities where the distress was most urgent; he has instituted inquiries upon all matters connected with public hygiene; and he has presented a report, which has obtained the prominent notice which it merited, by the importance of the subject itself, and by the abilities and good faith of the reporter.

In a leading article in the *Times* of the 3rd inst., the writer endorses the facts and reasonings presented in Dr. Buchanan's

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report, and very properly and humanely urges upon the benevolent to continue their contributions to the Lancashire Distress Fund, on the plea that the relief afforded is not yet sufficient to procure an adequate supply of food to the starving operatives for such a lengthened period as to secure them from an epidemic visitation of typhus. It is alleged in Dr. Buchanan's report, that this fever has broken out among the population of Lancashire for the first time since 1847, when it was nearly as fatal in that county as in Ireland during the famine. In Preston and Manchester, typhus, which appeared only in isolated cases during the summer, is said to have increased in the autumn, and to have assumed the epidemic form in the winter. Dr. Buchanan also states that in twelve of the chief manufacturing towns, including Manchester, Preston, Stockport, and Bolton, he has noticed among the cotton workers an evident loss of strength, colour, and flesh, and that these external signs indicate a readiness to sink under the first attack of disease. In fact, he leads us to suppose that a fatal epidemic of typhus is now raging in the manufacturing districts, and that those who have not yet taken the disease may very soon do so, unless speedy and energetic steps are taken to obviate the calamity.

Without having the least desire to arrest the current of public benevolence to our distressed fellow-creatures in Lancashire, and without the slightest wish to impugn the good faith and accuracy of Dr. Buchanan, we venture to ask the questions, whether this zealous and accomplished Physician has not, perhaps unconsciously, somewhat exaggerated the facts laid before him, whether the testimony of other independent observers entirely corroborates his own, and whether, indeed, his own statistics wholly bear out the views which he advances? In adopting our present line of argument, we conceive that we are allaying a rather unnecessary apprehension in the public mind by showing that the distress in the cotton districts has not yet produced such disastrous consequences as might have been feared, and that the contributions already made have served not only to sustain life, but to ward off the attacks of epidemic disease. What the future may have in store for the people of Lancashire it is not for us to tell, but we must deal with the facts at present before us.

In a letter printed in the *Times* of the 23rd inst., and signed by the chairman and the honorary secretaries of that admirable Sanitary Association in Manchester, Dr. Buchanan's facts and figures are very temperately criticised. It is admitted that, between midsummer and November of last year, twenty fatal cases of typhus occurred in Manchester. "But," it is asked, "do twenty cases in a population of nearly half-a-million, scattered over five months, constitute an epidemic?"

It is also admitted that no epidemic of typhus has occurred in Manchester since the years 1847 and 1848, but it is stated that sporadic cases have never been altogether absent, nor is the latter circumstance remarkable, considering the number and density of the population of Manchester. The Sanitary Association regard Dr. Buchanan's cases as also sporadic in their character, for "how otherwise," it is asked, "can we explain the still heavier mortality from typhus, which we find specially referred to by the registrars as having taken place in the six months preceding midsummer?"

It is, then, shown that in the months of October, November and December, 1861, 187 deaths were registered in Manchester and Salford under the generic name of fever, of which number 17 were set down as typhus. In the first three months of 1862, there were 133 cases of fever, 23 being typhus, and in the next three months the numbers were respectively 89 and 10. By pursuing the same reasoning, founded on statistics, it is shown that, during the six months when the famine epidemic is said to have prevailed, it carried off only 23 victims, while, during the six preceding months, it sacrificed no less than 31. It also appears that the total mortality from all causes in Manchester and Salford during the first six months of 1862 was 5979, while during the last six months it was only 5409, so that the number of deaths was actually less during the alleged epidemic of typhus than it had previously been. In another letter, which appeared in the *Times* of Thursday last, the same writers state the pregnant fact, that during the last six months of the year 1861, 17 cases of typhus fever occurred in the fever wards of the Manchester Infirmary, whilst during the last six months of the year 1862 there were only 14 cases, or three less. In the course of each year, precisely the same number (eight) have died in the wards from the same variety of fever.

Those who have perused the interesting letters of our Liverpool correspondent will perceive that his results are in accordance with the views expressed by the Sanitary Association of Manchester. In one of his letters, written in May of last year, he states that he had begun to institute inquiries into the sanitary condition of the Lancashire operatives, in connexion with the distress which was beginning to prevail among them, and the conclusions at which he then arrived were in favour of the view, that no increase of disease had then accompanied the cotton famine. In another letter, written in September, he pursued the same course of investigation, and with the same general result; and, in order to arrive at greater accuracy, he communicated with gentlemen holding official appointments in public charities in seventeen districts, asking them to favour him with reports as to the condition of the poor, and especially as to any increase of fever or tubercular disease, or to any aggravation in the type of disease in consequence of want. The answers were almost universally to the same effect,—namely, that no perceptible increase of fever, or of any other disease, could be discovered, and, on the contrary, some of the districts were more healthy than usual.

In October, our correspondent reported that, although most of the other towns in Lancashire were in a healthy condition, yet that Liverpool had seriously retrograded in that respect, typhus and typhoid fevers being both unusually prevalent. But it must be recollected, that Liverpool is not, strictly speaking, a manufacturing town, and is not, therefore, subjected to the same depressing circumstances as most of the other large centres of industry. In January, he resumed his investigations into the sanitary condition of several large towns, including Manchester, Stockport, Wigan, Warrington, Bolton, and Rochdale, and, while finding that the deficiency of employment was producing a great amount of suffering, he did not ascertain that there was any appreciable increase of epidemic fever. We cannot too highly commend the industry and impartiality of our correspondent, whose testimony, as an independent observer, is of the highest value.

We are compelled to believe, therefore, that the distress in the manufacturing districts has not been hitherto attended with such disastrous results, in a sanitary point of view, as might have been feared, and as, indeed, judging from previous visitations of famine and distress, might have been reasonably anticipated. Why we should experience so agreeable a disappointment is an interesting question for the politician and the philanthropist, no less than for the physiologist and the sanitarian. As we have just remarked, it would be presumptuous in us to declare that fever, in its worst forms, will not follow in the wake of famine; all we assert is, that at present it has not done so. This gratifying result may be due to several causes, among which may be enumerated the benevolent efforts which have already been made to alleviate the existing distress, and which, though perhaps falling short of accomplishing all that might be desired, have nevertheless had the effect of saving a vast amount of human life, and preserving a moderate degree of health. To this may be added the increased sobriety of the operatives, from their inability to procure the means of obtaining drink; their release from the confinement entailed by their employment, and their conse-

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quently greater exercise in the open air; and the greater care bestowed by the mothers upon their children, consequent upon the women having no labour to perform.

As to the amount of food absolutely required to sustain life and to preserve health, the question is an important one, but is too wide in its scope to enable us at present to discuss it. But it is manifest, as the result of experience, that different qualities of food are necessary for different persons, not only under differing hygienic conditions, but under different employments. The forthcoming papers of Professor Haughton will show this in figures. The agricultural labourer would seem to require less food than the weaver, and the man who works with his hands less than he who works with his brains. It may possibly be argued that the Lancashire operatives, being out of work and taking exercise in the open air, may be adequately sustained upon a smaller amount of nourishment than would suffice for them if they resumed their usual occupations. Common observation in the agricultural districts proves that the labourer in the field is sustained, and apparently adequately sustained, upon an amount of food, the scantiness of which would astonish a weaver or a miner. A letter written by "One who has Followed the Plough," and printed in the *Times* of January 27, alleges that the writer, when a boy, actually subsisted on *two shillings a-week*, almost his whole food being bread, meat and beer being totally unknown to him; his only taste of animal food being a small weekly taste of bacon!

These matters are all pregnant with interest, and they deserve and will receive attention at our hands.

THE WEEK.

THE "PHYSIQUE" OF CANDIDATES FOR EMPLOYMENT ON RAILWAYS.

The Report of the Medical Officers of the Great Western and its Associated Railways' Provident Society for 1862, contains information of general interest as to the physical condition of candidates presenting themselves for railway employment. Of 530 candidates 201 were rejected. The rejected and passed being ranged under their respective counties, although the numbers are too small and too unequally distributed as regards the counties, to allow much weight to inferences drawn from them, it yet appears that a greater proportion of rejections occur amongst candidates from counties containing large seats of manufacturing industry, than from the purely agricultural; and again, that, classifying the candidates according to their previous occupations, nearly one-half of general labourers and porters are rejected, whilst about four-fifths of the agricultural labourers and gardeners pass. So far, then, the evidence is in favour of the superior *physique* of the tiller of the soil. The chief causes of rejection were small and malformed chest (in 92 cases), disease of lungs and heart, hereditary phthisis and scrofula, and near-sight. The number rejected—38 per cent.—is about the same as amongst army recruits, if allowance be made for special causes of rejection of soldiers, such, for instance, as loss of front teeth, which, although it unfits for biting cartridges, does not incapacitate for the railway. One class of imperfection, however, affects the railway *employé* peculiarly; it is near-sight. Twelve rejections occur under this head. The pecuniary loss of the companies, on account of mis-sent packages, is far too large to permit any laxity here; and the danger of employing near-sighted persons as switchmen or policemen is obvious. It has been surmised that railway accidents have arisen, in some instances, from signalmen being affected with colour-blindness. Nothing like an approach to it was found in the 530 candidates examined; and, from the rarity of the defect, it is highly improbable that such a notion has hitherto had any foundation in fact.

NICOTINE IN TRAUMATIC TETANUS.

We are sure our readers will not accuse us of any leaning towards Hahnemannism when we assert that the doctrine of specifics is looking up. When we were a student, five-and-twenty years ago, we were taught by our excellent Professor of Therapeutics that there were but two remedies at all worthy of the name, to wit, quinine for ague, and mercury for syphilis. If new researches, such as those of Dr. Boeck, should lead us to discard the latter, the value of quinine in ague remains still undisputed. And are we not on the road to the discovery of others? The path we are following is that which has led to the discovery of undoubted counter-poisons. It is true, we may as yet count all these upon our fingers, but science is progressive, and we must hope and work. What if our first steps are empirical? they are not always so. At the recent meeting of the Surgical Society of Ireland, Mr. Tufnell brought forward a case of "Traumatic Tetanus, following upon Compound Fracture of the Forearm, which was Successfully Treated by Nicotine," the introduction of which into recognised practice is due to the Rev. Professor Haughton. The cases in which this line of treatment has proved successful in the hands of Professor Haughton have already been referred to in this Journal. In the present instance the nicotine used had been prepared under the direction of Professor Haughton, the strength of a single drop being equivalent to 23·3 grains of Virginian Cavendish tobacco. The case was a severe one. The first symptoms of tetanus appeared on March 12th. The nicotine was first administered on the 16th. The first dose of one drop induced remarkable perspiration, and an immediate relaxation of the spasms. This amendment being transient, it was repeated every two hours, and the dose was increased to two drops. After two days, the patient becoming ungovernable and scarcely able to swallow, two drops were injected into the rectum, and again the spasms relaxed, and, though delirium set in, the man had acquired full voluntary power over the muscles of the arms and legs. This practice was continued for three days longer, and on the 22nd the fifty-sixth drop and last dose was administered, the countenance being placid, and no spasm having occurred for some hours. After the 31st his recovery was progressive; other remedies were used in the course of the treatment; nourishment, some fomentations of decoction of tobacco over the abdomen, purgative enemata, chloroform, etc. Idiopathic tetanus has proved amenable to a variety of remedies, but they have failed wofully in the traumatic form. The best acknowledgments of the Profession are due to the acute and courageous reverend Professor Haughton. He has shown nicotine to be a manageable remedy; let us, then, in future, take heed to the maxim—"*Principiis obsta.*" No one need now be alarmed at its well-recognised activity.

POISONING BY MILK.

A number of persons occupying two of the principal hotels at Valletta, Malta, were seized, on the morning of the 17th inst., with symptoms of irritant poisoning. The *Malta Times* states that—

"All the sufferers were seized within twenty minutes to two or three hours after breakfast; and as the only article of diet common to all was milk, and as on other occasions of similar seizure the cause was clearly traced to that article, it is reasonable to infer that in the present instance the milk used for breakfast contained the poisonous ingredient. This conclusion becomes almost a certainty when it is known that several persons, living in the same hotels, who had not taken milk that day, escaped, while, without one exception, those who had taken it were seized with the alarming illness described. Several families in Valletta, it is said, were attacked in like manner the same morning, after partaking of milk for breakfast; even a cat, which had taken some, showed the same symptoms of having been poisoned. Towards the end of last year a number of exactly similar cases happened

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at Sliema, where the whole family of a field officer, with one exception, was poisoned, evidently by goat's milk; and about the same time other cases occurred among the officers and men of her Majesty's ships *Marlborough*, *Algiers*, and *Firebrand*, but with no fatal consequences. We have also heard of other cases occurring from time to time. Poisoning by milk, therefore, appears to be not an uncommon occurrence in Malta; but we are not aware if experiments were ever made by scientific men to ascertain beyond doubt the real cause of the milk assuming this dangerous character. The natives attribute it to the goats browsing on a particular plant belonging to the natural family *Euphorbiaceæ*, or spurge-worts, which they call *tenhuta*, and which, they say, possesses the property of rendering the milk poisonous to human beings, without inflicting any serious injury on the animal itself. On the other hand we have heard this popular belief ridiculed by some of the more learned Maltese Physicians, although we must confess we never could perceive upon what grounds. We are glad to learn that his Excellency the Governor has ordered a searching inquiry into the matter, and we hope the result will be the adoption of means, if possible, to prevent such serious endangering of life by a common article of daily food for the future."

It is well known that the *latex* of most of the plants belonging to the order *Euphorbiaceæ* has acrid and purgative properties; and it has also been observed that in certain districts of America the milk and flesh of cows have been rendered poisonous by particular pastures, without the health of the animals being affected. Like instances of numbers of people being poisoned by milk have been noted in various parts of the continent; amongst others, at Aurillac, in France, and at Hereford, in Westphalia. The latter cases have been long popularly attributed to the cattle having fed on the *Euphorbia esula*. Such a notion has, nevertheless, been negatived by continental toxicologists, on the ground that cattle refuse the *Euphorbia* as long as grass and other wholesome vegetables occur in their pasturage; yet this may be only the cause why such accidents do not occur more frequently. It is a mistaken idea that the instinct of ruminants in the choice of herbage always leads them to refuse poisonous plants. Oxen will eat the berries and leaves of the yew, and frequently die in consequence, either from the immediate effects of the poison on the nervous system, or subsequently from inflammation of the alimentary canal.

THE CHARGE OF PERJURY AGAINST A SURGEON AT MANCHESTER.

We have received from a correspondent, at Manchester, the following account of the Medical facts of the painful case which has, during the past week, attracted general attention. As the defendant is to appear before a higher tribunal, on a charge of perjury, we shall for the present reserve any comment:—

"At midnight on January 5, Mrs. Mary Ann Bell, from Bassenthwaite, in Cumberland, arrived, by appointment, at the Cathedral Hotel, Manchester, to consult Mr. Evan Thomas, a Surgeon of considerable repute. On the following morning, Mr. Thomas called to see her, and was conducted to her room. An examination of the patient was made directly, after which Mr. Thomas states that she was seized with an epileptic convulsion, and immediately expired. Mr. Thomas forthwith communicated the result to the borough coroner, by whose directions he made a post-mortem examination of the deceased, assisted by Mr. Braddon, a Professional friend; and on the evidence given by Mr. Thomas, before a coroner's jury, the latter returned a verdict of "Death from epilepsy." Nothing that afterwards occurred has shaken in the least the correctness of the verdict. A telegram, communicating the circumstances of the death, was sent by Mr. Thomas to Cockermouth, where it reached ultimately the hands of Mr. Musgrave, clerk to Mr. Waugh, the deceased's attorney. It appears, from the evidence, that there was at Cockermouth a gentleman who suspected that the deceased lady, who had been nine years a widow, had been to Manchester some time previously for the purpose of procuring abortion, and this circumstance immediately connected itself in his mind with the death of the deceased. Acting on this suggestion, Mr. Musgrave next day came to Manchester for the purpose of making inquiries. On his arrival, he called on Mr. Thomas, and heard from him the circumstances attendant upon the death of the deceased.

"On the following day, he went to see the coroner, and, in the afternoon, this functionary held a second examination, at which several witnesses gave evidence upon oath, and a second post mortem examination was ordered, conducted this time, however, by Mr. Heath, House-Surgeon to the Royal Infirmary. Mr. Braddon, who had assisted Mr. Thomas in the first post-mortem inquiry, was also examined. The evidence of these two gentlemen completely rebutted the idea of death having been caused by abortion, or of any attempt at the latter having been made, and was quite consistent with the verdict already returned. It, nevertheless, appeared that, either from Professional repugnance to expose the character of a patient, or from some other motive not yet explained, Mr. Thomas had been led to make in his evidence some important suppressions, and which resulted in his being placed before the magistrates on a charge of perjury. The previous unblemished character and Professional repute of the accused excited strongly the interest of the public, and the court-room was crowded.

"The charges of perjury founded on the statement made by Mr. Thomas before the coroner were,—first, that he had stated that there was a tumour in the womb, when there was no tumour; second, that the brain and membranes were congested, when the brain was not even examined; and third, that he had never seen the deceased before her arrival in Manchester, when it would be proved, by his own admission before the coroner on the second inquiry, that he had seen her previously.

"Mr. C. H. Braddon said: I am House-Surgeon at the Manchester Workhouse. On the 6th of January the defendant called upon me. He said he wished me to assist him in making a post-mortem examination. We went to the Cathedral Hotel. Mr. Thomas produced the key of deceased's bed-room, and opened the door. We proceeded with the examination. We examined the heart and lungs. The right side of the heart was full of dark blood, but otherwise healthy. The brain was not examined. I cut open the uterus, and found a fœtus and its membranes about five months old. The liver appeared healthy. There was no tumour in the womb, but there was a cystic tumour in one of the ovaries. It was not of much consequence.

"Cross-examined by Mr. Higgin: In making the post-mortem examination, I observed that the blood was liquid, and ran out freely. The cavity of the chest was filled with blood. I should think it probable that the filling of that cavity would relieve the brain of an overflow if there had been one. I examined the cervix uteri. I did not find the slightest symptom that anything like abortion had been attempted. There was nothing inconsistent with the notion that this lady had died of epilepsy. The deceased's pregnancy had nothing whatever to do with the cause of death. I think it quite impossible for death to have ensued so quickly if there had even been an attempt to procure abortion. The head was not opened, though Mr. Thomas asked me to open it. I replied that I thought it would be unnecessary, as he had seen the woman die, and probably nothing would be found there. It is possible that epilepsy might follow the use of a certain instrument with which the defendant told me he had made an examination.

"Mr. William Heath said: I have been for three years House-Surgeon to the Manchester Royal Infirmary. Upon a coroner's order, I made a post-mortem examination on the 9th instant on the body of Mrs. Bell. I found that a previous post-mortem examination had been made. The head had not been examined, nor had the kidneys. The other parts of the body had been examined at a previous post-mortem examination. The witness described his examination in detail, the effect of which was that all the organs were perfectly healthy.

"Cross-examined: Supposing the deceased had died from epilepsy, I should not have expected to find anything more than I did. There may be no abnormal appearances in a person dying from epilepsy. From the appearance of the body alone, I should not be able to predicate the cause of death. In such a case, it would be necessary, in order to ascertain the cause of death, to have the evidence of some person who was present at the death. I found very slight congestion of the brain or membranes. I did not find any indications that the first post-mortem had been performed otherwise than as I myself should have performed it.

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"The above is the Medical evidence bearing on the case.

"Mr. Higgin, barrister, who appeared for Mr. Thomas, said he had matters to submit which would take a very long time, as they were matters of law. As to the question of fact, at this stage of the case, he was bound, as they were all bound, by the statement of facts upon the part of the prosecution, because at that time he was not in a position to call any witnesses to controvert those facts; but, supposing them to be true, then grave questions of law arose, and he was quite sure that, speaking as he did before gentlemen of very vast experience, still, in such a case, they would ask themselves whether they were bound to decide questions of law. He knew well what their answer would be on such a subject. There was, again, another question which the bench would naturally ask,—whether there was the slightest prospect of any jury in the world convicting; if not, then what was the good of sending the man before a jury? On the other hand, if they thought it was a case deserving of further inquiry, then he would not make a speech. He believed he would be able to prove to the justices, and to any candid mind, that Mr. Thomas had been guilty of the suppression of the truth—that that was the whole extent of his guilt; and, to the mind of any man, Mr. Thomas's motives were deserving of the highest possible praise, and not of the censure which was attempted to be cast upon him. If the bench would tell him that, in their opinion, it was a case to be further inquired into, he was bound to be satisfied; but he was also bound, in justice to his client, to be silent.

"Mr. Ellison: We are of opinion that this is a case that ought to be further inquired into; and we, therefore, commit the defendant to take his trial.

"The bench admitted the defendant to bail."

NEW PAMPHLETS (a).

An able contribution to the literature of the pathology of the liver has appeared from the pen of Dr. F. N. Macnamara, of the Indian Medical Service, in the *Indian Annals*, and has since been circulated in a separate form. The chief point on which Dr. Macnamara insists is, that the form of liver abscess which most commonly accompanies dysentery, commences not with inflammation, but in the degeneration and death of the tissue; and he concurs in Dr. Budd's explanation of the common association of dysentery and hepatic abscess,—"That the portal blood becomes contaminated with morbid matter, and that this, arrested in the degenerated liver substance, commences the abscess, yet not always by setting up inflammation, but by destroying the nutrition of the part, and thus causing death." Before the formation of abscess, patches of degeneration show themselves—paler, and having a softer consistence than the surrounding parenchyma. In the next stage they have become larger—of the size of a walnut, and contain, in the centre, liquescent or completely fluid tissue, which, however, although puriform, may not present a single pus corpuscle on the most searching examination. Hitherto, there is no sign of inflammation, no congestion, no redness. In the next stage of the abscess, however, a halo of congestion is observed. Dr. Macnamara's observations will well repay the short time a perusal of his paper requires. An anonymous pamphlet on the "Evils Resulting from Rising too Early after Childbirth" is one of those semi-popular tracts which members of our Profession benevolently print, from time to time, for the benefit of a benighted public. It contains very good advice, and we would recommend the Ladies' Sanitary Association to distribute it freely amongst monthly nurses and mothers of the working class. Dr. Crisp's paper on the "Gall Bladder of the Vertebrata" is of great interest. The Hippocampus controversy having subsided, it is refreshing to learn that a new anatomical difference has been discovered between man and the "Yahoo" genera—*Pithecus* and *Troglodytes*. Dr. Crisp says that, in six anthropoid apes which he has examined (three ourangs and three chimpanzees), "the gall bladder was of a twisted, irregular shape—a fact of importance now that some zoologists are giving these brutes, as I believe, an undue elevation in the vertebrate scale." It has been asserted that the gall bladder is present in the hollow-horned ruminants, but absent in the *Camelidæ* and *Cervidæ*. Dr. Crisp has, however, found it present in the musk deer (*M. moschiferus*) and in two species of *Cervus*. In many of the *Antilopidæ* it is present—in many absent. Dr. J. M. O'Ferrall has reprinted, from the *Dublin Hospital Gazette* of February 15, 1845, an account of the removal of a large scrotal tumour. He adds, in a note, that the reprint was suggested by the adoption, without acknowledgment, of the principle on which his operation was conducted. The tumour, which measured from the pubis to the fundus, 28 inches, and in circumference about its middle, 22·5 inches, was a fibro-cellular growth, presenting on its surface none of the warty and tuberculated appearance which distinguishes elephantiasis scroti. It appeared to have its origin in the cellular tissue of the left spermatic cord. The cord on the left side was lost in the substance of the tumour, and the testicle was atrophied and buried in it. The penis was also enveloped in the tumour, just as in cases of elephantiasis. The right testicle could be felt about three inches below the corresponding ring; it glided up and down freely under the integuments, and was evidently healthy. Repeated and alarming hæmorrhage from an ulcer on the surface of the mass necessitated the operation. The mode of proceeding which Dr. O'Ferrall adopted, and on which he insists in commenting on the case, was to place the patient on his back, and to have the tumour poised for sufficient time to empty the vessels before operating. He thus lessened the chance of enormous hæmorrhage, an accident which proved fatal in the case of Hoo Loo, a Chinese operated on in London in 1831, and also very nearly killed Liston's patient. In the operation the patient was placed in the lithotomy posture, and two straight incisions were made in the perineum, at an angle salient towards the anus. These were then carried round the under and lateral surfaces of the tumour. The tumour was then allowed to descend to a nearly horizontal position, and the operation was completed in front by two straight incisions carried downwards from the groins, and meeting at an angle, so as to include a portion of integument capable of covering the urethra, and fitting into the incisions previously made below. Two short incisions connected the limbs of the two angles previously made. The tumour was then detached by a few strokes of the knife. The right testicle and penis were left uninjured, and, after getting through an attack of erysipelas, the man ultimately recovered. From the report of the Cranley Village Hospital, and the statement of its Medical Officer, it appears that uninterrupted success has attended the experiment. Of the thirty patients admitted during the year, several required operations, and many were cases which could not be adequately treated at their own homes. The statistics of the Hospital show but one death (from consumption). Amongst the Surgical cases was one of amputation of the thigh. We quote one sentence from Mr. Napper's statement. "The modest plan on which this little Hospital is conducted, may be gathered from the balance-sheet, made up to October, 1861, by which it appears that the whole expenses of the year were only £140 9s. 7d., whilst the receipts were £177 7s. 11d., a state of things which many of our larger Hospitals might envy." Mr. John A. Blake has done good service by calling attention to a deficiency in the treatment of the insane in the Irish public asylums. From evidence given before a Royal Commission in 1856, it appears that there has been a great want of system and appliances to

(a) "On the Pathology of Hepatic Abscess." By F. N. Macnamara, M.D., Assistant-Surgeon H.M.S.

"On the Evils Resulting from Rising too Early after Childbirth." By Obstetricus. London: J. W. Davies. 1862.

"On the Situation, Form, and Capacity of the Gall-bladder in the Vertebrata; on its Absence in Certain Animals; and on the Colour of the Bile." By E. Crisp, M.D. From the "Proceedings of the Zoological Society."

"Large Scrotal Tumour: New Plan of Operation for Large Tumours." By J. M. O'Ferrall, M.D. Dublin: printed by J. M. O'Toole and Son.

"Third Annual Report of the Cranley Village Hospital."

"Statement of the Medical Officer of the Cranley Village Hospital."

"Defects in the Moral Treatment of Insanity in the Public Lunatic Asylums of Ireland." By John A. Blake, M.P. London: Churchill and Sons. Dublin: Fowler.

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supply suitable occupation and amusements for the patients. Mr. Blake, from personal inspection of nearly a dozen asylums, finds that the state of things continues much the same as at the period of the report of the Commissioners. The chief instance of improvement has been at Belfast, where a musical band, drill, and regular walks in the country have been introduced. Generally speaking, the Irish asylums contrast unfavourably with the English in their prison aspect—their leading features being safeguards against escape. The exercise yards are surrounded by high walls, and the patient has nothing to look at but the gravel beneath his feet, the sky overhead, and dead wall or grated windows. The female patients are entirely idle; and of the male, a small proportion may be employed in field work, or in one or two trades, such as shoe-making and tailoring, but for by far the larger proportion there is nothing to interrupt the tedium of confinement or to break the thread of distraught fancy. Mr. Blake confirms Dr. Conolly's observation, that Irish patients, as a rule, improve more speedily than English. At Hanwell, Dr. Conolly observed that the form of insanity amongst the Irish was frequently pure excitement, rapidly allayed by quiet, temperance, and an orderly regimen. Mr. Blake's essay commences with a very well compiled review of the history of improvement in the treatment of the insane. We extract from one of his notes the process adopted as the best curative method by the great Chancellor, Sir Thomas More:—"Another was one who, after he had fallen into these frantic heresies, soon fell into plain frenzy—albeit, he had been in Bedlam, and afterwards, by beating and correction, gathered his remembrance. Being, therefore, set at liberty, his old frenzies fell again into his head. Being informed of his relapse, I caused him to be taken by the constables, and bounden to a tree in the street before the whole town (Chelsea), and there striped him till he waxed weary. Verily, God be thanked, I hear no more of him now."

FOREIGN AND PROVINCIAL CORRESPONDENCE.

ITALY.

LEGHORN, January 6.

ON LEGHORN AND VIAREGGIO AS HEALTH RESORTS.

It is curious to observe the changes which, from time to time, take place in the direction of the currents of tourists. At first sight, they seem as unaccountable as atmospheric or submarine currents; yet, if Buckle be correct in asserting that, although the individual may be a comparatively free agent, the actions of mankind in general are ruled by fixed and unalterable laws, we should be justified in searching after the causes of such phenomena. To ascribe them to the caprices of fashion would be moving in a vicious circle, fashion itself being left unexplained. The English health-and-pleasure-seeking public have for a long time been adhering to certain traditional rules, and which have become almost venerable by age, in mapping out their continental routes, and in choosing their winter quarters. A considerable amount of prejudices and fallacies has thereby been engendered, and the initiative of some original and inquiring mind would be necessary for inducing people to revise their judgment on these and similar questions. Although this need not, necessarily, lead to a thorough change of fashion and habits, it might save many of the poor erratic strangers great disappointment, by preparing their minds for a juster appreciation of both the advantages and drawbacks which await them in their temporary homes. But nowhere do we meet with such difficulties as if we attempt discussing the nature and action of climatic health-resorts. On the part of the observer himself, there is the tendency to generalisation and to dogmatism, while the public have an unreasonable craving for so-called "positive" information, which frustrates all efforts to approach the truth. A silly sight-seer, who catches a cold in a picture-gallery, and leaves Italy, disgusted with her climate, often becomes a missionary of error. Nor do the statements of Medical men deserve much credit, as long as they allow their judgment to be overruled by partiality or interest. Moreover, to stem or divert the fashionable currents of strangers, it would be necessary to bring the weight of a celebrated name to bear upon their *vis inertiæ*. If they change their course, nevertheless, it is scarcely ever by the force of reasoning, but rather by that of circumstances and necessities. The political condition of Naples, for instance, and the various more or less well-founded apprehensions thereby created in the minds of the less adventurous part of the public, have effected greater changes in this respect than any scientific treatise on climate could have done. Thus, in 1860, it became a necessity to seek for a safer, but equally pleasant, climatic health-resort, as a substitute for Naples, and such a one was easily found in the now fashionable villages and towns of the Riviera. Dr. Lee's pamphlet drew particular attention to Mentone; and even Nervi, which has, as yet, hardly one inhabitable house to boast of, is now on every tourist's lips; while Sorento is almost forgotten, and even Ischia, with its inestimable mineral springs and natural baths, unduly lost sight of.

Leghorn and Viareggio have had their share in this redistribution of public favours; and we shall endeavour to show that both are not quite unworthy of the boon which was so unexpectedly conferred upon them. This year, however, Nice and Rome have carried off the palm. They are fuller than ever—Nice, in spite of its annexation; Rome, in spite of its non-annexation. And, if we consider that even invalids cannot live on climate alone, but that they require some social or artistic pleasures, we can only congratulate the public on the present state of its predilections. After these two queens of fashion, places like Leghorn and Viareggio can only be mentioned with modesty and reserve. They are, however, both blessed with an excellent winter climate. Leghorn has all the resources proper to a commercial town, *plus* those of a sea-port, neither more nor less. Viareggio has none of these; but it has what neither Naples, nor Ischia, nor Palermo, neither Nice nor Mentone, have, viz., a magnificent sandy beach. I doubt whether, with the exception of Ravenna, another beach of this kind is to be found in Italy. It extends for about ten miles on either side of the town, and the surf, as may be imagined, is magnificent. In addressing Professional readers, it is unnecessary to dwell on the advantages of such a bathing-place. Siliceous sand is a bad radiator of heat; and the sandy seam of this coast being very broad, it is sufficient to influence the local climate of the place by lessening the dew, which, even in midsummer, renders the Italian nights so chilly. The long pine plantation, which extends many miles parallel to the coast of Viareggio, shelters the place against the land winds; while the Carrara mountains, in its rear, impart uncommon beauty to the scenery. Between these and the pine forest, there are some rice-fields, which, in former times, compromised the salubrity of the neighbourhood. But an improved system of drainage and irrigation seems to have rendered them perfectly harmless. A gentleman, who had for years been suffering from malaria, and who could hardly be prevailed upon to make a trip to Viareggio, has now been residing there for the last eighteen months with perfect impunity, and even with advantage to his general health. Since the opening of the railway, the number of season visitors, but especially of stationary residents, has been steadily increasing. Some good hotels and one or two English boarding-houses, besides a number of private lodging-houses, offer sufficient accommodation. Nevertheless, it should be borne in mind that, however beautiful its scenery and its beach, Viareggio is an intensely dull place; and if it deserves a word of praise, it is merely because it has something which cannot possibly be found anywhere else in Italy. For scrofulous children I know of no better place either in or out of Italy; and the Italian Government seem to have been fully alive to this advantage, when they chose Viareggio as the best place for the erection of a so-called *Ospizio marino*, or Hospital for children affected with glandular diseases.

Leghorn, although not more than twenty-four miles distant from Viareggio, differs considerably from the latter both topographically and as regards the climate. Its beach is rocky, and it is much further from the mountain-screen which encircles Viareggio. Hence it has more hygroscopic moisture in the night, and is more exposed to blasts. It has the valuable although negative virtue of being perfectly healthy, and free from all evil genii epidemici. Even small-pox is scarcely ever met with. It

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has a more genuine and unsophisticated maritime climate than most seaports, it being situate on a convex coast which bulges out considerably: while at Spezzia, for instance, the sea-air is carried to the shores by one wind only, viz., the scirrocco, it is wafted into Leghorn from nearly two-thirds of the compass. It is owing to this ventilation that, notwithstanding the scarcity of shade, one suffers less from midsummer heat at Leghorn than in many apparently cooler places. The bathing is somewhat irksome on account of the rocky nature of the ground. The town is handsomely built; the architecture of the houses and the pavements betray the wealth of the inhabitants, and it is not necessary to search beyond its walls for villas, gardens, and rural seclusion. Although perfectly uninteresting to the sight-seer, it rarely fails to fascinate the comfort-loving stranger, who, moreover, finds there a nucleus of stationary English residents. Some years ago a form of typhus fever broke out in some streets lining the coast, and enjoying, hygienically, the best possible position; but the cause of the mischief, viz., the blocking up of one of the sewers which run into the sea, was soon removed. The drinking water, which reaches Leghorn by means of a subterranean aqueduct, comes from the hills of Montenero, and is very good and wholesome. Something more ought to be done for a certain mineral spring, called the Puzzolente, and situate in a charming solitude about four miles from Leghorn. Its waters are strongly hydrothionic, and enjoy a good, although only local reputation. Some years ago an omnibus plied between the centre of the town and this place, and I am in hopes that the communication will soon be re-established. At present, there is nothing on the spot but the Naiads' own temple sheltering the spring, another small house, and an unenclosed natural garden of bushes, groves, and meadows, fenced in by some distant hills.

GRADUATION WEEK AT ST. ANDREWS, FROM ANOTHER POINT OF VIEW.

By a Second who was There.

Early on the morning of December 25, I left England for St. Andrews, to undergo the ordeal for the M.D. degree of the ancient and, in more respects than one, "renowned" University of that place, merely, I may confess at once, because I could not gain admission to examination for the degree at any other British university. On the evening of the same day, the train, conveying myself and a hecatomb of candidates, deposited us at a terminus situated in the midst of a desert in a small way. I saw, on peering from this terminus, two "busses" in waiting for the purpose of conveying candidates to the chief inns of the town—no cab or hansom to gratify the partiality of a very ordinary swell—no porters to rudely snatch your portmanteau, and ask which place you propose to patronise—but, to repeat, two busses, in all the stern reality of country busses. These vehicles were soon filled inside, and I, together with my companion, scrambled by the wheels to the top of one, which was, in a very short space of time, fully occupied. The driver dilated on the subjects of examination, the wished-for number of candidates, the state of affairs at his master's hotel, and so forth; and, after a ride of ten minutes through the so-called desert, we were put down in South-street, opposite the chief hotel of St. Andrews.

My friend and I found, on inquiry for quiet lodgings, that the beadle of the university, who combines with his duty that of bookseller and stationer, was the man to whom candidates would do well to apply. We went across to the beadle's. That beadle, melancholic and uncommanding as he seems to be, possesses a reputation in St. Andrews worthy of a celebrity! If you wish to know privately what kind of examination you are likely to have, go to him. If you desire to know how you have got on in your *written*, go to him. If you are anxious to know that you have been "spun," he is the man to tell you; and if, again, you want quiet lodgings, he can secure them for you. Well, we went across to this beadle's, and were recommended by him to rooms which, at an exorbitant price, satisfied us. We were no sooner ensconced in the apartments, than our landlady informed us, that all the gentlemen—charity knows how many—who had ever lived in her house had passed, excepting one, who appeared a second time, and departed again defeated.

On the following morning, December 26, I went to the Town Hall for the written examination a number of candidates having been posted thither, another number to the United College, and another to the University Library. The questions were, to say the least, difficult, and the time for answering them extremely limited. It became evident to me, that the examiners were determined to fathom the knowledge of each candidate in Latin, Chemistry, Materia Medica, Anatomy, and Physiology. On the following day, papers were given on Practice of Medicine, Surgery, and Midwifery, and, as on the preceding day, the time for returning answers was extremely limited.

I cannot pretend to say how gentlemen were supervised at the University Library, or at the United College, or even at the fore part of the room at the Town Hall, for I occupied a seat on a bench in the rear; but I must say that candidates who sat near me were pretty much at liberty to act as reason dictated to them, and, judging from the approximation of heads in different directions, an observer would naturally come to the conclusion, that nature had recommended a muffled and constant use of the vocal chords.

Well, thought I, after the *written*, the University of St. Andrews will rise very considerably in public estimation. The *viva voce* will pull down those who have gained information in the room by tasting, very superficially, of the Pierian spring. Altogether I began to entertain a very favourable opinion of my future *alma mater*.

I ascertained from the beadle that batches were to be examined, *viva voce*, hour by hour, until the day of capping. During the three days which elapsed before my turn came, what was my astonishment to find that the ancient university had provided a cap to make men Doctors of Medicine who had never attended a regular course of lectures on the principles and practice of Physic—that students of two years had been admitted to the degree for which I had been at the trouble of wandering so far north—and, worse than worst of all, that one of the newly-fledged Doctors had been metamorphosed from the state of a druggist, and has, since his graduation, combined the business of a druggist with the Profession of which I have the high honour to be a member!

After my *viva voce*, which lasted about an hour, and embraced all the subjects of the written examination except Latin, I was at a loss to know how the men to whom I have so particularly alluded could have passed through the trial. I could not consider it possible that a man who had never attended lectures on the subject could have satisfied Dr. Craigie on Practice of Medicine; nor could I see how students who had not fulfilled the curriculum of study should have been admitted.

Nevertheless, the bare fact, that these men had passed, was before my face; and, when the cap which had donned the head of the retailer and dispenser of drugs had made me a *bonâ fide* Doctor, I felt regret that the University of St. Andrews, at a time when public estimation begins to rise in its favour, should have foolishly thrown away the chance of gaining a *status* equal to that of other universities.

GENERAL CORRESPONDENCE.

GRATUITOUS MEDICAL ADVICE TO INSURANCE COMPANIES.

Letter from Mr. Spencer Wells.

[To the Editor of the Medical Times and Gazette.]

Sir,—The enclosed correspondence appears to be worthy of the attention of your readers. The Liverpool and London Insurance Company has hit upon a new mode of asking for gratuitous Medical advice, which, I trust, will be received by the Profession as it deserves to be received.

I feel certain that if Medical men would always refuse a fee from a patient in such cases, and induce him not to insure in any office which refuses to pay for the advice it asks for, the gratuitous system would soon come to an end. A few fees more or less in a year may be of little or no consequence to many of us, but it may be of serious consequence to others; and it is worth while to take a little trouble for our poorer brethren, though we would not on our own account.

I am, &c.

T. Spencer Wells.

3, Upper Grosvenor-street, January 23.

It will be noticed that the following letter, though sent from

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the office, and directed to be returned to the secretary, is signed by the gentleman whose life is proposed for assurance :—

(No. 1.)

" Private Medical Report.

" January 17, 1863.

" Sir,—Application having been made to the directors of the Liverpool and London Fire and Life Insurance Company, to effect an assurance on my life, I have given them reference to you as my Medical attendant usually and of late, and as being fully competent to give satisfactory and complete information respecting my habits, conformation, and general health; and I have to request the favour of your transmitting to them, at your earliest convenience, answers to the several queries annexed hereto.

" I need not remind you that the validity of the policy, if issued, will depend on the absence of reservation in your replies; and that communications of this nature are always received and regarded as strictly confidential. I shall, therefore, be obliged by your furnishing the directors with all the information necessary to enable them to decide on the proposal.

" Should your replies not be received by the company within a week from this date, I understand it will be assumed that you consider my life ineligible for the purpose of assurance.

" I am, sir, your obedient servant,

" T. C.,

" To Spencer Wells, Esq., " London.

" 3, Upper Grosvenor-street,

" London, W.

" To the Directors of the Liverpool and London Fire and Life " Insurance Company.

" Gentlemen,—In compliance with the request contained in the annexed letter, I beg to give you, in answer to the several queries at foot hereof, all the information I possess regarding the habits, conformation, and general health of Mr. T. C., by whom the letter is signed.

" I am, gentlemen,

" Your obedient servant,

" ——— "

[*Here follow fifteen questions in the usual form of Life Assurance offices.*]

No. 2 is a copy of the letter which I addressed to my patient :—

(No. 2.)

" January 22, 1863.

" Dear Mr. ——,—I received yesterday, from the Liverpool and London Insurance Company, a paper, called a 'private Medical report,' containing a printed form, which the company have induced you to sign, requesting me to give them a great deal of information respecting your 'habits, conformation, and general health,' and informing me that this information is necessary to enable the directors to decide on the proposal of insurance.

" As a friend and patient, it would, of course, give me great pleasure to oblige you in any way, and it would give me far less trouble to fill up the paper sent to me than to write this letter; but there is a principle of great importance to the Medical Profession involved in this matter, which I will explain to you.

" Some years ago most insurance companies obliged all who made proposals of insurance to come provided with a Medical certificate, and also to submit to an examination by their own Medical officer. But, as the companies gained very large profits, other companies were started, and competition had the good effect of lowering the rates of annual payments, and of dividing the whole or part of the profits of the company among the assured. But the tables are still so calculated as not only to insure the company against loss, but to secure so large a profit that a very considerable sum is paid yearly by every office as a commission to agents and others who bring in business—in other words, who introduce persons wishing to insure their lives. It is clear that the profit or loss of any office must depend, in a great measure, upon a judicious selection of lives; and equally clear that the directors must be guided in their selection by the reports of their own Medical officers, and of the Medical attendants of the assured. Nearly all the oldest and most respectable offices have gradually been brought to acknowledge that they should pay for the information by which their acceptance or refusal of a risk is decided. A few still hold out, and argue that, as they pay their own Medical officer, the assurer should pay his; and this would be fair enough if the engagement were one of mutual obligation—if the assurer were as anxious to insure his life *in one particular company*, as the company is to obtain business. But when there are not only one or ten, but twenty or fifty thoroughly respectable, rich, well-established companies competing for business, and perfectly willing to pay a fair or moderate remuneration for the information they require, no assurer of ordinary intelligence would make his proposal to an office which obliged him either to incur expense, or to ask a favour of his Medical man, when he might go to equally good offices who impose no such condition, but are perfectly ready to pay for the information required.

" I know nothing whatever of the Liverpool and London company; but of all the shabby modes of evading payment for necessary information, and of obliging assurers to obtain this information, that adopted by this company is the shabbiest I ever heard of.

" You, as a lawyer, would very properly resist any attempt of any public company to cut off the proper emoluments of your Profession, and will feel that I, as a Medical man, by exposing the artifice of this Liverpool and London company, am only doing for my class what you would do for yours. I am quite ready to furnish you with the names of twenty companies who offer quite as many advantages to assurers as the 'Liverpool and London' can possibly do, and who are not driven to the expedient of begging for gratuitous Medical advice.

" Believe me to be, dear Mr. T.,

" Very truly yours,

" T. Spencer Wells."

No. 3 is the reply of my patient, who, although already insured in the "Liverpool and London," has made a proposal of insurance to one of the oldest companies in the kingdom, instead of increasing his insurance in the Liverpool company as he intended :

(No. 3.)

" Inner Temple, January 22.

" Dear Mr. Wells,—In reply to your letter of this morning, I enclose you a copy of one I have just written to the Secretary of the London and Liverpool Insurance Company, which runs as follows :—

" 'Dear Sir,—Since I was at your office in Liverpool the other day, I have seen Mr. Spencer Wells, my Medical attendant, and having learnt from him that the letter I signed there, and which was addressed to him, is such as to exonerate the London and Liverpool Insurance Company from paying the usual fee, and as he refuses to take any fee from me for his services in this matter, I must decline to insure my life again in your office on such terms, much preferring to insure in an office which properly remunerates Medical men for their advice. I am, sir, your obedient, etc.'

" Had I been aware before that what you have stated in your letter was the case, I should not have insured my life in the London and Liverpool Insurance Company, as I have already done; and I am very much obliged to you for the clear manner in which you have explained the matter.

" I am, yours truly, T. C."

THE RECENT APPOINTMENT OF CERTIFYING SURGEON AT OLDHAM.

[To the Editor of the Medical Times and Gazette.]

Sir,—I venture to address you on a subject which is, at present, engrossing the attention of the Medical Profession in this town, and which, I have reason to believe, is not indifferent to the general public.

You are, no doubt, aware that there are, in Lancashire, numerous Medical appointments in connexion with the staple manufacture, cotton, of considerable value, these being held for life, as under the Poor-law, or during the "good behaviour," as it is called, of the incumbent. They are Government offices, and in the gift of the Inspector of Factories for the district in which a vacancy occurs. Those who hold them are denominated "Certifying Surgeons to the Factories," because all children, under the age of 16, have to undergo Medical inspection before they can be employed as factory operatives. The direct pecuniary value of these appointments varies from

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£100 to £400 per annum, and, indirectly, as a means of introduction to much Surgical practice, considerably more. In the town of Oldham, there are two such appointments,—one, the largest in the country, I am told, is supposed to yield between £400 and £500 per annum; the other, from £250 to £300. It is with the latter I have to do.

You may naturally suppose that whenever a vacancy occurs there is much emulation amongst the Medical residents to gain the prize, especially as the duties pertaining to the position are by no means onerous, and perfectly compatible with the conduct of a large general practice. It has been customary for the Inspector, when called upon to discharge this public trust, to nominate some Medical gentleman of established reputation resident in the town, and possessing the confidence of the public. During the past week, the death of Mr. Earnshaw, one of the certifying Surgeons here, has placed at the disposal of Mr. Alexander Redgrave, the Inspector for the district, the appointment of a successor. Judge of the surprise of the Profession when it was announced that, ignoring age, reputation, and *status*, he had violated his trust by nominating a non-resident young gentleman, who has just completed his education, the son of a sub-inspector in a neighbouring district. Is it matter of surprise that all here view this proceeding as a deliberate insult and a gross piece of official jobbing? We are anxious to take such steps as may manifest this opinion, having in view either the annulling of this appointment, or the prevention in future, here and elsewhere, of a similar injustice. It has been determined, therefore, to call a meeting of the Profession in the course of a few days, and it would much aid their object to be fortified by the support of the Medical press. It is to the interest of all of us that nepotism should be strangled in its birth.

Oldham, January 27. I am, &c. BETA.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, JANUARY 6.

Dr. COPLAND, President, in the Chair.

MR. THOMAS SMITH showed, for Dr. Wilson, of Clay-cross, the

SAC OF A SPINA BIFIDA WHICH WAS SUCCESSFULLY REMOVED BY OPERATION.

The child from whom the sac was taken was a fine, and, in other respects, well-formed boy, the first child of young parents. The tumour was pyriform, the size and shape of a ten-ounce necked cupping-glass. It hung from the upper dorsal region of the spine, was flaccid, and only partly filled with fluid; the integuments over it were very thin, indeed, translucent, and over the most prominent part of the swelling were two small excoriations. At the base of the tumour could be felt a deficiency in the bones beneath, corresponding with the third and fourth dorsal vertebræ. There was no paralysis or other symptom of deficiency of nervous power. From the time of birth Dr. Wilson applied pressure to the base of the tumour, so as to isolate it from the spinal canal as far as possible. To relieve the tension of the integuments which had become extreme, on the twentieth day after birth it was punctured, and eight ounces of fluid were drawn off. During the next twelve days it was tapped four times, each time about two ounces of fluid being drawn off. A steel clamp was applied to the base for five days before removal, and, on the thirty-third day, the sac and integuments were shaved off at the base of the tumour, which was grasped by a pair of circumcision forceps. The cut edges of the spinal membrane were lightly touched with a red-hot needle, sutures were applied to the wound, and pressure to the base of the tumour. Twenty days after the operation the wound had entirely healed. Two months after the operation the chink in the vertebræ was found to be closed by a solid mass which projected somewhat beyond the neighbouring spines, and appeared to be formed of bone. The sac, as Dr. Wilson says, consists of thin integuments covering the dura mater, to which it is unadherent; this is lined internally by a layer of epithelium resting on a basement membrane, coated on its free surface by a more or less organised exudation of lymph. The dura mater is quite an independent coat in this tumour, and is in no way connected with the integuments: the sac contains no nerves. The fluid in this case was situated in the sac of the arachnoid, and not, as is usually the case, in the sub-arachnoid space. The tumour (Mr. Smith said) had been examined by Dr. Cornelius Black, of Chesterfield, by Mr. Savory, and by himself, and all coincided with Dr. Wilson in his account of its structure and connexions with the spinal membranes.

Mr. HULKE asked if the fluid contained sugar? He had been told by a German friend that sugar was always to be found in the fluid drawn off; and he had since found it in every instance in which he had operated.

Mr. THOMAS SMITH said that there was no mention of any examination for sugar.

Dr. HARLEY said that eight years ago a French Surgeon proposed to determine whether fluctuating swellings over the spine communicated with the spinal canal, by examining the fluid drawn off for sugar. It was well known (he said) that the cerebro-spinal fluid contained sugar during digestion, but not during fasting.

Mr. HUTCHINSON remarked that this case had been very correctly described as the first successful one of its kind in English practice. It was not, however, by very far the first in which a similar plan had been tried. All the others had ended fatally, and he (Mr. Hutchinson) found in this fact a very strong argument against the measure. We must not be misled, by the successful result of a single case, into adopting a practice which, in the long run, would destroy many lives. He gave a strong opinion against all operative interference with spina bifida, stating that he had witnessed many operations of very various kinds for the cure of this deformity, but every one of them had been followed by the same result. In several of these there was every probability that, had the operation not been performed, the patient might have grown up. He had seen several adult patients the subjects of spina bifida which had been wisely let alone in infancy.

Mr. CURLING said that a great deal would depend on the state of the integuments. When they were healthy and thick an operation would not be justifiable, but when they were thin, and ready to burst, an operation might give a slight chance of averting death.

Mr. SPENCER WELLS presented

TWO OVARIAN TUMOURS REMOVED BY OVARIOTOMY.

The first was removed on the 16th of December from a married woman 42 years of age. There were very firm parietal adhesions, but the patient had thoroughly recovered, and left the Hospital three weeks after the operation. The tumour consisted of one very large cyst, and of a group of smaller cysts about the size of a doubled fist. The second tumour was removed on the 23rd of December from a single lady, 53 years of age, who was now convalescent. It had been surrounded by many pints of ascitic fluid, and consisted of a mass, of the size of a large adult head, presenting all the characters of adenoma. Mr. Wells said that, although ovarian tumours of this character presented many of the appearances of soft cancer, and resembled malignant tumours in the great rapidity of their growth, yet they offered the important practical difference, that they showed neither tendency to invade neighbouring parts nor to return.

Mr. SPENCER WELLS exhibited

A THIGH AND LEG REMOVED BY AMPUTATION AT THE HIP-JOINT,

on account of a malignant tumour developed in the substance of the biceps muscle, and obliterating the femoral artery. The tumour was first observed by a young married woman last March. It increased rapidly, and was removed by Mr. Wells last June. It was distinctly capsulated, and was entirely removed. It proved, on examination by Mr. W. Adams, to be true encephaloid. Growth very soon recommenced in the same spot, and the foot and leg began to suffer from want of circulation. The foot and outer part of the leg had previously been anæsthetic, owing to the division of the sciatic nerve at the removal of the tumour. Two months ago the patient fell and fractured both tibia and fibula on the diseased limb. After this the tumour grew more rapidly, the general health began to suffer, and it was determined to remove the limb at the hip-joint. Mr. Wells performed the operation on the 29th of December. Very little blood was lost, and the patient had gone on remarkably well ever since. About half the wound had healed by first intention, and the remainder was granulating. The tumour was a well marked example of encephaloid. Part of it surrounded the femoral vessels in the middle of the thigh, and about three inches of the artery were completely obliterated, although the vein was pervious. The

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sciatic nerve terminated at the point where it had been divided in a bulbous enlargement. Some blood taken from veins in the immediate neighbourhood of the tumour contained cells, differing from blood globules in their irregular size and outline, and closely resembling those observed in the juice of the tumour. Mr. Wells remarked that it was probable the extension of cancer from the surface to internal organs took place in this way by means of the blood.

Dr. Gull referred to a case in which branches of the vena porta were plugged by cancerous matter.

Dr. Hare mentioned a case in which the inferior cava was similarly plugged.

Mr. Cæsar Hawkins said there was a specimen in the museum of St. George's Hospital of cancer of the liver, which blocked up many portal and hepatic veins.

Dr. Williams said it was generally acknowledged, since Cruveilhier had shown the fact, that the blood vessels might be invaded by cancerous growths.

Mr. Ferguson said that the question raised by Mr. Wells was a very different one. He spoke of cancer juice or cancer cells circulating in the blood. If this were so, they ought to be seen in the blood of cancer patients during life.

Dr. Wilks said it was an accepted fact, that cancer invaded and destroyed blood vessels in its neighbourhood; but the act, that cancer cells might be carried in the blood and deposited in distant parts of the body, was not accepted, although he believed it must be the fact. If Mr. Wells had demonstrated it in this case, it was for the first time.

In reply to a question by Mr. Hulke, Mr. Wells said that Mr. W. Adams had not found cancer in the tibia or fibula.

Mr. Lee alluded to experiments of Langenbeck, that when cancer-cells, whilst warm, were injected into the veins of a dog, cancer of the lungs was developed.

Dr. Dickinson exhibited a specimen of

RUPTURE OF THE HEART, WHICH WAS ATTRIBUTED TO DIRECT VIOLENCE.

The subject from whom it was obtained was a child, 5 years of age, who was knocked down and run over by a cart. When brought to the Hospital she was quite dead. There was no mark of injury upon any part of the body. At the post-mortem the pericardium was found to be full of blood, which had issued from a transverse rent across the apex of the heart, which cut off all but a sort of fringe on the anterior aspect. Both ventricles were laid open. The muscular substance was torn to a greater extent than the pericardium. The spine and ribs were unbroken, and there was no injury to any other organ. It was obvious that the injury to the heart had been occasioned by the accident. A sudden spasmodic action, from terror or exertion, even if sufficient to rupture the perfectly healthy heart of a child, which is highly improbable, could scarcely be supposed to tear both ventricles in exactly adjoining situations. Moreover, when the heart is ruptured spontaneously it is almost always found that the rent is considerably higher up the wall of the ventricle than in the present case. Dr. Dickinson concluded that the cart had passed over the back of the child, and compressed, without breaking, the yielding structures of the thorax, so as to squeeze off the apex of the heart by means of some prominent bone, probably a rib. It must be noted that the rupture commenced on the posterior aspect of the heart.

A case was then related of a patient, thirty-five years of age, whose leg had been crushed by a gate falling on it. The leg was amputated; the man died suddenly some days afterwards. The right ventricle was found to be ruptured, probably, in this case, from mental emotion.

Mr. Hutchinson mentioned a similar case. In it a child was knocked down in the street, and died on its way to the London Hospital. There was no mark of bruise on the chest nor any fracture of rib, but the heart was found ruptured; the right lung near its root was also torn. The evidence was conflicting as to whether or not the wheel had passed over the child, but in all probability it had done so. The elasticity of the walls of the chest in children might account for the non-occurrence of fracture of ribs, and the fact that death took place from sudden and complete arrest of the heart's action, for the entire absence of bruising or ecchymosis.

Dr. Brinton said that rupture of the heart would follow the most severe accidents, for instance, a blow on the head. He could scarcely accept Dr. Dickinson's theory of the cause of rupture in his specimen.

Dr. C. J. B. Williams alluded to great contraction of the walls of the ventricle in the specimen exhibited.

Dr. Leared related a case in which a man died suddenly after the fall of part of a wall on him. The pericardium was full of blood, and there was a jagged rupture of the ventricle.

Mr. Spencer Wells related a case in which a sailor, having been struck on the chest by an officer, walked away and died shortly afterwards, whilst vomiting. There was a small aneurism of the aorta, which had been ruptured. The question raised on the trial was, whether death was due to the blow or not?

Mr. Croft exhibited, at a previous meeting, a specimen of

VILLOUS CANCER OF THE INTESTINE.

The subject of the disease was a male, aged 63. He had suffered from intermittent attacks of constipation for several years, and at such times he had complained of a fixed pain behind and to the right side of the umbilicus. The final and fatal attack commenced on September 1, 1862, and lasted over a period of ninety days. It was characterised by persistent pain over the seat of the tumour, and alternations of obstinate constipation, accompanied by fæcal vomiting and diarrhœa. After death, a tumour was found in the right half of the transverse colon. It projected across so that it blocked up the canal of the intestine, and the intestine was dilated on the proximal, whilst it was collapsed on the distal side of the seat of disease. The mucous membrane on each side of the disease was marked by tendency to redundancy of villous growths; and from the opposite side to that of the larger tumour a small, slenderly pedunculated one, of essentially villous character, was found hanging on to the canal. The larger tumour measured about two inches in breadth, and one in depth; it was seated on the lower segment of the intestine, and had caused constriction at that part. When the mass had been divided in half, the base and central portions were found to have sprung from the mucous coat, and to be seated on the muscular coats of the intestine. Several small cysts, containing mucus, were found in the base and central portions, and the intervening structures were seen by the microscope to consist chiefly of blood-vessels and connective tissue. The periphery of the mass consisted of a villous investment to the base and central portions, the villi in some places springing deeply from the centre. The villi themselves were very beautiful microscopical objects, being of all dimensions. Some were extremely fine and long, and made up almost entirely of delicate loops of capillaries; whilst others appeared almost papillary in their structure and dimensions, consisting of loops of capillaries invested by basement membrane supporting a perfect arrangement of columnar epithelium. In the examination of the seat of disease there was not discovered any particular feature of cancer; and, at the general examination of the body, the various viscera and the lymphatic system were observed to be free from disease.

Mr. Hutchinson remarked that he believed a very similar case was recorded by Mr. Birkett in the Society's *Transactions*. Mr. Gowland had recently, at St. Mark's Hospital, operated in three cases of large villous growths in the rectum. One of these operations he (Mr. Hutchinson) had witnessed; and although the growth was firmer, and much less shreddy, than those met with in the bladder, yet it, like the others, was undoubtedly villous in nature.

Mr. Holmes stated that the specimen shown by Mr. Croft appeared to him to be much more of a solid growth than true villous tumours are. He had seen some from the intestine in which the prolongations of the villi were very long; and adverted to one case in which the tumour grew from the lower tract of the rectum and was removed on many occasions.

Mr. Henry Thompson agreed with Mr. Holmes in doubting whether the term "villous" could be correctly applied to Mr. Croft's specimen. He thought we ought carefully to restrict that term to examples of growth in which the prolongations were very long, and bore resemblance to those of the chorion. He referred to several from the bladder, very different, indeed, in appearance from Mr. Croft's specimen, which showed little or nothing of the villous character.

Mr. Hutchinson differed from the last speaker, and considered that the difference between a villous growth from the bladder and one like that now before the Society was of degree rather than kind. He suggested that the reason why good specimens of villous growths were rarely met with except from the bladder was, that in the latter instance the villi grew in fluid, a condition very favourable to them, whilst in the interior of the colon it might easily be understood that the slender villi would be crushed off by the passage of fæcal masses.

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OBSTETRICAL SOCIETY OF LONDON.

ANNUAL MEETING, WEDNESDAY, JANUARY 7.

Dr. TYLER SMITH, President, in the Chair.

AFTER the ordinary meeting, the business of the annual meeting commenced.

The report of the Auditors of the accounts of the Treasurer for the year ending December 31, 1862, was then read, from which it appeared that the balance in the hands of the Treasurer is £204 9s. 2d., and that during the year a sum of £400 had been invested in the Funds in the names of the Trustees of the Society. The balance-sheet read by the Secretary showed that the Society had received during the year £478 15s. as subscriptions from Fellows, and £48 9s. 3d. as proceeds of the sale of the *Transactions* of the Society.

Dr. GREENHALGH, in moving the adoption of the Report of the Auditors, alluded to the satisfactory condition of the funds, and also to the fact, that the sum received during the past year in subscriptions exceeded that of any previous year, the respective amounts received during the years 1859, '60, '61, and '62 being, £336, £413, £445, and £478; while a total sum of 100 guineas had been paid into the Society's hands in respect to the proceeds of the first three volumes of the Society's *Transactions*. He also congratulated the Society on the promising condition of the library.

Dr. MEADOWS seconded the resolution, which was carried unanimously.

Dr. RICHARDS moved, and Mr. MITCHELL seconded, the following resolution, which was carried by acclamation:—

"That the best thanks of the Society be and are hereby given to the President and officers of the Society for their services during the past year. That the best thanks of the Society be in an especial manner given to the retiring President, Dr. Tyler Smith, and to the retiring Honorary Secretary, Dr. Tanner: to Dr. Tyler Smith for the able and efficient manner in which he has presided over the meetings of the Society for the past two years; and to Dr. Tanner for his valuable and zealous services as Honorary Secretary from the commencement of the Society, four years ago, until the present time."

Dr. TYLER SMITH and Dr. TANNER respectively returned thanks.

The list of donations during the past year was read, from which it appeared that 605 volumes had been presented to the Society by Sir Charles Locock, Bart., Dr. Clay, of Manchester, and others.

The following gentlemen were elected officers of the Society for the year 1863:—

Honorary President: Sir Charles Locock, Bart., M.D. *President*: Dr. Oldham. *Vice-Presidents*: Dr. J. Hall Davis, Dr. Druitt, Mr. Fergusson, Mr. Robert Hardey (Hull), Dr. G. Swayne (Bristol), and Dr. Tanner. *Treasurer*: Dr. Barnes. *Honorary Secretaries*: Dr. Graily Hewitt, and Dr. Braxton Hicks. *Other Members of Council:* Mr. H. Woodruffe Bailey (Thetford), Dr. Clay, (Manchester), Dr. Wm. Fred. Cleveland, Dr. Chas. Drage (Hatfield), Dr. Gream, Dr. Greenhalgh, Mr. F. Seymour Haden, Dr. Harley, Mr. Isaac Harrinson (Reading), Mr. Henry James, Dr. J. C. Langmore, Dr. Alfred Meadows, Dr. Madge, Mr. Joseph Thos. Mitchell, Dr. W. Tyler Smith, Mr. Fred. Symonds (Oxford), Dr. Alfred Joseph Tapson, and Dr. Jas. Geo. Wilson (Glasgow).

The PRESIDENT then delivered the

ANNUAL ADDRESS.

The first point dwelt upon in the address was the financial and numerical prosperity of the Society. The success of the volume of *Transactions* for 1862 was then briefly referred to. The additions made to the library during the year, the unique value which would attach to a large collection of purely obstetrical works, and the need which existed for appointing a librarian, and making some arrangement which should render the books accessible to the Fellows, were next alluded to. The loss of Fellows by death during the year was stated to be unusually large, including the names of Dr. Metcalf Babington, Dr. Waller, Mr. Jessop (of Cheltenham), Mr. Smith (of Crawley), Mr. Rowland (of Wrexham), and others. The trials which had occurred during the year, in which persons practising midwifery were accused of malpraxis, were commented on, and especial notice was taken of the case of Mr. Robinson, convicted of manslaughter at the Central Criminal Court. It was shown that in many of these cases the charge of malpraxis arose out of the attendance of midwives in the first instance; and the anomaly, that midwives, without any special training or qualification, are allowed to attend in cases often involving the question of life and death, was commented on. The progress of ovariotomy during the year, and its evident connexion with obstetric practice, were noticed. The recent discussion respecting the genealogy of the Chamberlens and the discovery of the forceps, was alluded to, and reasons were adduced for giving the merit to Mr. Peter Chamberlen, surgeon-accoucheur, of the City of London, and the first of the family of whom we have any record. The address was concluded by the retiring President thanking the Society for the kind support which he had received during his tenure of office.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary Examinations for the Diploma, were admitted Members of the College, at a meeting of the Court of Examiners, on the 22st inst.:—

William Clement Daniel, M.D. Heidelberg, Kennington; John Lovell Arnott, M.D. Edin., Cheltenham; William Frank Smith, Nottingham; Philip Henry Pye Smith, Hackney; Charles Henry Butlin, Camborne, Cornwall; Denis Joseph Canry, Dublin; Thomas Thomson Dick, M.D. Edin., Ayr; John Edward Thornburn, Cockermouth; George Smith, Hampstead-road; George Gregson, Harley-street; Robert Meadows, M.D. St. Andrews, Ipswich; William Cooper, L.R.C.P. Lond., Beaumont-street, Cavendish-square; Horsley Thomas Mapleson, Westbourne-place; Jacob De Leon, Jamaica; and Arthur John Farwell, Chipping Norton.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, January 22, 1863:—

Henry Addison Hobbs, Croydon; George Edward Walker, Wigan, Lancashire; Thomas Cargill Nesham, Newcastle-on-Tyne.

APPOINTMENTS.

ANDERSON, DR. ALEXANDER, M.D. Edin., has been elected a Director of the Royal Lunatic Asylum, Gartnavel, Glasgow.

DE MORGAN, CAMPBELL, F.R.C.S.E., has been appointed Consulting Surgeon to East Grinstead Dispensary.

EADE, DR., has been appointed Lecturer on Materia Medica at Melbourne University.

EARLE, JAMES NEALE, M.R.C.S.E., has been appointed Surgeon to the Royal South London Dispensary, Lambeth.

EDWARDS, DR. MORGAN JOHN, M.D. St. And., has been appointed House-Surgeon to the Glamorganshire and Monmouthshire Infirmary, Cardiff.

FLEMING, DR. JOHN G., M.D. Glasg., has been elected a Director of the Royal Lunatic Asylum, Gartnavel, Glasgow.

GAIRDNER, PROFESSOR WILLIAM T., M.D. Edin., has been appointed Medical Officer of Health for Glasgow.

HARVEY, DR. ALEXANDER, M.D. Edin., has been appointed Surgeon to the Aberdeen Ophthalmic Institution.

LAPLAIE, DR. THOMAS, M.D. Glasg., has been elected Surgeon to the Glasgow Asylum for the Blind.

LOCOCK, SIR CHARLES, Bart., has been elected Honorary President of the Obstetrical Society of London

OLDHAM, DR. HENRY, has been elected President of the Obstetrical Society of London.

PAGAN, DR. JOHN MACKENZIE, M.D. Edin., has been elected a Director of the Royal Lunatic Asylum, Gartnavel, Glasgow.

SANDERSON, DR. JOHN BURDON, has been elected Additional Assistant-Physician to Middlesex Hospital.

STAMPER, JAMES FENTON, M.D. St. And., has been appointed Resident House-Surgeon to the Tunbridge Wells Infirmary.

STEVENTON, DR. WILLIAM, has been appointed a Member of the Executive Council of the Island of Montserrat.

WARD, CHARLES PARKER, M.R.C.S.E., has been appointed one of the Visiting Surgeons to the Royal South London Dispensary, Lambeth.

DEATHS.

ALDIS, RICHARD, at Suffolk, on January 15, aged 71.

BOULT, EDMUND, L.R.C.P. Edin., at Bath, on January 24, aged 48, late of the H.E.I.C.S.

BOWMAN, EDWARD, L.R.C.S. Edin. (of Carlisle), at Kingston, Jamaica, whither he had gone for the benefit of his health, on December 24, aged 51.

BURMAN, HENRY, L.S.A., at Ketton, Stamford, Lincolnshire, on January 8, aged 56.

CRIGAN, REV. ALEXANDER, M.D., Vicar of Skipwith and Riccll, Yorkshire, at Skipwith, on January 25, aged 82.

EARNSHAW, J., M.R.C.S.E., at Oldham, Lancashire, on January 20, aged 51.

FOWKE, FREDERICK, M.R.C.S.E., at Wilton House, Ryde, Isle of Wight, on January 24, aged 57.

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Jones, William, M.D. Aberd., at 10, Lower Seymour-street, Portman-square, W., on January 26, aged 52.
Knowles, S., of Horley-hill, Ashton-under-Lyme, on January 4, aged 54.
Ramsay, David, M.D., R.N., at the Royal Naval Hospital, Simon's Bay, Cape of Good Hope, on December 16, late Surgeon of H.M.S. *Gorgon*.
Richardson, James, at Queen-street, Stirling, on January 10.
Robertson, J., M.D., at Woodside, Paramatta, New South Wales, on November 17, aged 40.
Smith, George Thomas, at 32, Clement-street, Leamington, on January 19.

The Middlesex Hospital Staff.—A correspondent of the *Times* is premature in announcing that Mr. Lawson has been elected the successor of Mr. Mitchell Henry at the Middlesex Hospital, no vacancy having yet been declared. In a few days it is expected that another vacancy will be declared in the Staff of this Hospital by the resignation of the lecturer on Midwifery, as it stated that Dr. Priestly will succeed Professor Farre at King's College.

Vaccino-syphilitic Inoculation.—At a meeting of the Royal Medical and Chirurgical Society, on Tuesday night, Mr. Henry Lee mentioned that he had now under his care at St. George's Hospital a case of vaccino-syphilitic inoculation. As the existence of such cases had been doubted, Mr. Lee mentioned that he should be happy to show the patient to any gentleman who might feel interested in the subject, on Tuesday next, at one o'clock.

Medical Society of London.—A course of three Lettsomian Lectures, "On the Surgical Diseases of Children," by Mr. Thomas Bryant, F.R.C.S., Assistant-Surgeon to Guy's Hospital, will be delivered, February 9, 16, and 23. Lecture I. "On the Differences between the Physiological and Pathological Processes in Children and in Adults, and on some Congenital Deformities, as Hare-lip and Malformations of the Rectum." II. "On the Differences between the Surgical Diseases of the Nervous, Respiratory, Circulatory, Digestive, and Urino-genital Systems of the Child and the Adult." III. "On the Diseases of the Osseous System, and on Tumours," etc.

Appointment of Dr. Furnari as Professor of Ophthalmology in the University of Palermo.—Dr. Furnari, well known by his works on Ophthalmological Medicine, and who, during his exile, had acquired golden opinions in Paris, has, on the recommendation of Professor Matteuci, been appointed Professor and Director of the Ophthalmological Clinic in the University of Palermo.

Testimonial to Professor Matteuci.—In order to perpetuate the remembrance of the services rendered by Professor Matteuci (while Minister of Public Instruction) to the cause of Medical education, the entire body of the Professors of all the Universities of the new kingdom of Italy has entered with enthusiasm into a subscription, in order to present him with a large honorary medal. On the one side is the portrait of the Professor, with the inscription—"To Charles Matteuci, 1862." On the obverse is inscribed—"For having established unity in instruction." On the exergue are the names of the 201 Professors.

Honours Conferred on the French Jurors and Exhibitors of Class 17 in the International Exhibition.—Among the Jurors, MM. Balard and Nélaton have been promoted to the rank of Commanders in the Legion of Honour; MM. Barrall, Bella, Demarquay, and Wurtz are made officers; and MM. Masson (the Medical publisher) and Lecorché (who acted as Medical attendant upon the exhibitors during their stay in London), Chevaliers of the Legion. Among the exhibitors, MM. Charrière, jun., Lüer, and Mathieu have been nominated Chevaliers.

Crocodiles in the Old Red Sandstone.—A paragraph has been inserted in several of our contemporaries, announcing that the remains of a crocodilian reptile had been derived from the *old* red sandstone in the neighbourhood of Elgin. We have only to remark that the bed in question, whence the *Leptopleuron lacertinum* was derived, appertains to the triassic age, and that remains of a theecodont reptile, with crocodilian scales (*Steganolepis Robertsoni*), from the locality are in all our public collections.

Netley Hospital.—The arrangements for the removal of the invalid establishment at Chatham, together with the Medical staff, Professors, and other officers connected with the Army Medical School at Fort Pitt, to the new Hospital at Netley, near Southampton, are expected to be completed in the course of a few weeks. The entire Medical staff at the General Hospital, Fort Pitt, as well as the staff of the invalid establishment and pay-offices, will quit Chatham for the new establishment at Netley. The responsible appointment of Governor of Netley Hospital has been conferred on Col. R. Wilbraham, C.B., the present Governor of the General Hospital at Woolwich.—*Times*, January 27.

The Senatus Academieus of the University of St. Andrews announces that the examinations for the degree of Doctor of Medicine will, under the new regulations, be conferred annually on ten registered Medical Practitioners above the age of 40 years, and on payment of the increased fee of fifty guineas. The next examination for the "M.D." will take place during the last week in April, on which occasion the examinations will also take place for the degrees of Bachelor of Medicine and Master in Surgery. During the last three months the Council of Medical Education and Registration have registered 262 Practitioners, twenty-six of whom have just been "capped" at St. Andrews. It may be regretted that persons still continue to be registered without any qualification, merely on their statement of having been in practice before 1815; consequently, these Practitioners, assuming they were in the practice of the Profession at the early age of 20 years, would now be 68 years of age. A correspondent, however, draws attention to a case in the West of England, where one of these Practitioners so registered is little more than 50 years of age.

Royal Medical College, Epsom.—A printed appeal has lately been issued by the Council of the Medical Benevolent College, calling upon the Profession to aid in increasing the number of Foundation Scholarships, and in rendering their maintenance independent, at least in part, of the precarious support of annual subscriptions. From the following extract it will be seen that the Council look forward to an important change in the mode of election of candidates:—"Hitherto there has been an objection, on the part of many Medical men, to contribute to what is essentially their own institution, from a fear that their money would be sunk in bricks and mortar. The building is now on the point of completion, so that this fear will soon cease to have any foundation; moreover, any donor, or subscriber, may prevent such an application of his contributions absolutely, by intimating a wish that they should be added to the Endowment Fund. When this fund has reached a certain point, it is earnestly to be desired, that the admission of the Foundation Scholars may no longer depend upon the present harassing and expensive method of a general canvass of all the governors, but take place by a competitive examination of the candidates, or some similar proceeding, which may at once render it a reward and a stimulus, while it takes from it that purely eleemosynary character which now surrounds it."

Royal College of Surgeons.—Professor Gulliver will, early in June, deliver six lectures on "Blood, Chyle, and Lymph," in continuation of his former course on "Blood;" and Professor Samuel Solly, F.R.S., will deliver six lectures on the "Brain and Some of its Diseases." The annual election of Fellows into the Council will take place, as usual, in July. The next Primary or Anatomical examination for the membership of the College will commence on Saturday, April 4, and the Pass or Surgical and Pathological examination on April 18. An examination for the Midwifery licence will take place on Wednesday, the 11th proximo. The following prizes, offered by the Council of the College, are open for competition by the Fellows and Members of the College, viz.:—The subject of the Collegial Triennial Anatomical Prize, of fifty guineas, is on "The Structural Anatomy and Physiology of the Lymphatic Vessels and Glands (the Anatomical Distribution not being required); the Communications (if any) between the Lymphatics and the Blood-vessels to be demonstrated; and the Influence (if any) which the Lymphatic Vessels or Glands exercise on the Fluid they transmit, to be elucidated. The Dissertation to be illustrated by Preparations and Drawings." The essays must be sent in on or before Christmas-day, 1864. The subject for the Jacksonian Prizes of twenty guineas, for the present year, 1863, are on "The Pathology and Treatment of Diseases of the Larynx: the Diagnostic Indications to include the Appearances as seen in the Living Person; the Dissertation to be illustrated by Drawings and Preparations;" and, "The Normal and Pathological Anatomy of the various Synovial Bursæ connected with the Muscles and Tendons of the Upper Extremity, and the Treatment of their Diseases; the Disserta-

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tion to be illustrated by Preparations and Drawings." The essays must be sent in on or before Christmas-day next. The terms and conditions may be known on application to the Secretary.

COMMON RESIN AS A SPECIFIC FOR WHOOPING-COUGH.—A writer in the *Australian Medical Record* for September 24, recommends the use of common resin as a specific in whooping-cough. The dose for a child is one or two grains three times a-day, and four to six grains for an adult. He is in the habit, apparently, of combining with the resin both opium and belladonna,—not a very philosophical practice, by the way, considering the established antagonism between these drugs. Nor do the sixteen cases adduced impress our mind at all forcibly as confirmatory of the value of the practice. Still, when we consider some recent observations upon the pathology of whooping-cough, we are disposed to advise our readers to make a trial of the remedy. At any rate no harm can come of it.

MELBOURNE LOGIC AND MELBOURNE LUNATICS.—We learn from the journal just referred to, that Dr. McCrea, who, we believe, is the Health Officer for Melbourne, certainly one of the best-informed Practitioners there, and highly respected by the Profession, has got into a little trouble, for daring to step beyond the bounds of routine practice. It appears that a Mr. Turner, who showed evidence of mental disturbance, was committed to the Western Gaol on May 26, and was seen there by Dr. McCrea. He was not violent, but on the night of the 29th became so, and from fighting with the other lunatics was much bruised. Half an ounce of tincture of digitalis was ordered him. This calmed the excitement; and on June 4 he was apparently well. At subsequent periods, on the recurrence of violence, the medicine was repeated with good results; and on the 18th he was transferred to the Yarra Bend Asylum. Dr. McCrea's practice was based on the belief that the early symptoms were those of delirium tremens. The patient never had more than an ounce of the tincture in the twenty-four hours. No one in his senses can blame Dr. McCrea, with the facts now before the Profession illustrative of the value of this medicine in delirium tremens. The case, however, ultimately became one of intermittent mania. The digitalis was no longer given, and three or four weeks after the last dose the man died from his injuries and from pericarditis. An inquest was held, and the coroner told the jury that, even if they found him guilty of manslaughter, he would not commit Dr. McCrea for trial. Whatever may be thought of this, it is clear that Dr. McCrea, whose practice was successful as far as it went, could not be fairly censured. As to "poisoning" Mr. Turner, the thing is simply ridiculous. Who ever heard of a man being poisoned with a large dose of digitalis, and not dying from the effects of the dose until a month had expired? Besides, how is it that the characteristic signs of the "poisoning" were not observed at any time? Mr. Phillips, who saw Mr. Turner last, says: "In my opinion, the cause of death was, first, pericarditis and exhaustion, induced by acute mania, accelerated by the sloughing sores on the trunk of the body." The comment of the editor is worthy of reproduction: "What else could be expected from placing twenty lunatics and two wardsmen in a ward 22 feet by 15 feet, than that some of them should be injured? If those in authority continued the system of crowding lunatics into a place of this kind, in spite of the repeated representations of Dr. McCrea, Mr. Turner's death was caused by their supineness." What year of our Lord is it just now in Melbourne?

RARITY OF BAYONET WOUNDS IN WAR.—We extract from Dr. Detmold's first lecture on "Military Surgery," delivered at the College of Physicians and Surgeons at New York, the following observations: we do so without comment:—"Almost all the wounds that will be brought under your notice will be gun-shot wounds. You hear a good deal about bayonet charges, and crossing of bayonets, but I have been through a great many of our hospitals, and have seen thousands of wounded, but do not recollect to have seen a single bayonet wound. The only bayonet wounds I ever saw were inflicted in a sham fight. I was attached at the time to the Royal Hanoverian Grenadier Guards, and in the sham fight our regiment was to make a decisive bayonet charge; the opposing regiments, according to the programme, were to give way, but a good deal of jealousy existing against the guards, the line regiments did not heed the programme, and the men actually crossed bayonets. On that occasion I saw a good many, in fact, the only bayonet wounds, and a good many men were maimed for life."—*American Medical Times*, Dec. 20, 1862.

ACCLIMATISATION IN AUSTRALIA.—A New Zealand journal, speaking of the two white swans presented by the Queen to this colony, and which were placed on the North Shore Lake, says that they were sitting on no fewer than eighteen eggs. The swans had been hatching alternately for three weeks. One of the Canadian geese, which came with the swans, and from the same royal donor, flew away some time after being placed on the lake, but the remaining bird took up with the common geese, and the result has been a magnificent cross. The divers are doing well. In Victoria, measures are in progress for the speedy introduction and acclimatisation of roedeer, partridges, rooks, hares, sparrows, and song-birds, from England; deer, Cashmere goats, and black partridges, from India; ostriches, pheasants and partridges, and antelopes, from the Cape of Good Hope; for all of which the money has been remitted by the Acclimatisation Society. A letter was recently received by the Acclimatisation Society of New South Wales from Mr. Black, of Miumi, enclosing a sample of wool from an Angora goat descended from those that were imported some years ago into this colony. Mr. Black, who has paid much attention to improving the breed of goats, states that their wool and fat are exceedingly valuable, and their flesh is in no way inferior to mutton, but rather resembling venison; that the females breed twice a-year, producing generally two at a birth; that they require very little shepherding, and thrive well where nothing else could be kept with profit.

TOWERS OF SILENCE.—"There exists in Bombay, on one of the fairest spots of Malabar-hill, a wide extent of ground, allotted to one of the vilest purposes which it ever entered into the heart of man to conceive. Here we have in modern times the vulture preying upon the dead body, as in heathen mythology the bird is reported to have done on the living! The 'Towers of Silence' are immense structures of varied diameter, raised twenty, thirty, or more feet from the ground, in the centre of which is a well, covered by an iron network, frame, or grating. On the latter are placed the corpses of the Parsee population, and before the mourning relatives have left the grounds hundreds of carrion birds, of voracious vultures and hungry crows, are quarrelling, fighting, clawing, like so many ornithological devils, at the specimen of humanity exposed to their ravages. The delicate Parsee female, the portly merchant, the withered sexagenarian, are all thus disposed of, and we are credibly informed that two hours after the deposition of any body in the 'Towers of Silence,' bones alone are to be found, which are eventually thrown down into the well enclosed in the tower. At the same time the loathsome carrion birds, with their bald heads and hideous claws, arrange themselves in rows on the summit of the towers, bloated and surfeited from their ghoul-like feast, secure in the knowledge that, by waiting where they are, a repetition of the festival will take place to-morrow! But the blood, bones, and fluids of the body must escape the voracity of the carnivorous birds, and, gravitating downwards within the tower, there undergo the inevitable process of decomposition, rising thence in pestiferous gases, which are only less hurtful than the miasma of the graveyards, simply because the altitude of Malabar-hill allows the free breezes of the ocean to sweep them off into infinite space. We are, however, credibly informed that neighbouring residents are not unfrequently annoyed by the 'Towers of Silence,' and this not only by pestiferous effluvia, but even in a more demonstrable manner. Thus, we have heard it rumoured that it occasionally happens that feathered bipeds may be seen pursuing one another, and quarrelling over pieces of the human form divine! Nay, more—tales of our intrusive friends, the crows, hopping into verandahs with digits in their beaks, have before now been related. The Parsees, who owe not only their wealth but their very location to the British, must not be longer suffered to carry on such a nuisance in the fairest part of Bombay. They, equally with all sects, must remove their 'Towers of Silence' without the island, and, having been made to take this step in advance, it may reasonably be expected, with a race so 'Europeanised,' that they will eventually hit upon some less loathsome method for disposal of their dead."—*Bombay Saturday Review.*

HOW TO COOK HEDGEHOGS.—"We have for supper this evening (said the gipsy) only a hedgehog, which was found in the hedge-row, and it is very little for so many. . . . Hereupon I placed a crown in the old woman's hand to buy

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a fowl with. . . . . . The next point was to cook it; and the gipsies have a peculiar mode of doing that: a square piece of turf was removed, and a hole dug in the opening, which was filled with small wood. In the meanwhile, the fowl's toilette had been made: this consisted simply in removing the entrails, and rolling it, feathers and all, in a paste of clay. This done, it was laid on the sticks, arranged so as to burn easily, and the piece of grass was placed over all as a lid. This mode has sundry advantages. In the first place, from a culinary point of view, it is excellent; and then it has the great merit in the eyes of the gipsies of concealing their dinner preparations. . . . . . After some little time the lid was removed, and the fowl taken out still wrapped in the clay, which was broken with a hammer: the feathers came off of themselves, and it was served up on a wooden dish. The chief of the tribe took from his pocket a formidable knife, and divided the plunder impartially. Next came the turn of the hedgehog, cooked precisely in the same way. This gipsy dish, thus prepared, is by no means to be despised; the skin and prickles of the steaming animal are removed by the mere act of breaking the clay."—*The English at Home, Alphonse Esquiros*, pp. 177, 178.

BOOKS RECEIVED.

PAMPHLETS.

A Brief Report of Indian Drugs as contributed to the London Exhibition of 1862. By Kanny Loll Dey. Calcutta. 1862. Pp. 14.

On the Registration of Births, Deaths, and Diseases: a Paper read before the National Association for the Promotion of Social Science. By Alexander Harkin, M.D. Dublin and Belfast. 1862. Pp. 20.

On the Psychical and Physical Characters of the Mincopies or Natives of the Andaman Islands, and on the Relations thereby indicated to other Races of Mankind. By Professor Owen. 1861. Pp. 9.

Mr. Scratchley's Proposal for the Creation of a Mutual Guarantee Fund, and for the Appointment of a Permanent Savings Bank Extension and Improvement Committee. 1862. Pp. 4.

Neber das Dubois'sche Gesetz des Muskelstromes. Zweite vorlaufige Mittheilung. Von Professor Julius Budge in Griefswald, Abdruck aus Gösehen's Deutscher Klinik. 1862. No. 43. Pp. 6.

On the Position and Prospects of Therapeutics: a Lecture introductory to a course on Materia Medica and Dietetics. By T. Grainger Stewart, M.D., F.R.C.P.E. Edinburgh. 1862. Pp. 36.

Large Scrotal Tumour: New Plan of Operation for Large Tumours. By J. M. O'Ferrall, M.D., M.R.I.A. Dublin. Pp. 16.

Temperance Congress of 1862. London. 1862. Pp. 207.

The Lung Disease of Cattle curable by Homœopathy. By James Moore, M.R.C.V.S. Lond. 1862. Pp. 22.

Die Erste Ausrotting eines Polypen in der Kehlkopfstrohle durch Zerschireiden ohne Blutige Eroffnung der Luftwege nebrt einen Kurzen Anleitung zur Laryngoskopie. Von Victer V. Bruns, Doctor der Medicin und Chirurgie. Mit 32 Abbildungen, und 3, Tafein. Tübingen. 1862. Zaupp & Siebeck.

Cellular Pathology, Case of Syphilitic Deposit in the Substance of the Heart. By D. Rutherford Haldane, M.D. Edinburgh. 1862. Pp. 13.

The Co-Existence of Tubercle and Cancer. By D. Rutherford Haldane, M.D. Edinburgh. 1862. Pp. 7.

Self-Supporting Dispensaries: their Adaptation to the Relief of the Poor and Working Classes. With Directions for Establishment and Management of such Institutions. By John Jones, M.R.C.S. Eng. London. 1862. Pp. 24.

Clinical Essay on the Mineral Waters of Eaux Bonnes (Pyrénees), and their Value in Consumptive Diseases. By Dr. Lucien Leudet. London. 1862. Pp. 22.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

L. L. G. F.—1. Yes; 2. No.

Mr. L. F. Crummey.—The omission was intentional. We do not think that the argument has a basis in fact.

A. Z.—We hear that a German translation of Mr. Toynbee's work on the "Ear" has just been published.

F.R.C.S.—We must repeat, that all communications containing the slightest reflection on the personal character or works of any member of our Profession must be authenticated.

We cordially concur in the object of the promoters of the cricket ground in Victoria-park, and trust that their petition to the Commissioners of the Board of Works may be successful.

A Father asks of us to pronounce an opinion on a case of which we have only heard one side. As a general rule, we condemn the use of the speculum in the case of unmarried women, unless there are ample reasons for suspecting some organic disease which cannot be diagnosed without visual examination.

A correspondent sends us the following advertisements, copied *verbatim* from the *Daily Telegraph* of Wednesday, January 28:—"For Sale: A Medical Diploma to be disposed of. For price, etc., send a directed envelope to J. A., care of Bookseller, 3, Spur street, London, W.C."—"An original Medical manuscript to be disposed of. It is a first-class production, and will bring both profit and *prestige* to the purchaser. Address, for interview, to Medicus, 3, Spur street, London, W.C."

The Invalids' Dinner Table, Earl-street, Lisson-grove.—The Third Annual Report of this really useful little charity has come to hand. Since its establishment three similar institutions have sprung up, one in Pimlico, another in Bayswater, and a third in St. Pancras. We have had personal experience of the good done by one of these amongst the out-patients of one of our Hospitals. The balance sheet of the Lisson-grove Dinner Table shows that, with an income from all sources of £159 7s. 6d., 3045 dinners of meat, vegetables, bread and beer have been furnished to the sick poor, although one-third of the said income has been necessarily spent in rent, furniture, salaries, printing, &c. Such a charity deserves support.

The Nightingale Fund.—At the suggestion of Miss Nightingale, a portion of the available surplus income of the fund has been applied to the purpose of training midwifery nurses for the poor, who are to be employed, not as midwives to replace, but as nurses to supplement the Medical man. For this purpose the Committee have made arrangements with the Council of St. John's House, and with the Committee of King's College Hospital, the one to train the nurses, the other to supply wards for the purpose. A certain number of beds for poor married women in their confinement are to be maintained in the Hospital at the expense of the fund, and the training of the nurses is to be conducted under the direction of the Physician-Accoucheur and the Assistant-Physicians for the diseases of women and children. Five persons are now training, and the report states that they have had the advantage of lectures delivered to them twice a-week by Dr. Meadows, one of the Assistant-Physicians. Those of us who attend midwifery amongst the poor know full well that it is as difficult to obtain good monthly nurses for them as good nurses in ordinary sickness. The movement thus commenced bids fair to be a boon not only to patients but to Practitioners.

Erratum.—In the prescription of Dr. Laycock's, quoted in a foot note at page 58 of the *Medical Times and Gazette* of January 17—℞ Tinct. ferri sesquichlor., ℥ij.; glycyrrhizæ, infus. quassiæ, āā ℥iv.; two tablespoonfuls thrice a-day—*for* "℥iv.," *read* "ʒiv."

St. Thomas's Hospital.

The following has been forwarded to us by a Physician of eminence:—

"*To the Governors of St. Thomas's Hospital.*

"Gentlemen,—The Governors of St. Thomas's Hospital would be entitled to the gratitude of the sick poor of London for generations to come, if they would take a liberal and extended view of the great charge entrusted to them.

"The object of the founders of these great institutions was to afford the greatest amount of relief to the greatest number of sufferers. That object would be best attained by removing the pale and debilitated invalid to the country, as soon as he was capable of removal. The rich seize on the first opportunity of acting on this principle, where they are personally concerned.

"To accomplish this would not be difficult; the Hospital has ample funds; it could maintain two establishments, each capable of receiving 200 patients, one in town and another in the country. Casualties and urgent cases of all kinds would be received in the lower Hospital, where pupils might attend lectures, and have other instruction.

"When the great London institutions were first founded, locomotion was difficult; now space and distance are practically annihilated. A train—nay, a single invalid carriage, daily, would accommodate the sick in transit to the country house, while passes by any train would enable the Medical officers, students, and patients' friends, to go a distance of five or six miles in twice as many minutes. The advantage to the sick poor of the metropolis would be manifest. Thousands living in close courts and alleys, who never in their lives slept out of town, would thus breathe the pure country air, and by that means, partly, be restored to health and usefulness. It would be a work of supererogation to dwell on the greater salubrity of an open country situation, as compared with a densely-populated city; suffice it to say, the mortality in Hospitals in towns is much greater than it is in rural establishments. The principle advocated here is already in operation in respect to many Hospitals, lunatic asylums, and sanitariums, both in London and in other large cities—indeed, its adoption bids fair to become universal; and it is hoped the Governors of St. Thomas's Hospital, looking to the real interests of the poor, will follow it up in such a manner as to do themselves honour, and secure the gratitude of thousands yet unborn. I am, &c.

"Gower-street, January. M.D."

Case of Absence of Abdominal Parietes.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—If you deem the following of interest to your readers, I will feel obliged if you will give it a place in your Journal:—

At the end of last month a male child was born in this parish without any covering to the abdomen, except the peritoneum; the intestines could be seen quite plainly; the child was otherwise perfect, and the bowels and bladder acted regularly; but, although taking nourishment freely, it gradually wasted and died at the end of three weeks.

I am, &c. Joseph Hazard, M.R.C.S. Eng., etc.

Litcham, Norfolk, January 21.

Midwifery Diplomata.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I beg leave to set "L., M.D.," right upon one part of his letter to you, which appeared in your valuable Journal of December 27, 1862. He there states, "that no midwifery licence or diploma is recognised by the Medical Act, nor will they be registered." Now, in refutation of this, if

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he will only refer to the registry, he will see that midwifery diplomata are registered, but not certificates; consequently, Mr. Talbot was not "legally entitled to attend a midwifery case."

Within the last few days, the certificate from the Dublin Lying-in Hospital was refused as a qualification by a dispensary committee; and the gentleman was obliged to go in for the midwifery diploma of the College of Surgeons before he was permitted to become a candidate for the appointment of Medical attendant to the district.

I am, &c.

Dublin, January 21. A Registered Midwifery Diplomatist.

Malposition of the Heart and Liver.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In the report of the meeting of the Royal Medical and Chirurgical Society for November 25, 1862, I see a case of malposition of the heart and liver recorded. As there is at present in this city a living instance of a similar case, and as the gentleman himself makes no secret of it, I see no impropriety in my referring to it. His heart is undoubtedly and congenitally placed in the right thoracic region; and he is fully persuaded himself that his liver occupies the left hypochondrium. The subject of this *lusus naturæ* is a small, but most active man, is one of our most eminent men here, is a specialist, and holds a very high and important position in our Royal College of Surgeons. He enjoys excellent health.

I am, &c.

Dublin, January 21. F.R.C.S.I.

Gibbon v. Budd.—Physician's Fees.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Allow me to correct a trifling inaccuracy in the report of this action, as it appears in your Journal, and to state that I did not attend the late Mr. Budd for a Surgical injury to the foot, but was called in four months after the accident by his Medical attendant, in reference to the extreme debility and head symptoms from which he was suffering. Had I had anything to do with the treatment of the Surgical disease it would, assuredly, have been pleaded against me; for the defendant left no stone unturned and spared no money in order to quash my claim. In other respects the report is one-sided, especially in not giving the evidence adduced on my behalf. As to the plea that I attended as a friend, the only pretext for it was that I had a passing acquaintance with Mr. Budd; indeed, I proved that he had once paid me for previous Professional services. Unfortunately for me, my attendance on him was abruptly terminated by an attack of typhoid fever, which obliged me to leave London for a considerable time in the autumn of 1861, when other Medical men took charge of the patient up to the time of his decease.

My legal title to recover fees under the new Medical Act will be decided in a few days by the Exchequer Court, as it was stipulated not to carry the question to a Court of Error, on account of the heavy expense it would entail upon the parties.

It may be a mistake, as you say, in a College of Physicians to enact conventional distinctions between the different members of their body; but it would surely be a greater mistake for the Fellows to impose legal disabilities on the members and licentiates without their consent.

With every respect for the opinion, or rather feeling, which you appear to share with a majority of the Fellows of the London College,—that the Physicians' fees had better be regarded as a "gratuity" than as "wages," for the most important and valuable services one man can render to another,—I must confess, after due consideration, that I cannot agree with you. If there be a moral claim, one would naturally suppose that there ought to be a legal title to remuneration for the inestimable services that we, as Physicians, render to our fellow-men. In a Professional point of view, we need only to determine whether of the two is the more just and the more politic,—the "honorarium" or the "merces" principle of payment. Now, it is difficult to conceive how any injustice can be inflicted either on the patient or his Physician by the "merces" principle, but it is constantly done under the "honorarium" system. In some instances, rare I admit, the Physician obtains, either through ignorance or excessive gratitude on the part of the patient, a much larger fee than his services warrant, or than his conscience would accept, were it not from this "honorarium" superstition. But in the far greater majority of cases he receives no remuneration whatever, or a very inadequate one, for services rendered at the cost of much time, skill, and labour. I more than suspect that the "honorarium" practice is partly the cause of nearly the whole of the public Medical service, in this country, being "honorary." Now, although this is done (except under the Poor-law) in the name and under the cloak of charity, I believe that you, with most other Medical gentlemen, denounce it as unjust and iniquitous.

With the exception of the case of our Hospital out-door patients, perhaps this system inflicts no injustice or injury on the public, for, unlike the barrister, the Physician is not paid his fee, or gift, until after he has performed his work: he cannot pocket any number of fees in the morning, on the understanding of seeing cases in the afternoon, and wholly neglect two-thirds of them, or send a junior to them to be paid by the patient. Moreover, the Physician can be, and often is, mulct in heavy damages for any want of skill or care he may exhibit in the treatment of his patient; but an unfortunate client has no remedy against the ignorance or carelessness of his advocate.

Turning to the question of policy, it is obviously to the interest of the Bar to keep up a system, enacted, strange to say, by some Roman Emperor, to control the rapacity of Doctors and lawyers, which enables a few to rapidly accumulate fortunes and to escape all responsibility. But what advantage is it to a Physician? It neither fills his pocket nor protects him from being legally responsible for his treatment. If there had been any value in it for such a purpose it would surely have been pleaded in Dr. Semple's case the other day.

Although I do not see it, there may be something in the opinion you express, that "honorarium" upholds the dignity of the Profession better than the "merces" principle of payment would. To take the case of the late Sir Benjamin Brodie, who, during the later period of his life, practised more as a Physician than a Surgeon—do you believe that the dignity and estimation of his professional character were lowered in the eyes of the world by the fact of his holding a legal title to remuneration for his services? The wealth of the Bar (*i.e.*, of its more eminent members) is increased, but I doubt whether its dignity is increased by the "honorarium" system. The dignity of a calling is proportionate to its influence and usefulness to the community. I have yet to learn that the dignity of a cabinet minister, an ambassador, a bishop, a judge, a surgeon or dentist, an architect or engineer, is compromised by his accepting wages for his toil as "merces" rather than "honorarium." It has always appeared to me undignified in Physicians to link themselves to barristers in this matter of fees, when the relation they bear to their respective clients is so different, and help to sanction a system of remuneration which, in the case of the Bar, is universally condemned as unjust.

Your fears that, if we established a legal title to fees, the fee would not be paid at the time, or as soon as practicable, are, I trust, groundless; at least, the consulting surgeon, the dentist, the architect, and the engineer are, as a rule, paid as soon as their work is completed.

The main question to be decided is, whether the remuneration of Physicians would be less if their fees were made recoverable at law. I hold the opinion that it would, in the long run, be much greater. If you hold the contrary opinion, you will do good service in convincing a large number of Physicians.

I am, &c.

3, Finsbury-square, E.C., January 27. Septimus Gibbon.

[We cannot endorse our correspondent's argument. The fee system, as pursued hitherto, has been undeniably to the advantage of Physicians; they are not so often cheated as the General Practitioner. If their remuneration is to be no longer honorary, but is to be canvassed and squabbled for in a court of law, it is certain that the rate of fees will be lowered. What common jury, or even special jury, of tradesmen will be able, for instance, to conceive the propriety of paying a Physician his fee per mile for a railroad journey? The law values the special juryman's time at a guinea a-day, and allows a fee not exceeding three guineas for the day's attendance of a Medical man at assizes. What chance of success would the Physician have who claimed fifty or a hundred guineas for a journey not occupying a longer time? The Consulting Surgeon's fee *is considered* honorary by the public, as is the Physician's.—Ed.]

Is Quinine (Sulph.) Aperient or Purgative, "per se?"

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Allow me to suggest to your correspondent "M.D.," the propriety of testing the above question in his own person before requiring a solution of it from his Professional brethren. Opium invariably acts as a "smart purgative," when taken by the writer of these lines—may it not have a like action on M.D.?

I am, &c.

January 26. Another M.D.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In answer to "M.D.," I think that most of us must conclude that the *rationale* of his case is purely depending upon idiosyncrasy.

I have a case at present of a robust and healthy child, one year old, who lately suffered from a periodic weed every day at 3 p.m. He was put upon two grain doses of sulphate of bibeerine daily, which stopped the weed, but moved the bowels, which were habitually costive. Since then, the nurse has always found two grains of bibeerine the best aperient she ever used for this child.

I am, &c.

Liverpool, January 26. Thos. Skinner, M.D.

Menstruation and Conception.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—At what, if any, period after menstruation, is conception impossible? Dr. Prosper Lucas, in his admirable work, "*De l'Hérédité Naturelle*," states, in the most unqualified manner, that "there is no day, however distant from menstruation, at which a woman may not and does not conceive."—Vol. ii., p. 917. Dr. Carpenter, however, in his "Human Physiology," is quite disposed to limit the period of possible aptitude for conception, and can only adduce one instance, from his own experience, in which conception followed connexion occurring so long as seven days after menstruation. (P. 1004, note, 4th edition).

Can any of your readers contribute a single case in which conception certainly took place subsequently to the twelfth day after menstruation had ceased, and not immediately prior to its return? Are there any works or contributions to the journals in which this important question is discussed in addition to those referred to by Dr. Carpenter? (*Op. Cit.*, p. 998, 1004.) It is to be hoped that in the forthcoming edition of his "Physiology" Dr. Carpenter will be able to arrive at a definite conclusion upon the subject.

I am, &c.

January 24. A Subscriber.

[All such evidence is hearsay, but on such evidence we know one case in which conception occurred on the tenth day after menstruation.—Ed.]

Follicular Conjunctivitis.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In a recent Number of the *Medical Times and Gazette*, this somewhat rare, but highly interesting morbid condition of the conjunctiva is very instructively noticed in a review of Dr. Frank's "Report" and of Dr. Marston's pamphlet.

We should be the more especially grateful to these gentlemen for their description of the complaint by reason of the fact, as indicated by their reviewer, that no previous description of it has been given by our systematic writers on the subject.

I confess, that from what I have recently observed, I am inclined to extend the application of the sago-grain-like bodies or obstructed follicles, as proximate causes of ophthalmia, beyond the sphere of regiments or where persons dwell together in large numbers.

The condition, however, of the palpebral conjunctiva in the sporadic cases, as in the detailed, is modified in degree when compared with the typical form which these gentlemen have portrayed; or rather, it would seem that in those cases where there has been no exposure to miasmatic or unhygienic influences, the diseased condition of the conjuctiva stops short of that in which, besides follicular prominences, the connective tissue becomes studded with the grain-like bodies.

A gentleman, between 30 and 40 years of age, complained of what at first sight looked like a rather painful case of catarrhal ophthalmia, or of irritation from a foreign particle in the right eye. No cause could be assigned, and no trace of intruding substance could be detected. He had once before suffered from "a cold in the eye." The sensation of grains of sand under the lid had been marked for three days; there was slight swelling of the lower lid; considerable injection of the conjunctival vessels generally; lachrymation and intermitting periods of much intolerance of light. Vision, *per se*, was unimpaired. Search was at first made for a foreign body, but none could be found. The conjunctiva of the lower lid

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was deeply reddened and roughened with distended and projected vessels. The patient seemed confident that there existed some fixed cause of irritation; and I was inclined to ascribe it to a villous projection of the mucous membrane. When, however, I had kept the lower lid everted for some little time, I perceived an indistinct opalescence in two or three spots towards the outer angle. Instead of applying a fine point of caustic to the roughened membrane, as I had intended, I scarified, with a narrow knife, these whitened follicles, producing, as the patient expressed it, instant relief, and, subsequently, an unusually speedy recovery of the eye.

Believing these facts to be suggestive of treatment, I beg to submit them to your pages. I feel satisfied that there was no disposition in the case to the formation of pustule, or of minute abscess in the lid; and I feel equally certain that the lesion described would, in all probability, have escaped my notice, had I not employed both time and patience in seeking it out.

I am, &c.

Birkenhead, January 28. Essex Bowen, M.D.

Groans of an Assistant.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—While it is held that the Medical Profession is one of the noblest that can by any possibility engage the thoughts or occupy the mind, it is to be regretted that some of its members act in a most disgraceful manner; for instance, two Medical men, holding a large union, club, and private practice, residing in a town in ——, have engaged a dispenser the last month; but what, think you, has been his previous experience? Was it in a druggist's shop? No; but he was an errand-boy in a draper's establishment; and these two worthy Medical men have now employed this young lad, aged 18, without any experience whatever in compounding, and pay him the miserable salary of £30 a-year, out of which he has not only to support himself, but also assist a poor widowed mother.

May I ask, is this the way to support the honour and dignity of a Profession which they have sworn to maintain? And it is to be regretted that every dispenser employed by these gentlemen has nearly been of the same stamp as the one they have now. Of course, when the dispensers get a sufficient knowledge of compounding, they leave them, and they see no reason why they should not become members of the Profession themselves, just like the last dispenser they employed, who, after over two years' hard work for a miserable salary, commences lectures next winter at one of our London schools. Of course, the poor dispenser looks to his own interest, and, as soon as he considers himself competent, looks out for a better shop, which, heaven knows, he can easily get. By acting as these two Medical men do, they admit men into the Profession who never otherwise would have a chance of getting in. Of course, they would not give them a certificate of apprenticeship. However, any one who is acquainted with the regulations at the Hall must be aware that it can be easily got over, as it is only required to have a certificate of having served after the manner of an apprentice.

You will say, perhaps, these Medical men cannot afford to give a fair salary, so as to employ a really competent assistant. I say, with truth, that they have one of the best practices in ——, and one of them I have alluded to was, some years ago, lecturer at one of our London schools. I trust they may read this letter, as they cannot contradict a word I have stated. Some principals care not if their dispenser was starving, so as they get the work done; no thought whatever of his comforts; and if they could get a dispenser to work for nothing, they would gladly do so. Indeed, there resides a certain M.D. in —— who boasts of kicking his assistant, but he often finds that more than he can manage.

As long as Medical assistants are treated badly by employers, and Medical men employ grocers' and drapers' boys to compound medicine—this, together with Medical men injuring each other by every mean act, lowering fees, etc., makes one ashamed to belong to such a Profession.

I am, &c. A Well-treated Assistant.

[We may sympathise fairly with the misfortunes of assistants, but the laws of political economy will not be set aside; and whilst there are a large number of persons willing to do the work for little or nothing, their position cannot be improved.—Ed.]

Children Suffocated in Bed.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—As a preventive measure for this class of fatality, I wish to direct your attention, and that of your readers, to an apparatus called the "Nursing Basket," invented by Mr. C. E. Wright, of Birmingham. It has been highly approved by the Medical Profession, but not sufficiently made public. I am so well convinced of the value of the basket, that I have ordered several of them, and they are now in use among the poor of this town. A child, when laid in the basket—which is very light and portable—and placed by the side of the mother's bed at night, or on the bed, would be warm and safe, and not liable to be overlaid or suffocated, which is so often the case when mothers and nurses are in the habit of going to sleep with an infant on the arm. By the use of this admirable contrivance, safety, cleanliness, health, and comfort are promoted. It has many other advantages, some of an industrial kind, to the mother, of which I cannot now stay to speak. I merely add, that a specimen of the "Nursing Basket" may be seen at South Kensington Museum, at the Economic Museum, Twickenham, and at Madame Caplin's Museum, London. It is a subject worthy of the profound attention of the Medical Profession and of all philanthropists, not only to discover the true causes of such accidents, but to devise some efficient measures for their prevention.

I am, &c.

Brighton, January 23. M. A. B.

A Singular Cause of Asphyxia of a Child during Birth.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The occurrence of such accidents as the one recorded below is, I am inclined to believe, very rare in obstetric practice, because I do not find in the works upon obstetric subjects any mention of it, excepting in Burn's "Principles," where mention is made of the membranes being carried forward by the head of the child—"like to a cap or cover"—forming, I suppose, the once valued caul. Nor have I been able to ascertain that it has been met with in the obstetric practice of some of my friends. From these circumstances, as well also from the medico-legal interest attached to the case, I am induced to suppose that a report of the case is not undeserving of a space in the pages of the *Medical Times and Gazette*, and thus ensure the attention of the Medical jurist.

It has occurred to me on other occasions, owing to several causes—*e.g.*, toughness of the membranes, etc., to find the child's life in jeopardy at the birth; but I have never met with a case of a child, quickly and easily born, cut off from life owing to a portion of the membranes being carried forwards with it, and closely applied over its head, face, and neck, like to a tightly-fitting oiled silk cap, so as completely to exclude the air from entering the lungs through the mouth or nostrils, and thus preventing the first inspiratory efforts being made.

Had this accident occurred to an illegitimate child, the mother, although anxious to avoid exposure, yet not altogether indifferent to the well-being of her child, certainly not desiring its death, would be exposed to serious suspicions. For supposing the birth to be sudden—almost unexpected, as in this instance—did she, when recovered from the shock, endeavour to ascertain the condition of the child and remove the membranous bag from the head and face, she would, if early, probably ensure the child's life; but if, as in this case, some minutes had elapsed, its death would be certain, and no statement the woman might make would secure her from the suspicion of infanticide.

May not some of the cases of presumed infanticide find an elucidation from the occurrence of accidents similar to this? If so, it must be confessed that such cases are deserving of consideration.

Mrs. W., married, required my attention January 17, 1863, she being in labour of her third child.

I may here remark that this patient has hitherto experienced lingering labours, owing to some slight deformity about the sacral prominence: on the two previous occasions she experienced severe pains, accompanied by the discharge of much fluid two or three days before actual labour commenced.

On January 15 I received notice of her condition, she having, whilst at dinner, experienced considerable pain a short time: during the continuance of this pain she felt something give way within her, and much watery fluid escaped from her. The remainder of the day she passed comfortably in her room, and when I saw her on the evening of the 16th she was moving cheerfully about, and was comparatively easy. On the evening of the 17th she became rather more distressed, and, experiencing some three or four decided and sharp uterine pains, I was at once sent for, she having now resumed her couch. I reached her in ten or twelve minutes, and found her on the bed in the usual obstetric condition. I was surprised to learn, in answer to some queries as to her state, that the child was born, and that it had been so almost before she could properly dispose herself upon her bed; it was very quiet, but it had moved its feet slightly once or twice.

Concerned as to the extreme silence of the child, I at once proceeded to ascertain its condition, and found the infant all but fully born, lying upon its back, motionless, warm, and perfectly white; the face, head, and body covered with sebaceous matter, but looking very smooth and glistening, as if varnished; the mouth and eyes firmly closed, and the lips very pale in colour. On feeling for pulsation over the region of the heart, and finding it absent, the cord was appealed to, and about an inch or so from the body the umbilical arteries could be felt distinctly, but slowly and feebly, pulsating. That the child was in a condition of asphyxia was evident, but from what cause was not so evident, for there was no exclusion of air by the pressure of the clothes, nor had any restraint been imposed on the child from the position of the mother; the cause was allowed to remain unexplained for a time, and endeavours were at once employed to restore life to the child. Hot and cold water were both abundant and at hand.

As a preliminary to the employment of measures to effect the restoration of suspended animation, I proceeded to cleanse the child's face with a sponge from warm water, and was surprised to meet with some difficulty about the mouth, the entrance of my finger being resisted by the interposition of a very transparent membrane, which, puckering up about the chin, enabled me to seize it and to draw it from off the entire face and head, to which it had been closely applied, giving to the surface a glistening appearance, and completely cutting off the air to the lungs through the mouth and nostrils. On removal of this membrane from off the child's head and face, endeavours were made to recall life by the employment of the Marshall Hall method; hot and cold water, the introduction of the tracheal tube—these and other expedients proving futile after twenty-five minutes had elapsed, no respiratory movement being excited in the child, and it having become cold, and the pulsation of the cord having ceased through its entire extent, the connexion between the placenta and child was divided, a few drops of blood, dark coloured, escaping. The placenta was readily removed in twenty minutes later. The mother subsequently did well.

In conclusion, it is to be regretted that her nurse was absent, an inexperienced friend being only present at the birth. I have also to deplore my absence, for, had I been in time, the membranes would have been much earlier ruptured, so as to have permitted the child's head to have entered the world entirely free from them. I am, &c.

Jermyn-street, S.W. Frederick Hall, M.R.C.S., etc.

On the Treatment of Diabetes.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In the *Medical Times and Gazette* of Saturday last appears a "Case of Diabetes Successfully Treated by the Saccharine Method," contributed by Mr. Usher, of Canterbury. In connexion with this case there are one or two points concerning which I, and possibly some others of equally dull apprehension, would like some more information, as, on reading and re-reading the contribution, I cannot light on a single word or passage touching the administration of sugar, which, in this instance, is set forth as the curative agent by the author. Of this, however, more hereafter; and, in the meantime, I would beg to inquire what was really the condition of the patient when first seen? Under what particular disease was he labouring so heavily that "he was in bed; face very much flushed; eyes glazed; tongue hanging from the mouth; lips covered with sordes; skin harsh and dry; intense thirst; inability to sleep or take a morsel of food; sternal pains severe and constant; bowels constipated?"

From this enumeration of symptoms, apparently so fatal, are we to understand that the man was dying of diabetes; and that by a combination of "spt. junip., liq. hydrarg. bi. chl." with "inf. tiliæ Europ.," he was happily restored to life even when in the jaws of death? At the risk of being considered impertinently curious, and even disgustingly hypercritical, I would like to have some light thrown on the therapeutic effects of this combination of remedies—as to how the "spt. junip." (by which, I presume, is meant the spt. junip. co.), with the "inf. tiliæ Europ." (by which is probably indicated inf. tiliæ) and the "liq. hydrarg. bi. chl.," acted so well together in bringing round a patient apparently dying of diabetes. In my humble opinion this mode of treatment savours much of the motto—"Similia similibus," etc.—But there are such strangely ingenious

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remedies turning up now-a-days, that we can only open our eyes, and express our thanks for all the mercies.

The patient was, no doubt, diabetic, and no doubt he was, as reported, restored to comparatively good health by a highly-varied system of tonics, and by a proper and nutritious dietary, including glycerine; for I take leave to question whether this substance contributed to the cure in any other way than by supplying nourishment, just the same as, though in a less degree than, cod-liver oil would.

If glycerine be claimed as the chief remedial agent in this case, and as illustrating, as it is evidently meant to do, the saccharine mode of treatment, I would beg to ask in what way it can exert any curative influence further than by supplying nutrition to a wasting body? Does it, sugar of oils though it be called, go to supply the place of the grape sugar, which is being rapidly eliminated from the diabetic patient? I cannot subscribe to the notion that the exhibition of glycerine is an illustration of the "saccharine method" of treatment. "To furnish him," says Mr. Ussher, "with this sugar in the quantities that he can appropriate will stop the downward progress as it did in this case; while the other constituents of glycerine will help to restore the general decadence." I would beg to inquire, what are the constituents of glycerine that remain after the appropriation of the sugar; and in what manner these constituents "will help to restore the general decadence?"

The pathology of diabetes is, doubtless, hard to be understood; but, thanks to the talented Pavy, whose researches on this subject are worthy of all praise (though I do think it has been meted out to him rather niggardly), it is becoming more intelligible; and he who would spin fine theories on the dogma—that the normal function of the liver is to form sugar, either ignorant of, or wilfully ignoring, Pavy's most conclusive experiments, ought to be "sent to Coventry." I am, &c.

January 21. HYPERBOREUS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your valuable Journal of the 17th inst. a case appeared, which "is a capital illustration of that cardinal defect in Medical reasoning which the *Medical Times and Gazette* finds its special vocation in correcting." The case I allude to is one by H. Ussher, M.B., of "Diabetes Successfully Treated by the Saccharine Method, and Remarks thereon." The writer terms his method the "saccharine," but from first to last not a particle of sugar, or of anything allied to sugar, was administered. Glycerine is, no doubt, sweet, but so is hyposulphite of silver, and also sugar of lead, but yet no one ever dreamt of applying the term "saccharine" to either of these two latter substances. Glycerine has no resemblance whatever to sugar of any form, but is, in reality, an alcohol of the teratomic type, its formula being $C_6H_8O_6$, whereas all true sugars possess an equal number of equivalents of hydrogen and oxygen. But even granting that glycerine is or contains sugar, as asserted by the writer, it does not at all follow that the good effects observable were due to it alone; for, in addition, the patient got a regular hotch-potch of quinine, iron, nitric acid, hyposulphite of soda, acetate of zinc, cod-liver oil, chiretta, hyoscyamus, strychnia, Dover's powder, alterative pills, and, lastly, a regulated diet.

Some of the prescriptions in this case are so peculiar as to deserve a passing notice. Take, for instance, the following:—℞ Quinæ dis., gr. viij.; ferri am. tart., gr. x; acid. nit. dil., ʒj.; tr. hyoscyami, ʒj.; glycerinæ, ℥ij.; aq. ad ℥viij., M. Now, in this most of the iron will be thrown down as sesquioxide, in consequence of the decomposition of the salt by the acid, so that the mixture will be, to say the least, inelegant. But six days later we find a far greater blunder committed, viz., the adding to this acid mixture gr. xij. sodæ bicarb. In order to ensure the whole of the iron being converted into as inelegant and inert form as possible, we find a new remedy introduced into a precisely similar mixture, viz., tincture of chiretta, the proper and peculiar action of both the acid and chiretta being thus impaired. On May 19 we find a prescription which nothing but a very decided predilection for homœopathy could have induced him to write. ℞ Ferri am. tart., ℈j.; liquoris strychniæ, gr. j. ad Oj. ʒj.; quinæ dis., gr. vj.; acid. nit. dil., ʒj.; aq. ad ℥viij. How this is to be taken is not stated, but taking it like the preceding, at the rate of ℥ss. ter. die, the strychnia in each dose would be exactly 1-2560th of a grain; so that it would require at least fifty-two days before the patient would have ingested the amount of one ordinary dose (1-16th gr.), even allowing that this drug is cumulative in the highest degree.

As to the method by which the writer estimated the amount of sugar, it is one which has been repeatedly proved to be so variable and fallacious in its results, that the figures stated by him cannot be relied upon. In many cases, indeed, the "companion phial" will not yield even an approximation to the truth. Thus, on April 27, the specific gravity of the urine was 1·035, yet in two specimens of it the amount of sugar per ounce was respectively eighteen grains and seven grains. Now, it would be hard to account for this great difference except by supposing that some very great increase of urea had occurred, which would, of course, keep up the specific gravity, though scarcely to such an extent as would reconcile the writer's results with those of experience.

In the remarks which follow, there are one or two curious assertions made, which it would be interesting, as well as instructive, to have more fully elucidated. Thus, the connection of the liver with the skin has not, I believe, been noticed by any anatomist up to the present time. Nor does it appear from observation that proximity of any organ to the surface of the body renders it co-ordinate in use to the skin, so that the "numerous illustrations" of this fact as regards the liver would be extremely valuable.

In the last paragraph but one of his paper, Dr. Ussher, not content with asserting glycerine to be a sugar, states "that the other constituents will help to restore the general decadence." This manifestly implies that glycerine consists of sugar and certain other flesh-producing and calorifacient materials,—a fact previously as unknown to chemists as the connection of the liver and skin to anatomists. These being the chief points of interest in this curious case, and apologising for the length of this communication, I am, &c. A FOURTH YEAR'S MAN.

COMMUNICATIONS have been received from—

HYPERBOREUS; Dr. J. LANG; Mr. J. HAZARD; A REGISTERED MIDWIFERY DIPLOMATIST; L. L. G. F.; F R.C.S.; A. B.; A WELL-TREATED ASSISTANT; Mr. LE GROS CLARKE; F.R.C.S I.; A FOURTH YEAR'S MAN; M.D; Mr. F. HALL; Dr. HOGG; OLDHAM; A FATHER; ANOTHER M.D.; A SECOND WHO WAS THERE; MANCHESTER; Dr. G. JOHNSON; Dr. BARRIE; Mr. STONE; Dr. GIBBON; Dr. ESSEX BOWEN; Mr. F. L. CRUMMEY; THE SECRETARY OF THE LONDON MEDICAL SOCIETY; Dr. E. ELLIS.

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 24, 1863.

BIRTHS.

Births of Boys, 1079; Girls, 1007; Total, 2086.
Average of 10 corresponding weeks, 1853-62, 1812·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	692	734	1426
Average of the ten years 1853-62	664·8	683·9	1348·7
Average corrected to increased population..	..	..	1483
Deaths of people above 90	..	..	8

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	..	26	16	2	12	8	1
North ..	618,210	10	7	21	5	15	17	2
Central ..	378,058	..	6	6	..	10	12	1
East	571,158	6	5	8	1	13	25	5
South ..	773,175	1	9	12	4	16	9	4
Total.. ..	2,803,989	17	53	63	12	66	71	13

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·430 in.
Mean temperature	43·8
Highest point of thermometer	53·8
Lowest point of thermometer	31·9
Mean dew-point temperature	37·1
General direction of wind	S.W.
Whole amount of rain in the week	0·32 in.

APPOINTMENTS FOR THE WEEK.

January 31. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m. W. S. Savory, Esq., F.R.S., "On Life and Death."

February 2. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Dr. Cockle, "On the Conditions of the Aorta Simulating Aortic Insufficiency." Mr. Streeter, "On Disease of the Brain by Extension from the Ear." Dr. Greenhalgh, "On a New Metrotome." Dr. Richardson, "On Nitrate of Amyle." Communications from Drs. Gibb and Thudichum, Mr. Baker Brown, and others.

ODONTOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.

3. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ETHNOLOGICAL SOCIETY, 8 p.m. Mr. Dunn, "On some Observations on the Psychological Differences which Exist among the Typical Races of Man."

4. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

OBSTETRICAL SOCIETY OF LONDON, 8 p.m. Mr. Baker Brown, "On Vesico-Vaginal Fistula—the Results of Fifty-five Operations at the London Surgical Home." Dr. Shortt, "On the Medical History of Woman in India."

5. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

6. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Meeting of Council.

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON, 8 p.m. Practical Evening, for the Narration of Cases and the Exhibition of Specimens.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday (to-day) at 2 p.m.:—

By Mr. Fergusson—Lithotrity; for Vesico-Vaginal Fistula; Necrosis of Lower Jaw.

By Mr. Henry Smith—For Hare-lip; Nævus.

By Mr. J. Wood—Plastic Operation upon Neck.

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F. PORTER SMITH, M.B. Lond.,
Evercreech, March, 1862. Associate of King's College, London, &c.

** Fresh Reports will be published in the Medical Journals from time to time.—Bristol, 1862.

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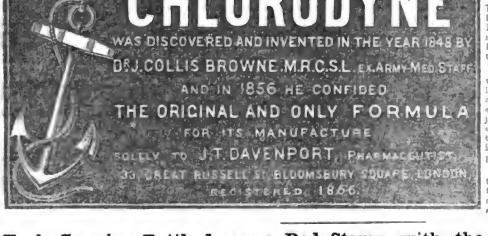

NOTIFICATION.

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A CLINICAL LECTURE ON THE DIAGNOSIS OF HERNIAL AND OTHER TUMOURS OF THE GROIN AND SCROTUM.

DELIVERED AT THE

Westminster Hospital.

By CARSTEN HOLTHOUSE,
Surgeon to the Hospital, and Lecturer on Anatomy in the Medical School.

GENTLEMEN,—From what we know of the anatomy of the parts in the groin, it should follow that inguinal hernia would occur most frequently in the male, and femoral hernia in the female, and this is fully borne out by the statistics of the two affections; indeed, so true is it, that, knowing the sex, we are apt to prejudge the nature of the hernia, and sometimes erroneously, as happened in the following case, with which most of you are familiar. A man, 47 years of age, was lately admitted into Luke ward with strangulated hernia, supposed to be inguinal. A tumour of an oblong form occupied the left inguinal region, its long axis was parallel with Poupart's ligament, and it projected a little above this structure. It differed, however, from an inguinal hernia in the following important particulars:—1st. Its outline was more defined. 2nd. It was more prominent. 3rd. It was more superficial. An inguinal hernia in this situation must have been wholly or in part within the inguinal canal, and, therefore, beneath the aponeurosis of the external oblique, which, owing to its unyielding nature, would have prevented such a prominence and such a definition of the tumour as was here apparent; but the decisive test for determining whether it were an inguinal or a femoral hernia, consisted in carrying the finger into the inguinal canal. This you saw me do: invaginating a portion of the skin of the scrotum on the end of my forefinger, I passed it into the inguinal canal, and found this passage free, and the tumour lying in front of my finger. There could be no doubt, then, that this was a femoral hernia, —one of those cases I have before spoken of to you, in which the hernia, having presented itself at the saphenous opening, and continuing to increase, takes the course in which it meets with the least resistance, viz., upwards. The taxis having failed to return the hernia, the usual operation was performed, and the patient, as you know, left the Hospital well a few days ago.

In the female, the demonstration of the variety of hernia is less perfect than in the male; this arises from the impossibility of carrying the finger into the inguinal canal, owing partly to the absence of any lax skin like that of the scrotum, partly to the small size of the inguinal canal, and partly to the existence of a large quantity of subcutaneous fat; this is so abundant in some women, that the different outlets through which a hernia may protrude are with difficulty made out. In these cases, you must be guided in your diagnosis chiefly by the duration, position, and size of the hernia: a recent one could not be situated *above* Poupart's ligament, unless it were inguinal, and in this case it would be small, ill-defined, and little prominent, causing a fullness rather than a tumour; while a small and recent hernia *below* that structure (Poupart's ligament) would show it to be femoral. A large and old femoral hernia might, as already seen, turn up over Poupart's ligament, and so occupy the inguinal region, but it would produce no alteration of the labium pudendi of the same side; whilst, on the other hand, a large and old inguinal would pass down into the labium, and produce a marked contrast between it and its fellow. There is, however, a variety of inguinal hernia which descends into the thigh instead of into the scrotum or labium, and so resembles a femoral hernia; but this is so rare an affection, that I need do no more than call your attention to the fact that such a hernia has been described. Its diagnosis from a femoral hernia might probably be established by a careful examination of the tumour and by the history of its origin and progress.

I now come to the second and more important part of my subject, viz., the diagnosis of hernia from other swellings which bear some resemblance to it, and these may be classed under two heads:—1st. Those situated in the neighbourhood of the groin, including the region immediately above and below Poupart's ligament; and 2nd. Those met with in the scrotum or labium. Among the tumours in the former situation may be enumerated enlarged glands, abscesses, imperfectly descended testis, hydrocele and hæmatocele of the cord, adipose tumour of ditto, the fibrous tumour of the iliac fossa of M. Nélaton, occurring, for the most part, only in females, aneurism, dislocation of the femur upon the pubes. The three last of these may be fairly dismissed from our consideration, as their characters are too well marked to be likely to be confounded with hernia. The tumours in the scrotum or labium which bear some resemblance to hernia, are hydrocele, common and encysted, hæmatocele, varicocele, sarcocele, and other tumours of the testis or cord; and, in the female, cysts and chronic abscesses of or in the labium.

Enlarged glands have been mistaken for hernia, and *vice versâ*. Here are two casts, one of a direct inguinal hernia, and the other of a chronically enlarged gland, and, as far as appearances only are concerned, they certainly bear a very close resemblance to each other; but there was no other point of similiarity: the one was reducible or disappeared on pressure, the other did not; the one was soft and elastic, the other hard and unyielding; the one had an impulse communicated to it on coughing, the other had not; the one first appeared suddenly, the other had been slowly growing. And here I must caution you against relying implicitly on the statements of patients. A widow, 66 years of age, presented herself among the out-patients, when I was Assistant-Surgeon to this Hospital, with a tumour in the left groin, which she called a rupture. She said she first observed it about nine months ago after carrying a heavy load, and that till quite lately she had been able to reduce it; she was now unable to do so, and, therefore, came to the Hospital to have it reduced. On examination, I found a large red, irregular shaped tumour, evidently composed of a mass of diseased glands, and on further investigation I discovered that the source of this enlargement was cancromatous ulceration of the uterus and vagina; yet so prone is poor human nature to deception, and so loth to be undeceived, that this patient went away dissatisfied that her so-called rupture was not returned, and, as I afterwards learnt, she declared that her case was not understood.

Abscesses, one would imagine, could scarcely be mistaken for hernia, did we not know by experience that the contrary is the fact. You have all, I believe, seen a case now under my care, in which this mistake was committed. The patient, a mariner, 29 years of age, presented himself at the Surgery, with an oblong swelling, extending obliquely from near the right anterior superior spine of the ilium to the spine of the pubes; the skin over it was of a natural colour, but it was slightly tender on pressure, especially towards its iliac extremity; it distinctly fluctuated, no impulse was communicated to it on coughing, and it could not be made to disappear on pressure. The history the patient gave of the tumour was the following:—About two weeks ago, on going aloft, he felt some stiffness in the hip-joint, and, on examining his groin, found a small swelling, as large as a walnut. He immediately consulted a Medical man, who told him it was an enlarged gland, and prescribed accordingly; but, at his next visit, on finding it larger, it was pronounced to be a rupture, and a truss was applied. This the patient was wearing when he came to the Hospital.

Only a few days ago, I was requested by a Surgeon in the country to see a female, who had a swelling in the right groin, about the nature of which he was doubtful, though he suspected it to be a femoral hernia. It was soft and elastic, and partly reducible; but it was also dull on percussion, fluctuating, and slightly tender on handling. It was a psoas abscess. But not only are abscesses sometimes mistaken for hernia, but the latter for abscesses. Some years ago, while I was Assistant-Surgeon to this Hospital, a female, 46 years of age, was sent here from the country, with a large tumour in the right groin; the skin over it and around it was discoloured, having a bruised or ecchymosed appearance, as if the tumour had received a severe blow, or been roughly manipulated. This discoloration, together with its great size, and the absence of any definite history, led the Surgeons who saw it to doubt whether it were a hernia, and one of them inclined to the opinion that it was an abscess. However, as the bowels had not acted for three days, it was determined to make an exploratory incision into it. Extravasated blood escaped from the incision, and, on cutting deeper, the sac of a large hernia was opened, from which escaped

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dirty, bloody, stinking fluid, revealing two large knuckles of distended ileum, partly gangrenous. The patient only survived the operation about six hours. Now, I have related this case for the purpose of illustrating two facts:—1st. That a hernia may so far resemble an abscess as to lead even experienced Surgeons to be doubtful of its nature; and, 2nd. That this doubt could never have arisen had a very simple test been applied, to which I shall again allude presently,—viz., percussion of the tumour. The fluctuation of an abscess is usually considered sufficient to point out its true nature; and so it is as a general rule, and in by far the greater number of abscesses; but the impression conveyed to the fingers by fluid within a cavity, and which we call fluctuation, is not always perfectly unequivocal,—it may be simulated by certain tumours of a malignant nature, or by a knuckle of intestine containing air, especially if a certain thickness of soft parts, or a stratum of fluid, intervene between the fingers and intestine; or, again, it may be absent, or, at all events, so obscure, owing to the distance of the matter from the surface, that error may arise from this cause, as happened in the following case:—A delicate female, 23 years of age, came under my care at the Lincoln's-inn Public Dispensary, in November, 1842, for a tumour about the size of a swan's egg, situated at the upper, anterior, and internal part of the thigh. It was movable, apparently solid, somewhat irregular on its surface, and felt like a fatty tumour; it was free from pain on pressure, and the skin over it was of a natural colour. Several Surgeons who saw it considered it to be a fatty tumour, and on this supposition the patient was admitted into one of our Hospitals to have it removed. During the operation, a sudden gush of matter took place; the Surgeon, while detaching the supposed tumour from its surrounding connexions, accidentally cut into it; it was the sac of an abscess—of a psoas abscess; and within a week the patient was dead.

But you will say in an abscess there is no impulse on coughing; well, this depends on its locality; abscesses in certain situations may have an impulse communicated to them on coughing; and it so happens that the situations in which this occurs are just those in which hernial protrusions take place, as the lower part of the abdomen and the upper part of the thigh; it is in the latter situation that psoas abscesses point; and as the upper part of their sac is situated within the abdominal cavity, you can easily understand how an impulse must be communicated to their lower part by coughing or straining, or by any act by which the sac is compressed between the viscera and abdominal wall. These abscesses also occasionally resemble a hernia in another respect—they may diminish or almost disappear on lying down, reappearing or becoming larger on standing up. If abscesses, then, may simulate hernia in so many important particulars, and hernia occasionally resemble abscesses, is there no other means of distinguishing them, you will ask, than by resorting to the knife? Fortunately there is; and it is so very simple that it seems almost incredible it should ever be overlooked—it is percussion of the tumour: the sound elicited on percussing an abscess is nearly always dull, while percussion of a hernial tumour, which might otherwise resemble it, is clear. I say *nearly* always, because I have met with a few exceptions in which air, as well as pus, occupied the sac of an abscess; but these were cases, either where the abscess had been previously opened and afterwards closed, and where, therefore, all doubt of the nature of the swelling had been removed; or they were anal abscesses, which are always preceded by unequivocal signs of inflammation of the part, and in no respect resemble any form of hernia.

An undescended testis has not unfrequently been mistaken for a hernia. I have seen the mistake committed more than once, and once I saw it cut down upon, in the belief that it was a strangulated hernia. A man has had one testicle in his inguinal canal all his life; he has noticed the swelling, and has fancied, or been told, that he has a rupture; he has even, in some cases, worn a truss for it. From a slight hurt or other cause, the tumour becomes inflamed and painful, and increases in size; this is not unfrequently accompanied with sickness and constipation, and other constitutional disturbance, and a Surgeon is consulted; he takes note of the above symptoms, but he does not observe that only one testicle is in the scrotum; and the case is pronounced to be a strangulated hernia. Hydrocele of the cord, whether encysted or diffused, bears some resemblance to hernia: a movable tumour, circumscribed in the one case, diffused in the other, occupies the inguinal canal, and, perhaps, the upper part of the scrotum, and can be pushed towards the abdominal and scrotal cavities, but not completely into them, as, indeed, is the case with an irreducible bubonocele: the difference consists in this—the hydrocele is fluctuating to the touch, and dull on percussion, whilst the hernia is either elastic to the feel, resonant on percussion, and has a distinct impulse communicated to it on coughing, in which case it is intestine; or it is neither elastic, resonant, nor fluctuating, but doughy to the feel, in which case it is omentum. The chief points in which a hæmatocele of the cord differs from a hydrocele of the same part are,—1st. The mode of its occurrence, coming on suddenly after violent exertion, or a blow on the part; 2nd. The occasional presence of ecchymosis; and, 3rd. The indistinctness of the fluctuation. In the suddenness of its appearance it is more suggestive of hernia than is hydrocele of the same part, in illustration of which I will read you the following case from Pott:—A labouring man, who had fallen down in the street, with a load on his back, was brought into St. Bartholomew's Hospital, on a suspicion of his having got a rupture in consequence of his fall, he having immediately perceived a swelling in his groin and scrotum which he had not before. The tumour seemed to occupy the whole spermatic process, which was so enlarged by it that it was impossible to feel the passage of it from the abdomen through the muscle; but the testicle below it was perfectly distinct. The appearance of a tumour, the suddenness of its formation, the distinct situation of the testicle below, and the accidental circumstance of the man's not having had a stool for two days past, inclined Mr. Freke (whose week it was) to believe it to be, and to treat it as, a rupture. He made some attempts for reduction, and, finding them fruitless, determined upon the operation immediately.

He divided the skin and membrana adiposa down to what he took to be the hernial sac; and, when he had done so, had a mind to endeavour at the return of the intestine without opening the sac. Accordingly, with his probe scissors he divided the tendinous opening in the abdominal muscle, and then again tried to reduce the gut, but to no purpose, for nothing would go up. At last, though with much reluctance, he was obliged to lay open the containing membrane. He had no sooner done this, than a large quantity of blood, partly fluid and partly grumous, burst forth, and the whole tumour subsided, leaving the process perfectly free, and containing neither intestine nor omentum.

A combination of hydrocele of the cord with incomplete descent of the testis is sometimes met with, as in the following case, which some of you may probably remember. Here is the case:—It is so instructive, that I will read you some of the notes of it from my case book:—

H. B., aged 48, blacksmith, was admitted into Henry Hoare ward early on the morning of March 19, 1861, with a painful tumour in the right groin, for which he was wearing a truss, and great tenderness and distension of the abdomen. The tumour, he said, had become much larger since the 16th, and on the day before his admission he had had vomiting. His pulse was feeble, and there was considerable prostration. The House-Surgeon, believing the case to be one of strangulated hernia, placed the patient in a warm bath and tried the taxis; but the swelling not yielding to these means, I was sent for. Hearing that the taxis had been tried without success, I gave directions that everything should be got ready for operating; and, on my arrival, I found the patient already on the operating table, and the inhalation of chloroform commenced. As soon as he was under its influence, I proceeded to make an examination of the tumour, which certainly presented most of the external characters of an inguinal hernia. On proceeding to handle it, however, I was at once struck by its softness, want of tension, and mobility, clearly showing that, even if it were a hernia, it was certainly not strangulated. Then, again, it distinctly fluctuated, and was dull on percussion. On examining the scrotum, the testis was found to be absent on this side, but, on carrying the finger into the inguinal canal, a small solid body, probably that organ imperfectly developed, was distinctly felt. The patient was carried to bed, and when fairly recovered from the effects of the chloroform, the following history was obtained:—Twenty-five years ago, whilst lifting a heavy weight, and giving a sudden jerk to raise it a little higher, he felt something give in his right groin, with great pain. He continued his work, however, and did not examine the part till night, when he found a hard lump, tender on pressure, and as big as a small marble. For five weeks afterwards he had some pain in the "lump," but it underwent no change in size or consistency.

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Twelve years ago he was persuaded by one of his mates to wear a truss; and he has continued to wear one ever since. From the first appearance of the tumour he has been subject to occasional attacks of pain in it, attended with an increase of its size and hardness. He thinks that it has altered to its present size and softness within the last five years only; but he is not certain on this point. He is not an intelligent man, and was not aware that he had only one testicle in the scrotum.

So much for the history of the tumour: now for the history of the symptoms for which the patient was admitted. It seems that he had been out of work for some weeks, and living very miserably. So far from there being any intestinal obstruction at the time of his admission, he was actually suffering from diarrhœa, hence the tympanitis and abdominal pain, which had been mistaken for peritonitis. Now, you will naturally ask, how came this case to be mistaken for strangulated hernia? The answer is simple. One little fact had been overlooked,—the bowels were not obstructed, and this single link wanting to complete the evidence of strangulation, all the other symptoms went for nothing. Nevertheless, it must be conceded that the tumour, the truss, the distended and painful abdomen, the prostration and vomiting, were well calculated to throw a Surgeon off his guard, and so lead to the error in question.

Very much resembling an epiplocele in the canal, especially if this be irreducible, is the fatty tumour of the spermatic cord, which, indeed, can scarcely be distinguished from it, and, perhaps, not certainly diagnosed. This is not of much importance, because, unless symptoms of strangulation are present, neither the one nor the other requires to be meddled with. In my next lecture I will direct your attention to the tumours of the scrotum and labium which resemble hernia.

(To be continued.

ORIGINAL COMMUNICATIONS.

NOTES ON CAUSES OF EARLY MORTALITY.

By J. WHITEHEAD, M.D.

No. IV.

Death-rate in Infancy.

(Continued from page 107.)

The French statistics bearing on this subject present some points of additional interest, inasmuch as the records are more minute for the early stages of infancy, whilst the illegitimate, in all essential points of their history, are separately distinguished.

There is one remarkable feature in the French death-rate, which is this. Although the general rate of mortality is considerably and constantly higher in France than in England, yet, during a large portion of early childhood, it is as remarkably and as constantly lower. The disparity may not be very striking in the first year's results, but will be found to be sufficiently so during the few following years. The average first year's rate, in France, for the fifteen years ending with 1831, stands at 18·24, which is very high. There is no result extant for England during the same period; but the average, thirteen years later, for the six years ending with 1844, is 14·80, being 3·44 per cent. lower than that of France. Allowance must be made, however, for improvements which may have been effected in England during these thirteen years; so that the disparity might not have appeared so great had it been possible to compare the results contemporaneously.

It is remarkable, that the preponderance in the French results occurs chiefly during the first three months of life, after which the estimates are lower than those of England to the end of the first year, and lower also, as will be shown hereafter, for several years later. Compare, for instance, the details for the two epochs referred to, as given below:

France.

Deaths (first year) to 100 births, 1817 to 1831.

Months.	Males.	Females.	Total.
0 to 3	6·76	5·27	12·03
4 to 12	3·32	2·89	6·21
First year	10·08	8·16	18·24

England.

Deaths (first year) to 100 births, 1840 to 1844.

Months.	Males.	Females.	Total.
0 to 3	4·13	3·26	7·39
4 to 12	4·07	3·34	7·41
First year	8·20	6·60	14·80

Showing an excess, during the first three months, of the French rate over the English, to the amount of 4·64; but, on the contrary, an excess for the remaining nine months, of the English rate over that of France, to the amount of 1·20 per cent.

Take again the respective issues for the two countries during the same term of life, at a more recent date:

France.

Deaths (first year) to 100 births, 1855, 1856, 1857.

Months.	Males.	Females.	Total.
0 to 3	6·01	4·70	10·71
4 to 12	3·73	3·17	6·90
First year	9·74	7·87	17·61

England.

Deaths (first year) to 100 births, 1858, 1859, 1860.

Months.	Males.	Females.	Total.
0 to 3	—	—	8·51
4 to 12	—	—	6·74
			15·25

Exhibiting still an excess in the French first year's mortality of 2·20 per cent., and also an excess on this, an exceptional occasion, for the remaining nine months of ·16. But it is due to observe, that the French death-rate has steadily decreased from the epoch ended 1831 to that ended 1857 to the extent of, for the first three months, 1·32, and for the whole of the first year, ·63; whilst the English rate, from the first to the second of the epochs above recorded, has increased to the amount, for the first three months, of 1·12, and for the whole of the first year, of ·45.

The causes of this differential fatality, and of the ever-recurring fluctuation in both countries, are numerous. Modes of nursing, tact in the adaptation of regimen, and the nature and relative sufficiency of means, are, doubtless, among the chief of them. The more favourable results in England for the first three months may, in great measure, be due to the practice, much prevalent among all classes in this country, of maternal breast-nursing during the early months of infancy at least; whilst in France it is extensively customary amongst mothers to commit their offspring, even from birth, to foster management, and that not seldom without the aid of a foster breast. This view is materially supported by the extraordinary fatality which occurs to illegitimate offspring, who, with scarcely an exception, are abandoned to the custody of strangers and the perilous infliction of artificial feeding from the day of their birth. On the other hand, the more fortunate issue for the following nine months, and for some time later, would point to a more judiciously adapted hygiene among the French during this period.

The immense preponderance of deaths during the first year, of those born out of wedlock, is painful to contemplate, and serves to illustrate how largely the life and well-being of the infant are dependant upon the natural sustenance and care which its own parent alone has the power of imparting. Any other form of aliment, however judiciously prepared, even cows' milk of faultless quality, however scientifically adjusted by approved modes of culinary preparation, are still immeasurably inferior to the maternal breast-milk, which, in the vital warmth with which it is induced when imbibed from the nipple, possesses properties which the subtlest skill of the chemist cannot supply.

It is notorious that foster nurses, both in this country and elsewhere, are chiefly supplied from among the unfortunate class of illicit mothers, whose offspring are necessarily consigned to the charge of indifferent persons, who, if not totally ignorant of infant management, are certainly devoid of many of the qualities essential to the well-being of the child, and which none but its mother possesses. Nor are these foster guardians at all times over-scrupulous as to the means they employ for the purpose of procuring repose in the event of restlessness, whether arising from disease, or from deficiency or improper quality of food. It is well known that cordi

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in the form of patent soothing nostrums and spirituous liquors, are often nefariously administered for such purposes, and possibly contribute not a little to the augmentation of the death-rate among this class of infants.

According to official returns for the year 1847(a), the comparative estimate of legitimate and illegitimate deaths at different stages of the first year of life, for the whole of France (except the department of the Seine), stands as follows:—

Age.	Deaths (first year) to 100 births in 1857. Legitimate.	Illegitimate.
0 to 7 days	2·61	5·02
8 „ 15 „	1·93	5·53
16 „ 22 „	1·15	2·80
23 „ 30 „	0·86	3·07
1 „ 3 months	3·20	6·91
3 „ 6 „	2·78	5·28
6 „ 12 „	4·10	5·85
	16·63	34·46

Thus, the rate of mortality of illegitimate children during the first year is shown to be more than double that of those born in wedlock; and the comparative estimate for the first three, as compared with the remaining nine months, is still higher, as may be better understood from the following summary of the preceding table:

Age.	Deaths (first year) to 100 births in 1857. Legitimate.	Illegitimate.
0 to 3 months	9·75	23·33
3 „ 12 „	6·88	11·13
	16·63	34·46

It is impossible to adduce an argument in favour of maternal breast-nursing more potently convincing than that which the preceding figures supply.

In the case of the illegitimate there is another cause, whereby the rate of early mortality is materially augmented: the absence, namely, of timely medical aid in the event of sickness. This is not necessarily owing to unskilfulness on the part of the practitioner employed: it is more probably due to neglect or delay in summoning such aid when required—a resource, however, which must, no doubt, be often much influenced by scantness of means.

The importance of timely and skilful medical aid is further illustrated in the great preponderance of still births among the illegitimate, as compared with those of the more fortunately circumstanced. Illicit mothers in France are seldom, perhaps never, except in cases requiring instrumental interference, attended in their confinements by skilled medical practitioners, but by *accoucheuses*. It may be observed, in passing, however, that the French midwife is usually an intelligent woman, suitably educated for her calling, and not allowed to practise without the possession of a certificate of efficiency. But there are, of necessity, various grades of these practitioners differing widely in skilfulness and experience; and it is commonly the cheaper, and consequently the least experienced of them who are employed in such cases, especially when not in Hospital.

For Paris and the department of the Seine, the disparity between the two classes of legitimate and illegitimate is less wide, although in both cases somewhat less favourable than for the rest of the empire.

The relations of still-births of those born *in* and *out* of wedlock, for Paris and the department of the Seine, for the rest of France, and for the whole of the Empire, comparatively stand thus:

	No. of children still-born to 100 births—1857. Legitimate.	Illegitimate.	Mean.
Department of the Seine	6·04	7·80	6·52
The rest of France	3·92	6·98	4·01
For all France	4·02	7·16	4·27

On the other hand, Paris, with its department, has a death-rate in early infancy somewhat below the general average. The following results copied from the official returns for 1857(b), although a little higher than those of the preceding and some other years, may be taken to represent fairly the average for a few years past:

Age.	Deaths (1st year) to 100 births—Paris and the Seine. Males.	Females.	Total.
0 to 7 days	1·19	0·97	2·16
8 to 15 „	1·59	1·23	2·82
16 to 30 „	1·57	1·32	2·89
1 to 3 months	1·53	1·28	2·81
3 to 6 „	1·15	0·97	2·12
6 to 12 „	2·15	1·94	4·09
	9·18	7·71	16·89

Compressed into the two periods of the first three and the following nine months, this table will stand as follows:

Age.	Deaths (1st year) to 100 births—Paris and the Seine. Males.	Females.	Total.
0 to 3 months	5·88	4·80	10·68
4 to 12 „	3·30	2·91	6·21
	9·18	7·71	16·89

For London, the average result for the years 1858, 1859, and 1860, in collective numbers (the details for the several months being wanting), is—males, 8·55; females, 6·90; total, 15·45; being 1·44 below that of the Parisian rate. It must be taken into consideration, however, that the density of population is widely different in the respective cities—that for Paris, with the *banlieue*, being 80; while that for London, with the suburbs, is less than 36 to the acre.

(a) "Statistique de la France, Deuxième Série." Tom. x., 1861.

(b) "Recherches Statistiques sur la Ville de Paris, d'après les Ordres de M. le Bn. Haussmann, Préfet du Department."

AN ACCOUNT OF THE

PHYSIOLOGICAL RESEARCHES OF THE REV. PROFESSOR HAUGHTON, M.D., TRINITY COLLEGE, DUBLIN.

An elaborate series of experiments on the urine of healthy men was recently undertaken by the Rev. Professor Haughton, M.D., of Trinity College, Dublin, with the object of establishing a theory of work applied to man, considered as a machine, mechanical, and mental. Reflection and observation suggested to him that the natural and proper measure of the value of a given diet was the amount of work it would produce in a healthy animal such as man. Bernouilli was of opinion that the total quantity of daily work of which a healthy man was capable was constant, no matter in what description of labour he was employed, but the state of knowledge in his time did not admit of the development of his idea; the facts, as he understood them, were against his view, and he was obliged to give up his opinion. The view which Professor Haughton takes of the subject is as follows:—A man in health consumes per day a certain amount of food and drink, and excretes per day an equivalent amount of waste matter, supposing him to be full grown, in good health, and not gaining or losing flesh: the excretions are effected in four ways—*per halitum, per cutem, per vesicam, per anum*, and are more highly oxidated than the food and drink consumed. The difference of oxidation of the ingesta and excreta, converted into work, should account for, and be equal to, the total labour effected per diem. This work is divided by the Professor into four heads: (*a*) the effort necessary to live, or the work spent on the performance of the organic functions [*opus vitale*]; (*b*) the work, converted into heat, requisite to keep up the animal temperature [*opus calorificum*]; (*c*) the mechanical work effected by bodily labour [*opus mechanicum*]; (*d*) the unknown, and hitherto unmeasured work done by the mind [*opus mentale*]. Confining himself to the subjects on which he has experimented directly, viz., the excretions *per vesicam*, and the mechanical labour of body, and work of mind, of which man is capable, he takes for granted that the substances excreted by the urine of a healthy man result from the wear and tear of tissue of every kind in the body; that, in a state of health, this excretion is exactly compensated for by the assimilation of an equal amount of the same substances ingested. Aware that, in restricting this hypothesis to the urine, he differed from many physiologists, he made a number of observations on the food taken by the persons experimented on, par-

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ticularly with reference to the relative quantities of nitrogen received in their food, and excreted by the urine. The close agreement between the amount of nitrogen excreted *per vesicam* and *per anum*, and the amount obtained in analyses of the food, has induced him to assume that the nitrogen used in the body is naturally excreted by the kidneys, and that the surplus taken in food, and not used or required by the body, is thrown out as a merely superfluous excretion *per anum*. The quantity of nitrogen in food, and in the corresponding urine and fæces, being determined by direct experiment, the quantity excreted by the skin and lungs is found simply by difference.

The first set of experiments were made with the view of determining the daily discharge of urea in healthy urine of man; and this course of investigations was rendered necessary by the difference between various authorities in their quantitative estimates relative to this subject. Having made preliminary trials as to the different methods in use among chemists for the determination of urea quantitatively, Liebig's volumetric process was adopted, as calculated to give the most accurate and consistent results, the test solution of nitrate of mercury being estimated by a known weight of pure urea previously.

The subjects of the observations were required to live according to their usual mode, without any deviation from their regular habits, for a period of from five to seven days, before the constituents of their urine were estimated. The urine was in all cases that of healthy men, and the quantity operated on was the excretion of twenty-four hours, considering this to be the natural period of man's cycle of labour, food, and rest. The subjects for experiment were divided into two classes—1. Well-fed, flesh-eating, wine-drinking men; 2. Well-fed, water-drinking vegetarians.

The following tables contain the results of the experiments:—

Table A.—Beef-eaters.

No.	Urea per day.	Urine per day.	Specific gravity.	Urea per fluid oz.	Solids per day.
	Grains.	Ounces.		Grains.	Grains.
1	465·09	34	1023·8	13·70	817·25
2	677·25	62	1019·0	10·11	1065·69
3	644·62	52	1018·5	12·40	998·55
4	554·66	50	1015·8	11·08	818·00
5	630·00	45	1028·2	14·00	1350·20
6	484·30	41	1024·8	11·81	1051·25
Mean.	575·87	47·3	1021·7	12·18	1013·49

Description of the subjects of experiment:—

No. 1. Age, 37; weight, 126 lbs.; occupation, walks five miles per day, studies five hours per day; food, 8 oz. fresh meat, 8 oz. white bread, 10 oz. vegetables.

No. 2. Age, 35; weight, 126 lbs.; occupation, partridge shooting, office work three hours, anxious about business matters; food, mixed diet.

No. 3. Age, 19; weight, 126 lbs.; occupation, studies five hours, walking and athletic games, two hours; won the prize for the long jump at the Trinity College foot-races; food, mixed.

No. 4. Age, 30; weight, 174 lbs.; occupation, walks two miles, office work, six hours; food mixed.

No. 5. Age, 40; weight, 189 lbs.; occupation, walks four miles, studies four hours; food, mixed.

No. 6. Age, 40; weight, 145 lbs.; occupation, walks five miles, studies two hours; food, mixed.

Table B.—Vegetarians.

No.	Urea per day.	Urine per day.	Specific gravity.	Urea per fluid oz.	Solids per day.
	Grains.	Ounces.		Grains.	Grains.
1	367·50	70	1014·60	5·25	1012·90
2	578·81	81	1014·76	7·14	1236·87
3	315·00	45	1015·23	7·00	712·50
4	366·12	56	1012·41	6·54	717·08
5	343·35	43	1017·17	7·67	773·60
Mean.	395·99	59	1014·71	6·76	890·99

Description of the Subjects of Experiment.

No. 1.—Age, 63; weight, 173 lbs.; occupation, walks 3 miles per day, office work 1 hour; food, 1 egg, 6 oz. bread, vegetables *ad lib.*, 16 fl. oz. milk, 40 fl. oz. water.

No. 2.—William Wall, 16th Regiment (2nd battalion), in Military Prison, Dublin. Age, 22; weight, 132 lbs.; occupation, 3 hours' shot drill, 1½ hour ordinary drill, 3½ hours oakum picking; food—breakfast, 8 oz. oatmeal, ½ pint milk—dinner, 9 oz. Indian meal, ½ pint milk—supper, 8 oz. bread, ½ pint milk.

No. 3.—William Tysack, Military Train, in Military Prison, Dublin. Age, 31; weight, 146 lbs.; occupation and food, same as last.

No. 4.—Thomas M'Donald, 18th Regiment (2nd battalion), in Military Prison, Dublin. Age, 22; weight, 146 lbs.; occupation and food, same as last.

No. 5.—Same man as No. 3, a fortnight subsequent.

(To be continued.)

THE EMPLOYMENT OF POSITION IN CONTROLLING HÆMORRHAGE.

By FRANCIS B. QUINLAN, M.D., Trin. Coll. Dublin,
Medical Adviser to St. Vincent's Hospital.

PAIN, shock to the nervous system, and hæmorrhage may be fairly considered the principal sources of immediate difficulty and danger in the actual performance of extensive Surgical operations; and, as the all but universal employment of anæsthetic agents has, to some degree, neutralised the first two impediments, it may be of advantage to recur to a plan of diminishing venous hæmorrhage, which, employed and described in the year 1845, has since been frequently resorted to, although not always with due acknowledgment to Dr. O'Ferrall, of St. Vincent's Hospital, the distinguished Surgeon by whom this plan was first devised. It will be admitted that, while most cases of arterial hæmorrhage are susceptible of comparatively easy control, there is scarcely any bleeding so rapid, so tremendous, or so alarming in its effects as that experienced in the removal of large scrotal tumours, when the enormous tortuous veins—usually found in connexion with these growths—have been divided while in a state of repletion; and it is to guard against such hæmorrhage that the plan to which I have alluded is especially directed.

The accuracy of these statements will be easily established by a brief review of some operations of the kind which have been performed with and without having recourse to this plan.

In the first of these cases, a large scrotal tumour, weighing about fifty pounds, was removed by the late Mr. Liston, the veins being in an engorged condition. Upon the first incisions being made, the blood flooded out, to use the words of that celebrated operator, "as from a shower-bath;" the patient rolled in exhaustion and agony from the table, and the operation was completed upon the floor; the patient collapsed, and was with difficulty restored by the energetic exhibition of stimulants. In Mr. Aston Key's operation, performed upon the Chinese Hoo-Loo, the results were similar, but, from the feeble Asiatic temperament of the patient, more disastrous. The operation lasted an hour and three-quarters, and the patient, who had shown some signs of syncope during its continuance, died immediately after its conclusion. It may be observed that in both these cases the genital organs were necessarily sacrificed in an effort to hurry the operation to a conclusion, in order to save the patient from impending death from hæmorrhage.

Results of this character, occurring in the hands of some of the first operators of the day, were sufficiently appalling; and it speedily became evident that, unless some means could be devised to diminish this excessive hæmorrhage, the removal of such tumours must, like the extirpation of bronchocele, be for the present abandoned. It was, therefore, with peculiar satisfaction that the Profession learned, in the *Dublin Hospital Gazette* of February, 1845, that a method of operation had been devised by Dr. O'Ferrall, by means of which he had removed an enormous scrotal tumour (fully equal to those removed by Liston and Aston Key) without difficulty in eight minutes, and with the loss of only five ounces of blood; the genital organs being preserved, and the patient having made a good recovery, notwithstanding attacks of erysipelas and various other unfavourable circumstances. Such an announcement could not fail to be in the highest degree gratifying; and it became all the more so when it was found the importance of Dr. O'Ferrall's plan of operation was only

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equalled by its extreme simplicity. Observing the great change produced in turgid varicose veins of the leg by placing the patient upon his back, and elevating the limb, and the immediate arrest of hæmorrhage from such veins which ensues upon the adoption of this position, it occurred to Dr. O'Ferrall that, if the enlarged scrotum were held up, a similar withdrawal of the vital fluid would take place, particularly as regards the enlarged and tortuous veins which were the principal sources of hæmorrhage. The result completely justified the accuracy of this expectation, — the more so as the hæmorrhage in these cases had been always observed to be principally of a venous character; the arterial hæmorrhage, in Aston Key's case, being estimated to be scarcely one-twentieth of the whole.

Since the publication of Dr. O'Ferrall's plan, a complete change has occurred in these operations, which have since been performed in rather considerable number, and with an case and success more or less resembling that experienced in his case. I now recur to the plan, because in two instances of operation published during the present year (in one of which an Asiatic was the subject) it appears to me that the able and successful operators, although adopting the method, omitted, in their reports of the cases, to make due acknowledgment to the author; contrasting, in this respect, with Mr. South, who, in his splendid work on Surgery, gives due prominence to Dr. O'Ferrall's plan.

The application of this method is by no means limited to the removal of large scrotal tumours. On the contrary, it has been resorted to by Dr. O'Ferrall in cases of considerable innocent tumours of a vascular character; and in amputations he has obtained great advantages by loosely applying the tourniquet, elevating the limb, emptying it of venous blood by manipulation, and then tightening the tourniquet. The limb can thus be kept in a state of comparative anæmia while the amputation is being accomplished; and a loss of blood can be prevented, which, by deteriorating the general quality of the vital fluid, might have laid the foundation of subsequent disease. In fact, the value of a position by which the entrance of arterial blood into a limb will be retarded, and the exit of venous blood facilitated, is almost as useful in the performance of an operation as in the treatment of inflammation.

POISONING WITH MORPHIA.

Communicated by Dr. ANSTIE.

Charles S., aged 40, of good general health, but suffering from fistula in ano, became a patient of the Chelsea Dispensary on November 3. On the evening of the 5th, the House-Surgeon, under whose care he was, supplied him with a bottle containing ℥iv. of iq. morphiæ, diluted with ℥iss. of water, directing that two teaspoonfuls should be injected into the rectum that night, in order to quiet the pain, which was excessive. Through the ignorance and carelessness of the woman who administered it, about three-fourths of the whole (equivalent to three grains of morphia) were injected. This was at half-past eight, and, immediately afterwards, the man lay down to sleep, and his wife retired to rest in an adjoining room. At six o'clock on the following morning, she went to him, and found him insensible. On the House-Surgeon visiting him, he proved to be deeply comatose, with strongly contracted pupils, and surface rapidly becoming cold. Stimuli and friction were applied to the surface, and he was thoroughly shaken and made to swallow some hot tea, with the effect of so far rousing him that once he even answered a question. At 8.30, Dr. Anstie saw him. At this time he was quite unconscious; the pulse was exceedingly weak; pupils strongly contracted and insensible to light; muscles of the jaw strongly contracted, so that the mouth could scarcely be opened at all. Breathing loud and rattling, indicating much mucus in the bronchial tubes; lips livid. It was attempted to administer coffee, but owing to the clenching of the jaws, but little could be got into the mouth; this was, however, swallowed. Coffee was injected into the rectum, but the bowel would not retain it; in a short time, however, the spasm of the jaw-muscles somewhat relaxed, and a fair quantity of coffee was got into the mouth and swallowed, producing a slightly reviving effect. Meantime, some caffeine had been procured from Morson's, and twenty grains of this were now administered, dissolved in a little water. The effect was remarkable; the pulse, which had been scarcely perceptible, rose to a fair strength, and beat 100 in the minute; consciousness slightly returned, and the limbs became perceptibly warmer. The improvement, however, lasted only for about an hour and a-half, at the end of which time it became evident that the patient was rapidly sinking. At a quarter to one (sixteen hours and a quarter from the administration of the morphia) he died quite quietly. Throughout the case there was no convulsion whatever.

Remarks.—Two things are notable in this case: the dose which proved fatal, and the treatment adopted. Three grains of morphia is by no means the smallest dose which has been known to prove fatal, for less than a grain has been known to kill an adult; but it is a small dose, nevertheless, to produce this result, and, in fact, many instances are within my knowledge in which as much has been given to patients not particularly well used to taking opiates, without any mischief occurring. This case serves to confute signally the notion, which unaccountably prevails in a good many people's minds, that opiates do not act so powerfully when given per rectum, as when given by the mouth—an idea which is entirely contradicted by my own experience, and, indeed, by that also of some of the highest authorities.

Another point which I wish to notice is the administration of caffeine as an antidote. This plan of treatment was attended with complete success in a bad case of opium poisoning, which came under the care of Dr. Campbell, an American Physician, and which is recorded in the *Southern Medical and Surgical Journal* (U.S., 1861); and, upon the strength of this case, I determined to give it a fair trial. My own experience of the treatment with belladonna had not been so favourable as to encourage me to entertain much hope of its proving useful—at any rate, in this case. What was needed, above all, was some powerful stimulus to the action of the heart, which was rapidly failing. If this could be sustained in tolerable strength for a few hours, there was reason to hope that the effects of the poison would pass away. The teaching of all the experiments which have been made with caffeine is, that this substance has a very powerful stimulating influence upon the heart, as, indeed, we might expect beforehand, from familiar acquaintance with the effects of its diluted form—coffee and tea. The action of the heart being once roused, the languid circulation in the brain is quickened, and the patient is restored to a certain degree of consciousness, perhaps sufficient to enable him to take part in the measures adopted for his recovery. For these reasons, it appears to me that caffeine is an appropriate physiological antidote to opium—far more so, at any rate, than belladonna, towards which attention seems to have been attracted solely on account of the apparent opposition between its effects and those of opium on the pupil, which appears to me an insufficient basis for the hypothesis that the two agents are mutually antagonistic in their effects on the nervous system generally. I can speak pretty confidently as to the effect of large doses of belladonna upon the nervous system of healthy persons, as I have repeatedly witnessed the operation of enormous doses given, under Medical advice, to persons whose general health was pretty good; and in one case I had an opportunity of minutely observing the symptoms of acute belladonna poisoning, which went to the very extreme of what was consistent with recovery. The result of my observation is the conviction, that the quick beating of the heart which frequently attends the delirium of belladonna poisoning, is not the expression of a stimulated condition of the heart, but merely the consequence of general nervous prostration, such as one sees in typhoid affections, and that the cerebral circulation actually languishes, instead of being quickened during the profoundest atropism.

It must be remembered that opium kills, by causing a cessation of the respiratory movements. One of the best means to meet this danger is, doubtless, the employment of artificial respiration; but a far better way of preventing its occurrence at all is to keep the brain, and, consequently, the intelligence and consciousness, in a state of activity. If once a patient, suffering from opium poisoning, becomes thoroughly unconscious, he becomes unable to make those voluntary efforts at respiration which are far more likely to prevent its cessation than artificial processes are to restore it when once it has ceased.

Now, there can be little doubt that caffeine quickens the circulation generally; and there are some special reasons for thinking that it especially exerts an influence upon the circulation of the brain; it would, therefore, be well adapted to this particular purpose.

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I have spoken with distrust of the therapeutic effects of belladonna in opium poisoning; but it must be distinctly understood that I refer only to the use of poisonous doses of that drug. What might be the effects of belladonna administered in those small doses (*e. g.*, one-sixth grain of the extract), which we give in the treatment of incontinence of urine, constipation of the bowels from want of muscular tone, etc., etc., and which, undoubtedly, act as pure stimulants to the affected part, I know not. But obviously this would be quite a different mode of treatment to that which proposes to antagonise the poisonous action of opium by means of the poisonous action of belladonna.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

RECURRENT FIBROID TUMOURS OF THE BREAST —TEN OPERATIONS.

(Under the care of Mr. FERGUSSON.)

[Reported by Mr. SMITH, House-Surgeon.]

Case 1.—Elizabeth E., aged 42, a fine, healthy-looking woman, the mother of two children; she had no appearance of cachexia, and had always had good health.

History.—About seventeen years ago she noticed a small swelling about the size of a marble below the left clavicle; it increased in size, was attended with no pain, and at the end of ten months it had increased to the size of a large walnut; it was then removed by the knife at the Birmingham General Hospital.

She applied again at the same Hospital at the end of seventeen months, and another tumour was removed from below the cicatrix of the former incision. This second appeared five months after the last operation.

Twelve months after the second operation another tumour appeared in the same place, and gradually increased in size. It was removed by Mr. Pollock, at St. George's Hospital.

After the last operation she was free for five and a-half years, when another small lump appeared in the cicatrix. This grew very rapidly, and when, at the end of a year and a-half, she applied to Mr. Fergusson, there was found to be a large tumour below the left clavicle, extending down to the mammary gland, and reaching from the sternum into the hollow of the axilla. The skin ever it was tightly stretched, glazed, and of a purple colour, and at some points seemed about to ulcerate. This was removed by Mr. Fergusson on August 17, 1861, and in six weeks she was discharged well. No microscopical examination was made of the tumour.

She was admitted again into King's College Hospital, on January 8, with several small tumours scattered about the old cicatrices. These, she said, appeared about a fortnight after the last operation, and had grown very rapidly, but were unattended with much pain. They were removed on January 11, and, upon examination under the microscope, were found to be good specimens of the recurrent fibroid tumour. She was discharged well at the end of the month.

February 27.—Another tumour, the size of a pigeon's egg, was removed.

March 3.—Another small tumour was removed.

April 30.—Several tumours have appeared in the old situation since last operation; one of which, just above the nipple, was the size of a large orange. They were all examined, and found, under the microscope, to be made up of elongated, caudate cells.

In the month of May she was twice operated upon, and once in the month of June. Fresh tumours sprung up in a very few days after the operation, and rapidly increased in size. She always begged to have them removed; and, although extensive incisions had to be made, she was able to dress them herself, and generally left the Hospital about three days after the operation.

At the end of August she died, but from no cause connected with the growth of the tumours.

RECURRENT FIBROID TUMOURS OF THE LEG— FOUR OPERATIONS.

(Under the care of Mr. FERGUSSON.)

Case 2.—Thomas H., aged 43, a gardener had lived in the country all his life, and had always had good health. He was a ruddy, strong, hearty man, with no signs of cachexia.

History.—About thirteen years ago he fell and hurt his left leg. Soon afterwards he noticed that there was a swelling in his calf; it gradually enlarged for four years. He was then admitted into King's College Hospital under the care of Mr. Fergusson, who removed a small fibrous tumour.

About six years after this he noticed another small tumour in the same place; this increased in size very rapidly, and, after he had allowed it to grow, the calf measured nineteen inches in circumference (in the first growth, of four years' duration, it only measured thirteen inches). The skin became involved, and when he was admitted into the Hospital, June 1, 1857, there was a large fungous protrusion. The tumour was removed by Mr. Fergusson; was found before section to be firm, and semi-transparent. He was discharged at the end of six weeks.

About three months after last operation, another tumour appeared near the cicatrix. This increased rapidly up to February 5, 1862, when it was removed by Mr. Fergusson, and found to consist of a soft, jelly-like substance, mixed up with clots of blood. Another small tumour was discovered lower down on the inner side of the calf, but this was firmer, and a good specimen of the recurrent fibroid growth.

On October 16, 1862, he was admitted again with several distinct tumours about the old cicatrices, each about the size of a walnut. These, he says, began to grow about a fortnight after the last operation. He has had very little pain, although they have increased in size very rapidly. They were removed by Mr. Fergusson on October 18. During the operation there was very much haemorrhage, and some little difficulty in dissecting them out. These were of a firm, fibrous structure, and, under the microscope, showed the elongated, oval-shaped cells characteristic of the recurrent fibroid tumour. He was discharged cured on November 23.

RECURRENT FIBROID TUMOURS IN THE LEG— EIGHT OPERATIONS.

(Under the care of Mr. PARTRIDGE.)

Case 3.—Chas. K., aged 50, is a comb maker, a native of London; he looked a strong, hearty man, and had always had good health. About two years ago a small tumour was removed from the front of the tibia of the right leg. This had been growing six months, and, when examined, proved to be of a fibroid character. Three months after this, another small tumour was removed.

On September 13, 1861, another tumour was removed from the same place. This had been growing twelve months, and had attained the size of a hen's egg.

April 9, 1862.—Another tumour removed; this was found to involve both the skin and the periosteum covering the tibia.

July 29.—Another small tumour was removed from the cicatrix. After the operation, extensive sloughing of the flaps occurred; and, after healthy action was established, several distinct tumours sprang up amongst the granulations; these were removed three times, twice by Mr. Partridge and once by Mr. Mason.

At the end of September, he was discharged with no signs of any more growths.

HOSPITAL FOR SICK CHILDREN.

PROGRESS OF A CASE OF SUCCESSFUL EXCISION OF THE KNEE.

(Under the care of Mr. HOLMES.)

THE patient was a healthy boy; his age at the present time is 14. The operation was performed in August, 1861, on account of chronic disease of the knee, with long-standing dislocation, and the case is reported in the *Lancet* for April 19, 1862. It will be seen, by reference to that account, that, in order to get the bones into position, the section of the femur was necessarily carried higher than was desirable, so that a portion of the whole thickness of the epiphysis was removed, and the shaft cut into at one part. On this account, anxiety was felt as to the equable growth of the two limbs; and, notwithstanding the immediate success of the operation (which was most satisfactory), doubt existed as to its ultimate utility. The precise measurements, which were taken at the time of the boy's discharge from the Hospital, were unfortunately mislaid; and the report merely says, in general terms,

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that the shortening was "fully two inches." Mr. Holmes' impression, however, is, that the precise measurements would have given a greater shortening.

The boy attended recently (November 29) for the purpose of showing his limb. To outward appearance, nothing could be more satisfactory. He can walk (with a high-soled shoe) actively, and with very slight limping. The operated limb bears the weight of the body in standing on one foot. He generally uses a stick, but can walk quite well without it. The limb is quite straight, and firmly soldered at the seat of operation. It does not appear more shortened than when he left the Hospital; but the measurements certainly indicate a shortening of at least three inches—the healthy limb measuring a little over 28¾ inches from the anterior superior spine of the ilium to the point of the external malleolus, while the same measurement on the opposite side gives only 25¾ inches. This shortening is partly compensated by inclination of the pelvis. No spinal curvature exists.

The boy and his friends are highly delighted with his restoration to activity; and the limb, as it now is, is certainly greatly superior to any artificial leg; still, some little doubt yet remains as to its future condition. He was accordingly requested to exhibit himself again at the latter part of this year.

CASE OF EXCISION OF THE KNEE-JOINT—RECOVERY—CONDITION OF THE LIMB THREE YEARS AFTER THE OPERATION—CLINICAL REMARKS.

(Under the care of Mr. THOMAS SMITH.)

This case is a valuable one, as the patient has been under observation longer than the majority of such cases; indeed, long enough (Mr. Smith said) to justify a reasonable expectation that the cure will be permanent, and long enough to afford information on the question of the influence of the operation of excision upon the growth of bones in young children. Mr. Smith remarked that resection of the knee-joint has been pronounced by many (Mr. Syme among others) to be inapplicable to the growing bones of young children, from the belief that the injury inflicted would either abruptly arrest the growth of the limb, or at all events so seriously interfere with it as to render the limb nearly useless in adult life. The results of the following case (Mr. Smith said) tends to confirm an opinion he had expressed in 1857, namely, that, provided the line of epiphysial cartilage is uninjured by the operation, the subsequent growth of the bones will continue as before.—*British and Foreign Medico-Chirurgical Review*, 1857, vol. xx., p. 313. This coincides with the results of the recent investigations of Dr. Humphry, of Cambridge, on this subject, which are summed up by that gentleman in the following words (*Medico-Chirurgical Transactions*, vol. xlv., p. 303):—"We are justified in concluding—1st. That if the epiphysial lines are sawn away in the operation of excision of the knee, the subsequent growth of the limb will be impaired; 2ndly. That if the epiphysial lines be intact, there is much probability that the growth of the limb will be fully or nearly equal to that of the other limb.

A boy, aged 9, had been suffering with repeated attacks of pain in one knee during the last three years. The first attack was attributed to a blow. When first seen, the joint was about twice its natural size, fixed and flexed at a right angle; any attempt to straighten it gave great pain, but it bore external pressure pretty well; it was elastic and puffy on each side of the patella, as if from synovial enlargement; the limb was useless; the mother stated that recently the pain had become worse in the joint, and that the boy was day by day getting thinner and weaker. He frequently awoke at night with loud screams from the pain produced by starting of the limb; there was the usual distortion of the joint, characteristic of advanced disease, the bones of the leg being drawn outwards and far backwards, beneath the condyles of the femur, and the patella being dislocated on to the external condyle.

Excision was performed on August 24, 1859, the patella and articular surfaces of the femur and tibia being removed by a short and wide semilunar incision stretching across the front of the joint. The hamstring tendons were divided, as the limb could not otherwise be brought into the straight position, notwithstanding that a second slice of the femur had been previously removed with the same object in view. A long back-splint with a foot-piece was applied, and a short, wooden splint was strapped firmly over the front of the femur, and a large pad was placed behind the head of the tibia. No ligature was required.

The joint was found to be full of tough, vascular, and pulpy synovial membrane, and a similar structure connected the opposed surfaces of bone. The back of the condyles of the femur rested on the front of the head of the tibia. The cartilage of the femur was everywhere eroded, and about three-fourths of its surface had been removed. It had a worm-eaten appearance; the bone beneath appeared healthy; the tibia and patella had suffered in the same way to about the same extent; the whole thickness of the bone removed did not exceed an inch when put together in their natural position. In taking the second slice from the femur, a portion of the epiphysial cartilage was removed over the most prominent part of the external condyle. This piece was about the size of a shilling, or rather smaller.

For the first few days after the operation the boy suffered severely from constitutional irritation, but by the sixth day the wound had, for a time at least, healed, and he had regained his appetite and ordinary condition. Three weeks after the operation, an abscess formed in front of the resected ends of the bones, which required a drainage-tube to be passed through it before its cavity would close. At the end of six weeks from the operation the splint was first changed. Three months after the operation the boy was allowed to walk across the ward at his own request, and, from his mode of progression, it was evidently not the first experiment of the kind. The limb was quite straight, and apparently firmly anchylosed (no force was employed to test it). It was an inch shorter than the opposite, measuring from the umbilicus. There were still two small sinuses open. The whole joint was encased in gutta percha, and a firm bandage applied, and at the end of November he went to Brighton to a convalescent institution.

Dr. Humphry, who was kind enough to look after him at Brighton, wrote on February 4, five months and a-half after the operation,—"There is two inches' difference in the length of the limbs, partly accounted for by the stiff limb being anchylosed in a slightly flexed position. The boy can run and do anything."

Mr. Smith saw the boy two years after the operation. The relative length of the limbs was the same, and, though the boy had grown much taller, there was still but two inches' difference in the length of the legs.

February, 1863.—The boy is strong and well. He can, he says, walk as well as other boys.

THE LONDON HOSPITAL.

CASE OF TRISMUS ALGIDUS—TREATMENT BY INDIAN HEMP—RECOVERY—CLINICAL REMARKS.

(Under the care of Dr. FRASER.)
[Reported by Mr. HECKFORD.]

GEO. M., 23, a robust sailor, was admitted on January 2, 1863. His previous health was good; he had never had rheumatism, worms, nor had he received any injury to the jaw, nor any wound or scratch whatever; in fact, all his organs seemed healthy. Having previously been very much exposed to wet and cold, the attack commenced six days before being admitted, by inability to open the mouth to its full extent. This inability gradually increased until his admission, when the jaws were so closely locked together, that the tip of the tongue could not be protruded. He had had no pain until that day, when he had some uneasiness in swallowing. There was no impediment to the lateral movement of the jaw, and it could also be brought forward so as to make the lower incisors project beyond the upper jaw; the left temporal and masseter muscles seemed more tense than the right, but not to any great degree. His appetite was very good, but he was able to swallow liquids only. Sleep undisturbed, and bowels regular. He said that a year ago he had had a similar attack, though not so severe. This, also, followed exposure to cold and wet. It disappeared in three weeks without any treatment. He was ordered a purge.

3rd.—He now complained of stiffness of the muscles of the neck. He was placed under the full influence of chloroform, but there was no relaxation of the spasm, considerable force being required to partially insert a gag, and on its being removed the jaws snapped together like a lock. To have a quarter of a grain of the extract of Indian hemp every hour.

4th.—The stiffness of the neck ceased, and he was able to

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pass the tip of the tongue between the teeth. 2 p.m.—The dose to be increased to a grain every hour.

5th.—Was able to project the tongue about half an inch.

6th.—Mouth could be opened to the extent of three quarters of an inch.

7th.—He was able to take meat for the first time. To have three grains of the extract every hour, and its effects to be carefully watched. He commenced at 6 p.m., but showed no signs of disturbance till seven o'clock the next morning, when, on getting out of bed, he felt giddy, was unable to stand, had tremor of the hands, and occasional twitchings of the limbs, and he described his sensations as those of a drunken man. The medicine was stopped, and in the course of three hours these sensations disappeared. Altogether he had taken 115 grains of the drug.

9th.—Could separate the jaws about an inch, and it was evident that the left maxillary angle was more acute than on the right side, as if there still existed some amount of spasm. He expressed himself as being perfectly well, and left the Hospital at his own desire, having a voyage in view.

Clinical Remarks by Dr. Fraser.—This affection is one of the three varieties under the species "locked-jaw," viz., *trismus nascentium, trismus algidus, trismus traumaticus.* Whatever may be the remote cause of these obscure and curious affections, it operates upon the reflex excitability, and the characteristic spasms are induced totally unconnected with any influence of the brain. Before drawing your attention to the case in question, I may observe that trismus nascentium is one of the most fatal diseases of childhood; and those of you who are likely to be engaged in obstetric practice will do well to be prepared for its terrible encounter. It seldom appears before the third, and never after the eleventh day. The pathological cause is said to be inflammation of the umbilical arteries, consequent on dividing the cord. Trismus traumaticus is a subject of too large proportions to be entered upon at present, but I may say that it seldom appears before the tenth day after the injury, and that, so far as I am informed and have seen, severe cases are almost always fatal. In mild cases various remedies have been successful. In trismus algidus the result is generally favorable, and spontaneous recoveries are not unfrequent. The intellect is unaffected; the pulse not much, sometimes not at all affected; the bowels usually costive, and if the patient survives over the fifth day of the attack recovery is pretty certain. However, sometimes, in severe and prolonged cases even of trismus algidus, the condition of the patient becomes imminent, for the jaws may be so firmly locked that suction is next to impossible; and if there be no aperture caused by absence of, or broken teeth, through which to introduce a stomach tube, life may be difficult to sustain, for it is not easy to extract a tooth under such circumstances, and we must then have recourse to nourishing injections per anum, until the spasms relax.

Until we know the cause of the one set of muscles only being thrown into spasm—viz., those of mastication, including the temporal masseter, two pterygoids, etc.—our treatment can be only experimental. The muscles in question are supplied by the motor branches of the third, inferior maxillary, division of the fifth nerve. In this case the two pterygoids seemed to be unaffected. The chloroform was administered with the intention of abolishing the reflex action (this effect is disputed by Schroeder Van der Kolk) consequent on irritation, from cold and wet, of the peripheral nerves, and conveyed to the inferior maxillary branch of the fifth, or, according to Dr. Radcliffe, to a withdrawal of nerve power. This latter opinion is entirely at variance to all our previous convictions. No appreciable relaxing effect followed the employment of the chloroform. Romberg, in his work on "Diseases of the Nervous System," vol. ii., p. 115, gives a case in which no effect was produced by chloroform, but in which benefit followed etherisation. I refer you to this work for other interesting statements.

The *Cannabis Indica* was given with the same view as the chloroform. I shall not strongly assume the "post hoc ergo propter hoc," because we know that the patient recovered spontaneously from a former attack, which, however, was less severe, and lasted longer; but I may safely aver that the influence of the hemp was beneficial, for no increase of spasm took place after its administration; indeed, the treatment evidently arrested the threatened spread to the muscles of the trunk. None of the attributed inconvenient effects of the drug were induced.

FRACTURED RIBS, WITH EMPHYSEMA—TYMPANITIS — GALVANISM — CONVALESCENCE.

(Case under the care of Mr. MAUNDER.)

J. P., aged 60, an omnibus-driver, of sober habits, stout, and of lax fibre, was admitted into the Hospital on January 17, for fracture of one or two ribs on the right side, attended by slight emphysema. Strips of plaister were applied to keep the right side of the chest at rest, and with great comfort to the patient. Six ounces of wine.

18th, afternoon.—He complained of nausea and distension of the abdomen. To take, by order of the House-Surgeon, a dose of house-medicine.

19th, 2 p.m.—Has retained two doses of salts and senna on the stomach, and took, at 10 a.m., one drop of croton-oil, but vomited, on taking some beef-tea, about half an hour afterwards. Bowels inactive, not even flatus having been passed per anum; eructations and vomiting persist, and the distension troubles him. At 2.30 p.m., galvanism was applied to the abdomen, one pole of the battery being placed upon the lumbar spines, the other being moved about over the anterior abdominal wall. The abdominal muscles contracted strongly under the influence of this agent, and, after the lapse of a quarter of an hour, voluminous discharges of flatus took place per anum, to the great relief of the patient. Brandy, six ounces. The application was continued during twenty minutes. 3 p.m.—The galvanism to be repeated at 7 p.m. if the bowels have not acted; and, after the lapse of an hour, to commence taking two grains of watery extract of aloes and one-twentieth gr. of strychnine, every two hours.

20th, 1 p.m.—Bowels were relieved at six o'clock last evening, three hours after the employment of the battery. The vomiting did not recur, and the patient expressed himself as being very much better.

21st.—The bowels have been freely moved, six pills having been taken.

22nd.—The patient is convalescent.

Mr. Maunder regarded the tympanitis and vomiting as dangerous symptoms, and believed the former to be due to functional paralysis of the muscular coat of the intestines, consequent on the sudden withdrawal of the usual stimulus, —viz., walking exercise of from three to four miles daily.

GALVANISM APPLIED, BY AID OF THE LARYNGOSCOPE, TO THE VOCAL CORDS.

The electric current has been brought to bear directly on the vocal cords by Dr. Morell Mackenzie, and two cases of functional aphonia have yielded to it immediately. One patient had completely lost her voice for two years, and had been in the London Hospital for some months, where every remedy had been used in vain by Dr. Mackenzie. Cauterisation of the larynx, blisters, and even the employment of galvanism externally, had all failed, but the application of galvanism directly to the vocal cords succeeded at once, and, after a week, the patient spoke as well as she had two years previously.

In the other case, where the loss of voice was of eighteen months' duration, and where every kind of treatment had been tried unsuccessfully in the London Hospital, the voice was immediately restored by galvanism directly applied to the vocal cords. Dr. Mackenzie has invented an instrument, by which the electric current can be set going, but does not pass beyond a certain distance till the point is introduced into the larynx, when a spring is touched, and the current reaches the vocal cords. Dr. Mackenzie recommends the remedy in the early stages of clergymen's sore-throat, before the perverted state of the nerves has led to follicular deposit.

ST. MARY'S HOSPITAL.

SEVEN CASES ILLUSTRATING THE TREATMENT OF JAUNDICE—CLINICAL REMARKS.

(By Dr. HANDFIELD JONES.)

Case 1.—Jaundice Occurring in a Spirit Drinker after "a Cold"—Treatment by Mercurial Purgatives and Benzoic Acid —Recovery under the Nitro-Muriatic Acid.

JAMES M., aged 36, admitted January 16. He had been ill three weeks, having caught cold, followed by pain in the upper part of the sacral region. It afterwards shifted thence to front of the chest. Yesterday his skin became yellow, and his urine red. He had no appetite, felt very sick, but

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could not bring anything up, and said, "It all lies across the middle of my chest." He had no pain in the right hypochondrium. The liver was four finger-breadths below the ribs, but this was chiefly from its being depressed by the lung. The heart also is overlapped by the lung. He used to drink spirits very freely till three or four months ago, but ate freely at the same time. Appetite has failed since then. An ipecacuanha emetic was ordered, and three grains of calomel for two nights, with an ounce of decoction of aloes twice a-day.

On the 19th he was very faint and sick. Tongue white; the jaundice continued; bowels not acted on. He was ordered five grains of benzoic acid four times a-day.

23rd.—State same; bowels open; ten grains of calomel for two nights at bed-time, to be followed by white mixture in the morning.

25th.—Bowels freely acted on; but the stools were still quite pale; the urine was high coloured, and the colour of the skin as deep as before. The liver was decidedly small; there was almost no dulness to be discovered in the hypochondrium, and below the right nipple the resonance of the lung extended to within about two finger-breadths of the edge of the ribs; there was no abdominal tenderness whatever. Intellect is quite clear.

℞ Acidi nitro-muriat., ♏viij.: aq., ℥j., ter. die. Nitro-muriatic acid lotion to the abdomen. The lotion caused cutaneous irritation in three days, and was then omitted. The acid was continued till February 11, when the motions had become of natural colour, and the jaundice had greatly diminished; the urine being, however, still high coloured, and the conjunctiva tinged. He complained of griping abdominal pain. He was ordered twelve grains of quinine daily, and was perfectly recovered of his disorder by March 1.

Remarks.—This was a rather severe case of jaundice, probably induced by catarrhal tumefaction of the mucous membrane of the duodenum, extending to and obstructing the gall duct. The previous spirit drinking, no doubt, had predisposed the stomach and intestines to be the seat of inflammatory congestion. Calomel, even in large doses, was of no avail, nor was benzoic acid, but nitro-muriatic appeared to be really serviceable. I think it, however, very likely that the calomel purgation was useful in preparing the way for the nitro-muriatic acid, which without it might have caused irritation.

Case 2.—Jaundice of Eight Months' Duration—Treatment by Long-continued Doses of Podophyllin and Nitro-Muriatic Acid—Subsequently by Iodide of Potassium and Podophyllin—Recovery—Remarks—Nervous Origin of the Pain in the Right Arm and Right Hypochondrium.

Jane B., married, aged 31, admitted August 7. She had been ill (jaundiced) eight months, but had been worse the last fortnight. Her skin was very yellow, stools pale, urine very high coloured. The liver was only two finger-breadths below the ribs, and there was no tumour to be felt in the abdomen. There was some tenderness in the right side. She had been blistered in that position three or four times. Immersion of the right hand in warm water caused pain in the right side beneath the ribs. She had not taken meat for some time.

℞ Podophyllin, gr. ½; extr. hyoscyami, gr. ijss. M. ft. pil., ter. die.

August 18.—Urine of much lighter colour, yellow, and turned to a deep green by any acid. It did not, when treated with sugar and sulphuric acid, give the reaction for biliary acids. The same was the case when tested on the 14th.

Cont. pil. ℞ Acidi nitro-muriat., ♏v.; aquæ, ℥j., ter. die.

23rd.—Two days ago she had a sudden attack of an influenzal character. There was hysterical agitation at first, which was followed by disturbance of the stomach and prostration.

Cont. pil. ℞ Mist. pot. citrat. efferv., ℥j.; tr. opii, ♏iv., 4tis horis.

September 1.—On examining yesterday, Dr. Jones found that the liver extended from about two finger-breadths above the edge of the ribs to the level of the umbilicus. It was very perceptible to the hand, and was decidedly tender at the lower part. She had much pain in the right side and back, catching on inspiration. The breathing in the right lung was good. Tongue clean. She was much less yellow, and stools were of a good colour. Urine scanty, and very high coloured.

Cont. pil. ℞ Tinct. cinch., ʒss.; potass. iod., gr. ij.; mist. pot. citr., ℥j., ter. die.

On the 4th five grains of the compound soap pill were ordered to be taken every night.

11th.—She continued to have great pain, chiefly under the right breast and in the right side, and about the lower angle of right scapula. Right side fully resonant everywhere. State of stools and urine improves. She had some sickness occasionally. Taking last seven days pil. saponis co., gr. v., o. n.

15th.—On the 12th and 13th she was very sick, and rejected everything from the stomach. She had one very pale stool on the 12th, and on the 13th passed urine "like blood." The evacuations were as before.

℞ Podophyllin, gr. ½; extr. canaub. Indic., gr. ¼; in pil., ter. die. ℞ Tinct. aconiti, ℥j.; aquæ, ℥ij. M. ft. lotio.

18th.—Much improved; much less pain.

29th.—Is doing very well. Urine pale, but contains films consisting of homogeneous stuff containing coarse granules and triple phosphate prisms. She had passed such films as these at various times during the last three years, and the urine had then been like blood. She complained of weakness in the right arm, and had pain down the outer part when she exerted herself. Appetite not good.

Cont. pil. ℞ Tinct. ferri ses. chloridi, ♏xv.; acidi muriatis, ♏ij.; spt. ætheris chlor., ♏vij.; aquæ, ℥j., ter. die.

October 23.—She has quite a good colour now, having just returned from the country, and is much stronger and better, but has still some pain in the right arm and side. Stools and urine natural.

℞ Ferri carb. sacch., ℈j., ter. die. Rep. pil. and lotio. aconiti.

November 11.—Calls to say she is well.

Remarks.—The cause of the long-continued jaundice in this case was most probably obstruction of the ducts by biliary concretions. The podophyllin was given with the view of increasing the secretion of bile, and, so to speak, washing out the ducts. This intention it seems gradually to have accomplished, not without the occurrence of severe pain in the right side and back. Calculi were looked for, but none found. That the remedies were efficacious seems probable, because the disorder had continued unchanged for eight months, and was cured, after treatment was commenced, in three. The extension of the pain down the right arm is clearly a phenomenon of the same kind as occurs in cardiac anginose affections. Both must originate in irritation of sympathetic nerves, which is conveyed probably to the part of the cord where the brachial nerves are implanted. How external applications to the skin of the parts to which the pain is referred can afford relief, as they unquestionably do, is a great enigma. The curious circumstance, that immersion of the right hand in warm water caused pain in the right side, must also be referred to a central nervous action. Probably the grey matter of the spinal centre had become so hyperæsthetic that a slight impression communicated to it gave rise to the sensation of pain. On this view some explanation may be offered of the above enigma, viz., that the anæsthetic action of the aconite was also propagated to the centre, and diminished the excited state of the part.

Case 3.—Acute Congestion of the Liver—Jaundice—Benefit from Leeching and Purgation—Cure completed by Quinine.

Isabella H., aged 35, married, admitted December 8, 1859. She had been ill four weeks, and had all the time been jaundiced. The urine was very dark, and the motions had been very dark, but were lighter, but still darker than natural. She had no appetite, and her tongue was rather coated, and she felt very languid. The liver was enlarged, and extended downwards fully three finger-breadths below the ribs, and also upwards higher than usual. There was considerable tenderness over the region of the liver. The lung resonance and breathing behind were normal.

Eight leeches applied to the right side, over the lower ribs, quite removed the pain. ℞ Hyd. chloridi, gr. ij.; ext. taraxaci, gr. vi.; ft. pil. duo omne nocte. ℞ Magnes. sulph., ℥j.; mist. pot tart., ℥j., ter. die. s.

This treatment was continued till January 2, when the jaundice was much diminished, the stools nearly of natural colour, and the urine still dark at times. The catamenia had appeared after twelve weeks' interval. There was still some degree of obscure pain and tenderness in the liver, as tested by deep and firm pressure on the right hypochondrium; the viscus still extended three finger-breadths below the ribs. Pulse quick. ℞ Quinæ disulph., gr. ij., ter. die.

6th.—She was very much better. The liver projected but little

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beyond the ribs, and there was no uneasiness at all on pressing on the hypochondrium. The urine varied much, being sometimes quite thick with lithates and high-coloured, and at others clean; the day's urine is generally clearer than the night's. More appetite.

12th.—Feels quite well; eyes clear; urine quite clear and rather pale; she can bear pressure on the right hypochondrium quite well.

Remarks.—The foregoing was evidently an instance of a congested and semi-inflammatory state of the liver, which gave rise to the jaundice. It is to be remarked that there was apparently no obstruction, the stools being abnormally dark. Bile, or biliary colouring matter must have been produced in excess. The *quasi* inflammatory congestive state was first relieved and lessened by leeching, calomel and saline aperients; then, when it had become asthenic, was put an end to by quinine in small doses acting as a tonic to the vasomotor nerves and blood-vessels. It is worth remarking that in such cases as the above, and in the allied state of polycholia or bilious flux, which is also attended with jaundice, the liver-tissue must be in an opposite condition to that which prevails in many common cases of icterus. Instead of being torpid, it is fully or over active, and the chief indication is to diminish the afflux of blood.

Case 4.—Jaundice—Cure apparently by Nitro-Muriatic Acid Lotion alone.

G. P., aged 25, merchant service, admitted March 3. He had been ill fourteen days, and markedly jaundiced all the time. He felt low and weak three weeks before the jaundice appeared. His stools were pale coloured, and the urine very dark. The appetite was very fair, but had not been for the first week or two of his illness. The liver extended about two finger-breadths below the ribs. Tongue coated. Bowels open three times a-day without medicine. He was ordered only a nitro-muriatic lotion to apply to the right side of the abdomen. Improvement commenced speedily, and he was quite well in a fortnight. At the end of the first week the urine deposited a copious sediment.

Remarks.—The nitro-muriatic acid appears to have acted very beneficially in this case.

Case 5.—Jaundice—Treatment by Colchicum—Recovery—Colchicum a Cholagogue.

James B., aged 22, admitted December 11. He had been ill two days, and, when seen by Dr. Jones, was jaundiced. Urine thick and high-coloured. Motions slaty. Tongue clean. Very little pain about the epigastrium; some tenderness about the region of the duodenum. Bowels open. Hydrargyri chloridi, gr. v., h. n. s.

13th.—Same state as before. Pulv. ipecacuan., gr. v., ter. die.

17th.—Since the 15th has had—℞ Acidi nitro-muriat., ♏v.; aquæ, ℥j., ter. die. Bowels relaxed two days. Urine to-day is yellow with bile, as tested by nitric acid. Motions still paler. Appetite good. ℞ Extr. colchici acet., gr. ij., in pil., ter. die.

20th.—His skin is much clearer, and the motions and urine are of a much better colour. No purging from the pills. Pulse good. Capiat pil. colchici, bis die.

31st.—He is quite well. There is scarcely a trace of yellowness of the conjunctivæ; motions natural; urine a little red in the morning.

℞ Acidi nitro-muriat., ♏v.; liq. taraxaci, ℥j.; infus. cascarillæ, ℥j., ter. die.

January 14.—Discharged.

Remarks.—There can be no question that the colchicum exerted virtue in this instance as a cholagogue. In my belief it is one of the most potent. I have seen it succeed satisfactorily when mercury entirely failed.

Case 6.—Simple Hepatic Torpor—Jaundice—Failure of Podophyllin—Good Effect of Nitro-Muriatic Acid.

Charlotte S., aged 32, admitted August 30, 1862. She has been ill eleven weeks, and jaundiced all the time; the urine has been very high coloured, and stools pale, and they are so still; there is no pain in the abdomen, and no tumour is discoverable; the liver extends about two finger-breadths below the ribs; she has had pain after taking food, and her bowels have been relaxed; tongue clean; appetite indifferent. ℞ Podophyllin, gr. ¼; extr. hyoscyami, gr. ij., ter. die.

September 4.—Some appearance of bile in the stools; bowels much acted on; urine deep red, and when treated with nitric acid it is changed to a deep, dull green—when boiled it becomes almost black.

11th.—There is some, but not marked improvement; bowels relaxed; omit pill. ℞ Acidi nitro-muriat, ♏v.; aquæ, ℥j., ter. die. a. ℞ Acidi nitro-muriat. dilut., pro manuluvio.

26th.—Her health better, and the jaundice is declining slowly; the acid has produced some eruption on the arms from its local irritation; there is no bilious diarrhœa; tongue remarkably large, clean, and smooth, not a papilla to be seen in the mid part.

October 11.—The jaundice has now almost disappeared; the motions and urine are much more natural; the appetite is good; the manuluvium has been omitted.

She was discharged well soon after.

Remarks.—The pathological state giving rise to the jaundice in this case is far from being clear. There does not appear to have been any notable congestion, or any impaction of concretions in the ducts. The disorder was essentially chronic, and not very markedly influenced by remedies. Podophyllin had very little effect. Nitro-muriatic acid was more serviceable, as it was taken internally; as a lotion it showed no virtue. The failure of podophyllin is, to my mind, tolerably conclusive that there was no vascular engorgement of the liver; and the absence of any abdominal tenderness also is against the view of catarrhal duodenitis causing tumefaction of the mucous lining and obstruction of the ductus communis choledochus. The action of mineral acids appears mostly to consist in a toning and astringing of the homogeneous capillary walls and limitary membranes, so that they allow less fluid exudation to take place. They diminish the alkalinity of the blood, and render it more exciting to the tissues. While the general effect of these acids is thus decidedly restrictive of morbid or excessive secretion of cutaneous or mucous flux, the nitric and nitro-muriatic have, evidently, in a high degree, an opposite influence in regard to the liver. The bile-secreting apparatus is by them powerfully stimulated, especially when they are applied in the form of bath. How they affect the sugar-secreting part of the organ we are quite ignorant; but it may, perhaps, be inferred that its saccharine product is not augmented like the biliary, as there appears to be no indication of an excess of sugar passing off by the kidneys. In the above case the acids appear to have acted as a general tonic and hepatic stimulant.

Case 7.—Jaundice, at First Simple, afterwards assuming the "Pernicious" Character—Death—Autopsy.

Laura P., aged 6, admitted January 6, 1862. She had been ill seven days, and was very yellow. The motions were very pale, and the urine high-coloured. She had not much appetite, but did not appear to ail much. Bowels open daily; thirsty; tongue whitish. A grain and a-half of calomel every night.

9th.—State the same. ℞ Extract colchici acet., gr. j., bis die.

13th.—The colchicum caused gastric disorder and vomiting, but did not alter the state of the urine or stools. The sickness had been quieted by an effervescing saline and hydrocyanic acid, and a blister had been applied to the right hypochondrium. Three grains of calomel also were given last night. She had slept well, but was drowsy to-day, though quite conscious. Tongue white. Some pain in the head. To continue to take three grains of calomel every night.

17th.—The liver did not extend beyond the ribs, and the spleen was not enlarged. The urine was clear and yellow, the stools solid and clayey. Tongue coated. She had five grains of calomel last night. Nitro-muriatic acid internally and as a foot bath.

18th.—She began to be delirious yesterday, and continued very much so during the night, screaming a great deal. She continued to-day in nearly the same state, moaning and screaming, and in a state of stupor. She had passed no stools or urine. Pulse not frequent, but weak; pupils large. A jalap purge was given, and a turpentine enema, and also some quinine, but she died in the following night comatose.

At the autopsy, no other change was found except shrinking of the liver. Its surface and interior were yellow in patches. The cells were deeply yellow stained, and tending to break up into granules and fatty detritus. The gall passages were free.

Remarks.—The most remarkable feature in this case was

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the length of time which the disease continued without showing any indication of "perniciousness." The child had been ill twelve or thirteen days before any trace of serious disorder appeared, and it was not till the seventeenth day that head symptoms were clearly marked. Wunderlich thinks that cases of this kind have, in common with many others, where the disease has a different seat, the element of "perniciousness," by which he implies an inevitable, or almost inevitable, destructive tendency. Pernicious jaundice, one may conceive, may be similar to malignant scarlatina, which originates from the same influence that affects but slightly one member of a family, while, to another, it is most virulent. The difference of effect is not in the influence, but in the recipient system. So it may be with pernicious jaundice—the effective cause may be the same obscure influence which causes, in other cases, an innocuous paresis of the liver, such as seems to have existed in Cases 4, 5, and 6.

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Medical Times and Gazette.

SATURDAY, FEBRUARY 7.

CARDINAL WISEMAN ON "POINTS OF CONTACT BETWEEN SCIENCE AND ART."

"Points of contact between science and art! Would that they were multiplied so far as the healing art is concerned!" Such were our thoughts as we went, on Friday evening last, to hear the discourse on this subject by Cardinal Wiseman at the Royal Institution. It was evident enough that the curiosity of this great town had been thoroughly aroused. Never within our own recollection was the theatre more crowded, not even on Faraday nights, nor yet when Du Chaillu narrated his exploits amongst apes and cannibals. One veteran philosopher amongst the auditory declared that he had never seen such a throng there since the days of Humphrey Davy, in 1808. Well-shaven priests of the Roman Church, and well-bearded philosophers, Anglican clergymen, and many of the most conspicuous members of our own Profession, with Sir Henry Holland in the chair, were amongst the listeners to a discourse of nearly two hours' duration, of which we will attempt to give a rapid sketch, with such a commentary as may illustrate the relative position of science and art in Medicine.

The Cardinal, in treating of "science" and "art," on this occasion, used the term "science" in its widest application, as embracing all human knowledge which has the stamp of exactitude and precision; whilst, under the term "art," he dealt solely with those branches of "the fine arts" which appeal to the eye;—that is to say, the "arts of design," including painting, sculpture, and architecture, and not to the other branches of the fine arts, whence we derive solace and ornament, as poetry and music, nor yet to the practical arts, as agriculture, Medicine, and metallurgy, whence we derive the necessaries and luxuries of our lives.

First, he treated of science and art as they came in contact in painting. As an *art*, painting has been known from very early times, but it is only of very recent date that it has been aided by *science*; for perspective, the science which treats of the representation of objects on flat surfaces, and of the method of representing distance by proportion, is of quite modern origin,—whether it be scientific perspective, strictly so-called, which gives correctness of form, or artistic or aërial perspective, which teaches the nicer gradations of tone. Herein we may gather the existence of three stages:—The first, in which paintings and other representations on flat surfaces were effected, not only absolutely without perspective, but in defiance of it, and, probably, with an utter unconsciousness, on the part of the painter, that such a science could exist, or would ever be developed. This stage may be exemplified by the Assyrian marbles, in which scenes are represented in low relief—sieges, battles, towns, and rivers;—but men are represented in the clouds as they are in a willow pattern tea-cup, and boats at the bottom of the river, amongst the fishes. In Egyptian paintings, too, kings and magnates are represented as of huge size, and common people like the pigmies; and this utter absence, not only of knowledge of perspective, but of consciousness of ignorance, prevailed amongst nations who were no mean proficients in many of the practical arts, and who could build royal palaces and mighty temples. This stage may typify that of the healing art in its lowest stage, as amongst the Greeks at the Trojan war, or the savages of the South Sea in our own day. But, reader, it does not the less typify the present state of Medicine so far as regards the nervous system, respecting which even yet we are dimly groping our way, and too often meddling with matters of which we know the facts most imperfectly, and the laws not at all.

The second stage is that of great Artists—men whose genius and industry, and powers of observation enable them to work out practical results—to *do* things before the invention of scientific rules, and to hand down methods of practice derived from experience. So when painting rose above Byzantine mannerism, the great pre-Raffaelites, Giotto, Van Eyck, and Pietro della Francesca, a friend of Raffaelle's father, made themselves, practically, masters of perspective; that is to say, they *did* paint pictures, in which objects and distances were rightly represented on flat surfaces, although the scientific rules of perspective did not then exist. This stage represents that out of which actual Medicine is struggling. Our practice is not deduced from scientific data, but is *empirical*, that is to say, is based upon the experience of Great Masters, who have, from time to time, taught their disciples and successors to see things with their eyes, and work according to their rules. We who devoutly believe in the unity of Medicine hold that all great Physicians in all ages treat disease as much alike each other as the difference of circumstances permits—that the sagacity, and penetration, and practical tact of Hippocrates in one age, and of Galen in another, would, had they been born in these times, have ranked them with Sydenham, or Huxham, or Fothergill, or Baillie, or Halford, or Pennington, or Hooper, or Chambers, or Tegart—men who may be taken as types of the best Practitioners of their day. Modern times, with increased light for the collateral sciences, bring improvements in details—individual character causes difference in any age; but in all ages the great artists shine out as men who *do* things well, even in the absence of scientific laws, and who leave practical rules to a school of disciples and imitators.

But then followed, in painting, a third stage, in which science came thoroughly into contact with art. Leonardo da Vinci and Albert Durer perfected the art. Then arose the *science* of perspective: the first treatise published in 1608; Brooke Taylor's standard book in 1731. But now the representation of objects no longer depends on arbitrary conventions, as did those of the Egyptians; nor on the genius of individual artists, whose sagacity enabled them to work without rule, but on a body of scientific principles, which are everlastingly true, and admit of no possible deviation.

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In some details, a scientific basis can be predicated in Medicine. Science, too, supplies infinite modes of exploration, diagnosis, and remedy; but we have not yet solved some of the most elementary problems of life. There are doubts yet as to the source of animal heat, the production of sugar, carbonic acid, and urea; and till these are solved, to say nothing of the higher phenomena of the nervous system, and till the natural history of health, and growth, and decay is more minutely known, a scientific, as distinguished from a practical or empirical, treatment of disease is an idle dream. Medical practice may be sagacious, may be the effort of genius or imagination, may be successful, may be a boon to humanity —still it is *art*, not *science*.

A fourth stage was indicated by the Cardinal in the history of the effects of science upon art; and that is, that a knowledge of scientific principles shall be so diffused, that a deviation from them would be scouted by the population, as certainly as would the notion that two and two could make aught else than four. The vulgar would not tolerate even a sign-board out of perspective now. So the day may come, though it has not come yet, when the vulgar may see the imbecility of quackery—the contrariety of the doctrines of quacks to each other and to truth; and it may be repeated as a joke, that, in some barbarous and conceited nineteenth century, an Irish archbishop could write on behalf of homœopathy and mesmerism!

We must pass over much that the Cardinal said showing how general progress in art of all kinds facilitates the operations of every individual branch; how the Crystal Palace, the product of the iron and glass trades, enables Handel's music to be performed with a grandeur which even the composer could scarcely have realised; and how the railway indoctrinates the masses with love of the natural landskip,—a love which the Cardinal, with other great scholars, denies to the ancients, though we venture to think on scarcely sufficient grounds. So we see how largely the manufacture of glass, India-rubber, gutta-percha, and aluminium, and improvements in chemistry, add to the means of relieving sickness and suffering. But the Cardinal's remarks on colour have a useful moral.

Poor as they were in perspective, the ancients were grand in colour. The frescoes in the tombs of ancient Egypt and in the monumental churches of mediæval Italy seem as if their colours would stand till the day of judgment. This was a good empirical result. Modern chemical science has not come to the aid of art here. The composition of these colours is unknown, and science prefers to enslave herself to dyers and other manufacturers than to assist fine art. We do not yet know, either experimentally or scientifically, the conditions under which colour will resist a London atmosphere.

The Cardinal might have added a weighty moral, but did not. Some modern painters, beguiled by imperfect chemical knowledge, have departed from old practical rules, and used colours which do not stand. Reynolds, for example. Here is exemplified that ridicule of our Profession,—the habit of altering old remedies and modes of treatment, on imperfect scientific data, false analogies, visionary theories, and experiments which prove nothing. Instances crowd upon us like leaves in autumn; space compels us to mention one only. Wine is or is not beneficial as an article of diet in health, and in certain cases of disease. If beneficial—a thing to be known only by experiment—it should be given; if hurtful, should be forbidden. What are we to think of the *quasi*-scientific Practitioners who forbid wine because the dubious experiments of Lallemand, Perrin, and Duroy seem to show that it is "not food"? Why, that patients treated on such visionary notions are very likely to show the ghostly, bluish colours of the decaying beauties on Sir Joshua's canvass.

The remarks on sculpture, on the proportions of the human figure, and their identity with the subdivisions of a musically vibrating string, and with that curve which bounds the orbs in space, so as to make man, even by his outward configuration, a type of the power, and beauty, and harmony of all creation, must be passed over; but there followed some remarks on the relations of anatomy to art, which deserve notice and comment.

In Greek sculpture (said the Cardinal) two singularly contrasted features strike every observer:—the magnificent, placid, intellectual heads; and the exaggerated, brute-like development of the muscles. Whence the grand serenity of those heads of poets and philosophers culminating in Plato? Clearly the sculptor had before him men of thought—not always right thought, perhaps—but still men in whom the intellectual powers were developed beyond example before or since. But whence the muscular development? Was it a result of training and the gymnasium? The Cardinal thought not; but that it—exaggerated and untrue, as it seems to us—was the result of the witnessing by the sculptor of muscular actions, the physiological expression of intense brutal emotion of a kind which to us are, happily, unknown. He illustrated this point thus:—Amongst the most interesting by-sources of knowledge of the habits and life of the ancients are the *Graffiti*, or rough sketches and inscriptions which the slaves and vulgar of old time scratched on the walls, just as the vulgar now scribble whenever they can get access to any flat surface in public that they can deface. As cads and jockeys now would sketch prize-fights and horse-races, so, as a matter of course, slaves of old sketched gladiatorial combats. For example, amongst these *Graffiti* has been copied and published a sketch of a fight between two men—one, Spiculus, a tyro whose sword was unfleshed; the other, Adtimetus, whom the numerals xvi. showed to have been the victor in that number of murderous conflicts. Spiculus was now the victor—Adtimetus lay at his feet. Now, imagine these men, inspired with no moral or noble feeling—not even with what the lowest of us call honour and good feeling—no preliminary shaking of hands—standing forth naked, under the eyes of 80,000 spectators, in the deepest silence, glaring at each other with murderous eyes, approaching each other with the stealth and ferocity of tigers, and animated alone with the lust of blood—how those hearts *bet!* (we thank the Cardinal for using the *strong* Saxon-English form of this preterite)—how those lungs dilated!—how every outward muscle would swell and knot itself with the intensest energy! And so the sculptor's keen eyes noted and represented *living* muscular forms, such as we see and wonder at (for, be it remembered that he could not dissect.)

And here, our readers will pardon us for recalling what we said, in our late *éloge* of Robert Knox, of that great anatomist's idea of the true functions of anatomy in the study of art. Anatomy is a means to an end; it is like the dictionary which explains the living forms of speech. An anatomist knows where muscular, and sinewy, and bony elevations *can* be shown, and where they *cannot*; but that is no reason why they *should* be shown, as in the grotesque figures of Fuseli and others, who fancy that a man is an artist because he is an anatomist. There is here the same distinction as between a scholar and a pedant; between the manners of a gentleman and the grimaces of a dancing-master. Beauty is the thing to represent—that which speaks of life: sinews, as shown by modern artists, reek of death and the dissecting-room.

We can only record the Cardinal's emphatic approbation of the study of ethnography—of the form, costume, and mode of life, and intellectual expression of various races; his whole remarks on architecture; his condemnation of the neglect of scientific insight into the nature of the stone with which the Houses of Parliament are built, and his account of the manner in which pure science was employed to detect and remedy the tottering cupola of St. Peter's. We must conclude this hasty notice of a long and eloquent discourse with one of the anecdotes by which the speaker gave it the

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relish of geniality and humour. When saying how necessary it was for artists to *know* the objects which they undertook to delineate, so as to preserve truth in details, he told us that a friend once overheard a couple of Yorkshire grooms criticising a picture of the death of Absolom, represented, as usual, hanging by his hair, with his mule close by: "Sarve him right," was the exclamation of one of these hippologists. "But why?" "For riding such a vicious brute as that with only a snaffle."

THE WEEK.

INCREASED DUTIES OF POOR-LAW MEDICAL OFFICERS AT OLDHAM.

Although we have shown that epidemic typhus is not prevailing in the manufacturing districts as the result of the prevailing distress, yet it is admitted on all hands, that the claims made upon the administrators of the Poor-law, and, consequently, upon the Poor-law Medical officers in Lancashire, have very largely increased during the last twelve months. Persons who have hitherto been able to pay for Medical attendance have latterly become incapable of doing so, and it has, therefore, followed, that the Poor-law Surgeons have had their duties enormously augmented—sometimes to double, and sometimes even to five times their former extent. A deputation of the Medical officers of the Oldham Union waited upon the Board of Guardians at Oldham on the 24th January, and, representing the circumstances to which we have just alluded, claimed an increase of salary as a just recompense for the extra labour which they were now called upon to perform. The board have not at present come to any definite resolution on the subject, the guardians seeming to be in doubt whether the difficulty should be met by an increase of the salaries, or by the appointment of additional Medical officers; but it appears that the complaints of the deputation were admitted to be founded in justice.

RECENT APPOINTMENT OF A CERTIFYING SURGEON AT OLDHAM.

From a letter, which appeared in our last Number, from a correspondent under the signature of "Beta," it will be perceived that very considerable dissatisfaction prevails in the town of Oldham in consequence of the recent appointment of a Certifying Surgeon to the Factories. The appointment in question is a rather valuable one, considering the usual rate of Medical remuneration at the present day, as it amounts to about £250 or £300 per annum, and the duties are by no means laborious or incompatible with the ordinary avocations of a Medical Practitioner. A vacancy has lately occurred in the district, in consequence of the death of Mr. Earnshaw, one of the Certifying Surgeons, and it was expected by the inhabitants of Oldham that the choice of a successor would fall upon one of the Medical gentlemen resident in the town; but, to the great surprise and disappointment of all parties, it appears that a young gentleman, who has just completed his Medical education, and who is not resident in the district, has been appointed to the post. The patronage rests with the local Inspector of Factories, and the gentleman whom he has appointed is said to be the son of a sub-inspector in a neighbouring district. The affair thus bears something like the aspect of official jobbery, and we, therefore, are inclined to applaud the Profession in Oldham for the steps which we find they have taken. At a numerously attended meeting of the local Practitioners, held at the Angel Hotel on the 29th of January, the following resolutions were unanimously adopted:—

"That this meeting views with the greatest dissatisfaction Mr. Redgrave's appointment of a non-resident junior member of the Profession to the office of Certifying Surgeon to the Factories, lately held by Mr. Earnshaw, thereby entirely disregarding the claims of Medical gentlemen of standing and experience, many years resident in the town, and possessing the confidence of the public; and as this appointment is calculated not only to discourage rising local merit but to reflect discredit upon the whole body of the Profession in this locality, we, therefore, unhesitatingly record our protest against the disposal of public appointments, conferred, as this has been, without regard either to the age, the *status*, or the claims of the person appointed.—That the claims of the resident members of the Profession having been entirely overlooked in the appointment just made, J. M. Cobbett, Esq., and J. T. Hibbert, Esq., members of parliament for this borough, be respectfully requested to accompany a deputation from this meeting to the Right Hon. Sir George Grey, Bart., her Majesty's Secretary of State for the Home Department, to lay before him the circumstances of the injustice done to the resident Medical Practitioners, with the view of having the appointment reconsidered and revoked, and of inducing the Home Secretary to give such directions and instructions to the inspectors of factories as shall secure, in future, the appointment of Certifying Surgeon being conferred only on some duly qualified Medical Practitioner resident in the district.—That Messrs. Leach (chairman), Thomson, and Dr. Armitage, be requested to accompany the members of the borough as a deputation to submit the foregoing resolutions to the Home Secretary."

NON-INFLAMMABLE CLOTHING.

The inquiry into the circumstances attending the late dreadful accident at the Princess's Theatre, besides its use in bringing to light a culpable omission of the usual provisions for extinguishing fire on the part of the theatrical management, was turned to good account by the coroner in a sensible and practical summing-up. It is of no use reviling the fashion of crinoline. It is only to be hoped that the epidemic of bad taste has reached its height, and that a decline may be expected:

"Dr. Lankester thought it quite impossible by any amount of reason or warning to produce any effect on fashion, and persons who had given much consideration to the subject had arrived at a similar conclusion. He did not know how many women would be required to be burnt to death before any of the fair sex would give up wearing an article of fashion—such a thing was not to be thought of; but if there was no chance of getting rid of the dress itself there were means of rendering it uninflammable; yet, strange to say, such an obvious precaution was little thought of, while the danger of ignition had constantly been increased from the time of the ancients till now, when, by the extensive use of gas and the style of our grates, it was very imminent. In reference to the use of sulphate of ammonia, tungstate of soda, or other chemical preparation, by laundresses, it had been stated, in a letter to the *Times*, that the light dresses worn on the stage and in ball-rooms were never washed. If that was so, the question in respect to such dresses became one of manufacture; and from a letter published in the *Times* of that morning by a firm in Oxford-street, it appeared that if there was a demand for uninflammable materials for ladies' dresses there would be an ample supply of such articles. This remark applied not only to tarletans and muslins, but to linens, and to all articles of cotton manufacture. There seemed no reason why an inflammable nightdress should be put on any child in the kingdom. Since his appointment as coroner for Central Middlesex he had held 601 inquests, of which 23 were in cases of burning, 18 of these having been caused by clothes catching fire. At least two-thirds of these might have been prevented by the wearing of uninflammable clothing. From these figures they might form some idea of the annual loss of life throughout the kingdom from clothes catching fire; and as the attention of the public had recently been called to the subject by several very melancholy accidents and by writings in the press, it was to be hoped that a subject in which we were all so deeply interested might at length be dealt with in a satisfactory manner."

FEVER AND FAMINE IN LANCASHIRE.

The remarks we made in our leading article of last week, in reference to the alleged connexion between fever and famine in the cotton districts, have received an ample confirmation by the publication of the quarterly return of the marriages,

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births, and deaths, by the Registrar-General. This return is dated January 30, and our article on the fever-panic was in type on the 29th, and we mention these dates only to prove that, although our language and that employed by the Registrar-General are almost identical, the views at which we arrived were altogether independent of the official publication. The return, after alluding to Dr. Buchanan's report, refers also to the Report of the Manchester Central Executive Committee for the Relief of Distress, dated January 19, the latter document, as we stated, being at variance with the conclusions arrived at by Dr. Buchanan. We quote the following passages, *verbatim*, from the Registrar-General's return, in order to prove the close similarity of the language and of the sentiments which we ourselves expressed:

"The Registrar of Preston sub-district reports that typhus became prevalent there in the early part of October; it excited the most serious apprehensions, and, notwithstanding the greatest efforts to check its progress, 48 cases proved fatal. Dr. Buchanan in his report pronounced it to be of the Irish type, 'the steady follower on famine;' he found a decline from the normal standard of health among the unemployed operatives of the cotton towns, and that scurvy and other symptoms of a haemorrhagic tendency had been manifested. On the other hand, the report of the Central Executive Committee (for the relief of distress), dated January 19, states that the middle of winter had been gained without the outbreak of any serious epidemic, or the appearance of scurvy, diarrhœa, or dysentery, forms of disease that follow prolonged low diet, and the use of coarse food without much variety. The Registrar of Chorlton-upon-Medlock writes that, notwithstanding the great number of persons unemployed, no epidemic has prevailed, nor any disease resulting from privation; that the poor are provided for liberally and with 'wise economy.' Scarlatina and diphtheria, and also diarrhœa, prevailed to a considerable extent in Manchester. An increase of deaths in Ashton-under-Lyne is attributed to scarlatina and measles. Scarlatina caused eighty deaths, being a third part of the total number, in Oldham-above-town; these occurred not only in the working class, but in the general population. In Blackburn and in Witton, which is also in the Blackburn district, the mortality was increased by measles and bronchitis; and at the latter place there was 'much sickness in consequence of the damp weather.' The mortality in the Chorley sub-district was nearly doubled, chiefly by measles; and the weather, 'mild and damp,' was considered unfavourable to health.

"It will tend to strengthen the conclusion, that the increase of mortality in Lancashire in the last quarter was not caused directly by famine, nor indirectly by diseases induced or aggravated by it, if it be stated, in addition to facts that have been mentioned above, that of the twenty-six districts of which that county is composed, while a certain number exhibited an increase of deaths over those of the corresponding quarter in 1861, there was in an equal number of districts an actual decrease. The districts of Bolton, Manchester, Salford, Burnley, and Preston are amongst those that stand in the latter more favourable category. The munificence of the nation, aided by its kinsfolk in other lands who 'have brought their food from afar,' has hitherto averted the last, direst extremity, the death of a people by famine. Amongst elements of the situation that have been conducive to health, are the cheapness of provisions, a winter in great part unusually mild, increase of maternal care, recreation out of doors, and, perhaps, for many men and women who were not robust, a season of needful rest. The future of 'the cotton-famine' is still undetermined,—in the language of the Central Executive Committee it may be even 'full of gloom and uncertainty,' and 'to chill the sympathy or arrest the efforts' that have been evoked would be rash,—but that which is passed may be subject of congratulation; and it is now known that the history of the distress is not written in the death-registers of the year that has closed."

CONSUMPTION OF HORSE-FLESH IN BERLIN.—A Berlin newspaper makes the statement, that there are at the present time seven markets for horse-flesh in that city, in which, during the first ten months of 1862, there were 750 horses slaughtered. No horse is allowed to be slaughtered and sold without the certificate of a Veterinary Surgeon.

REVIEWS.

Clinical Lectures on Pulmonary Consumption. By the late THEOPHILUS THOMPSON, M.D., F.R.S. With Additional Lectures by his Son, E. SYMES THOMPSON, M.D., M.R.C.P., etc. London: Churchill and Sons.

WERE the book before us merely a re-issue of the late Dr. Thompson's well-known lectures on Consumption, it would demand nothing more than a line of friendly recognition from the reviewer. But, as its title-page states, it is more than this. It contains two really valuable lectures by the son of the author, embodying, as he tells us, some observations which illustrate and some which modify the original lectures, together with remarks on new but correlative topics. The author's Lettsomian lectures, a paper read by him before the Royal Society on the "Influence of Different Oils in Phthisis," and an unpublished essay on "Venous Murmurs," have furnished the editor with part of the material of the additional lectures.

The manner in which Dr. Symes Thompson has performed his task is alike creditable to him as a son zealous for his father's Professional reputation, and as a young author desirous of securing a like reward for himself. To two or three points only in the added portion of the work we can now draw attention.

Dr. Thompson defines tubercle as morbid secretion taking the place of healthy product: the material thus imperfectly formed, failing to pass through the usual changes, is left as a foreign body in the organ in which it originated. It may be an accumulation of morbid lymph in the lymphatic glands; or a collection of inspissated pus; or a material differing from inflammatory exudation only in being prone to degeneration and disintegration; or a modified form of epithelium. The last variety he regards as *the* tubercle of phthisis, except in those cases which are preceded by pneumonia, or in which tubercle is formed by the drying up of an encysted abscess. It will hence be seen that Dr. S. Thompson accepts the modern opinion, that the pulmonary vesicles are lined by an epithelium. He adds in a note:—

"In deference to the opinion of my esteemed teachers, Messrs. Todd and Bowman, I was long disposed to question the existence of epithelium in the air-cells of the lung, but was first shaken in this opinion by observing, some years since, a distinct epithelial lining in the pulmonary vesicles of the cat; and, shortly afterwards, my friend, Dr. Andrew Clark, showed me a similar layer in the human air-cell. Recent observations with an ammoniacal solution of carmine, as employed by my colleague, Dr. Beale, in his minute researches on the 'Structure and Growth of Tissues,' have enabled me to exhibit these cells, the nucleus being coloured by the carmine and rendered perfectly distinct."

Those who have had the advantage of attending Dr. Andrew Clark's demonstrations of the pulmonary air-cells will entertain no doubt as to the existence of the epithelial layer. Dr. Thompson belives that the relation between epithelium and tubercle may be demonstrated by a frequent examination of the expectoration with the aid of a carmine solution, and by comparing it with the post-mortem appearances. He adds:—

"In phthisis, the expectoration may be simply frothy, as in catarrh; sometimes it is quite gelatinous, and contains granules, molecules, and a few scattered mucous corpuscles. If examined in water, the edge of this gelatinous matter looks like the margin of an epithelial cell; indeed, the structureless or molecular matrix seems to correspond with the scale of epithelium; the contained granular mucus corpuscle to its nucleus. Regarded in this light, epithelium differs only from mucus in being apt to break up into distinct pavement-like portions; whereas the mucus, which has not this propensity, forms a tenacious mass, resisting the pressure of the microscope glasses."

Phthisis, in its totality, Dr. Thompson describes as an error in the organism, exhibiting itself generally in defective blood and imperfect hurried action—locally in faulty cell formation. The first appreciable step in the disease he thinks to be changes in the mesenteric glands, as indicated by an imperfect performance of their part in the elaboration of the blood. Evidences of the hurried action are found not only in the quick pulse, but in the hastened respiration and over-rapid secretion. Cod-liver oil, whilst it relieves other symptoms

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seems to act last upon the pulse. It is for this reason that ozone has been combined with it by the author. The experiments, both of Dr. Thompson and his son, have led them to believe "that ozone exerts a remarkable influence on the pulse, lowering it, in many instances, ten, twenty, or even thirty beats per minute," without the depressing effects of digitalis.

The author has found neats-foot oil (*Oleum bubuli*) of great value in cases where irritability of the bowels forbade the employment of cod-liver oil. Its slight smell especially renders it useful for inunction. He recommends that two or three ounces, combined with a grain of iodine and a few drops of oil of lavender, be rubbed in warm at bedtime, the body having been previously sponged with tepid water containing a little soda.

We have only touched cursorily on a small portion of the subjects of the additional lectures, but we cannot extend our notice. We would only say, in conclusion, that they contain much that is of interest—much that is suggestive in theory, and several hints that may be useful in practice.

The Climate of the South of Devon, and its Influence upon Health; with Short Accounts of Exeter, Torquay, Babbicombe, Teignmouth, Dawlish, Exmouth, Budleigh-Salterton, Sidmouth, etc. By THOMAS SHAPTER, M.D., F.R.C.P., Senior-Physician to the Devon and Exeter Hospital, etc. Second Edition. London: John Churchill and Sons. 1862. Pp. 282.

THE first edition of this work appeared twenty years ago: its plan has been preserved in the present; but the book has been re-written and improved in accordance with the increased experience and extended observations of the author. The work constitutes, in its amended form, an excellent introduction and guide to all that concerns the topography, climate, geology, natural productions, and industry of South Devon. The seventh chapter is devoted to a consideration of diseases as they occur there, arranged in the order now adopted by the Registrar General. The eighth chapter relates to the climate of South Devon considered with reference to its general effects on health and disease. The book is one of those few Medical works, the perusal of which may be usefully recommended to the general public as well as to the Profession. It is evidently designed for the reading of both classes.

Life in Nature. By JAMES HINTON, Author of "Man and his Dwelling-place." London: Smith, Elder, and Co. 1862. Pp. 258.

MR. HINTON is a speculative philosopher—some would call him a pseudo-philosopher—who would persuade us that we all live literally in a vain show, and would resolve the material, about which we even now know little, into the spiritual, about which we know infinitely less. Well, what then—suppose it were true that all physical existence were a myth and a dream, we are ourselves a portion of the deception, and we and our surroundings constitute a harmonious whole, in which everything proceeds so regularly that the relations of the one to the other may be studied, and its so-called laws educed, as if all were a reality. Until, therefore, Mr. Hinton proves to us a little more satisfactorily that we are wrong, and that our wrong notions lead to practical errors, we prefer the old to the new light. Still, there are minds which, at any rate, may find a beneficial exercise in the perusal of Mr. Hinton's book, and to such as possess them we commend it. It is readable and interesting, if not always clear. We should be sorry to crush or even to discourage inquiries into the relations between the material and immaterial. The ground, however, on which the inquirer must tread is dangerous as well as difficult.

Health in the Tropics; or, Sanitary Art Applied to Europeans in India. By W. J. MOORE, L.R.C.P. Edin., M.R.C.S. Eng., Bombay Medical Service. London: John Churchill and Sons. 1862. Pp. 318.

SOME little time ago we had occasion to notice favourably a "Manual of the Diseases of India" by this author. We are glad to meet with him again in print, and writing upon a subject so vitally important as the application of sanitary art to the residents in tropical climates. Nothing can be more practical than this volume, which should be read not only by our Medical officers in India, but by combatant officers also, and by civilians, for its truths concern all. Well does the author say that "the principles of sanitary science should form part of the educational course of every military officer. Having been made aware of the truth of those principles, there would be little danger of any superior officer questioning their practical application in matters of detail, the due observance of which must always be initiated by the professional knowledge of the Medical officer."—P. 9. Besides, the book before us is not by any means devoid of interest to ourselves, though living in a temperate climate. The principles involved are of world-wide application; and the special suggestions of the author have often that in them which may furnish a wrinkle to sanitarians here. Mr. Moore is a clear, concise, and agreeable writer. The book is enhanced in value, too, by a copious index.

Illustrations of Dissections in a Series of Original Coloured Plates the Size of Life, representing the Dissection of the Human Body. By GEORGE VINER ELLIS, Professor of Anatomy in University College, London, and G. H. FORD.

THIS work is original in design and original in its execution; that is to say, the plan and object are new, and the plates, which form the basis of the whole, are new—copied from nature only. In the anatomical plates in common use the various systems are, for the most part, represented separately, the muscles connected only with the bones, the blood-vessels apart from the nerves, and so on. But in this new work all structures are shown together, as they are in nature, or rather as they occur in a good dissection. The old plates had their uses, and they still have their uses. To the student they were useful, especially when the examinations in anatomy consisted in questions about "the origin and insertion" of muscles, "the course" of an artery, or "the distribution of the branches" of a nerve. But now that the quality of examinations has been much altered—that the candidate for a degree of the University, or a diploma of the College of Surgeons, is required either to make a dissection, displaying the various parts in their natural combination, or to point out the details of a dissection already prepared, the old plates are of but little assistance to the student. A new kind of anatomical plates was wanted in the new circumstances; and the want will be supplied by the work of which the first part is before us.

But how far are plates really of value? It is most important that there should be no misunderstanding as to the reply to be given to that question, and, therefore, we answer it thus:—

1. They are useful to the student as helps to his dissection.

2. They are useful, also, to recal the impression made by the careful examination of parts previously seen and learnt in dissection; and so they serve the purposes of the Surgeon as well as the young learner. Such are their real uses, and those are important. And in order to guard against a baneful mistake, we would add that plates of any kind are not to be regarded in any degree as substitutes for dissection. No error would be more injurious than to consider any imitation of nature in that light, wherever, as in the case before us, accurate knowledge is required.

The part of the work now published is quite successful. The plan of the dissection in each case, and the manner in which it has been rendered by drawing and colouring, are all that could be looked for. With these plates, and such as these, by his side, the learner will be well guided in his dissection; and under their guidance he may safely continue his study when out of the dissecting room. With such plates as these the Surgeon will be fully reminded of all that is needful in anatomy when engaged in planning an operation.

A word respecting the authors. The work is published in the joint names of Professor Ellis and Mr. Ford,—the anatomist and the artist. Mr. Ellis is well known as a teacher of anatomy, and the author of a most accurate anatomical treatise, "The Demonstrations of Anatomy," which has reached a fifth edition. Though there had been books named "Dissectors" long in use, that was really the first treatise in any language in which the student was completely guided in his course of practical study. It was remarkable also in this, that the various details of description were written, not from other books, but from the objects themselves; and hence the accuracy which characterises it. The intimate knowledge of so-called "descriptive anatomy" possessed by the author of that book, and his long experience as a teacher, are the best

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guarantees for the accuracy and the judgment which ought to be expected in the new work. Mr. Ford is well known as an anatomical artist. The admirable expression and finish of his drawings for the work of Dr. Falconer on Fossil Bones, and of those for the illustrations of the Museum of Fort Pitt, were among the first proofs of the excellence that entitled Mr. Ford to the high position in his art which he has held for many years, as well as to the post of artist to the Royal Medical and Chirurgical Society, to which he was appointed after enquiry and report by a committee of that body. In securing such a fellow-labourer Mr. Ellis has been fortunate.

Considering, then, the usefulness of the work, its originality and truthfulness, as well as the care and finish of the part before us—considering also the reliance which may be placed on the authors as anatomist and artist, we give a hearty welcome to the "Illustrations of Dissections." Hereafter, when the publication is further advanced, we shall resume our notice of the book, and shall then review the commentaries which Professor Ellis connects with the explanation of the plates.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

AMERICA.

Camp, near Falmouth, Virginia, December 31, 1862.

THE BATTLE OF FREDERICKSBURG.

Since I wrote you last(a), many circumstances have occurred that, if chronicled by a pen more expert than mine, would, I believe, prove interesting to the Profession in peaceful England. My last, dated from Warrenton, told how the Surgeon's morning report was almost a blank; how robust was the health of the army; how high its spirits, and its hopes of success. This, written opposite Fredericksburg, has a different story to record: low spirits, from defeat, tell heavily on the health of the soldier, even though he is well sheltered, fed, and clothed,—though fuel is abundant, and the weather mild. Home-sickness, too, among the old regiments, impairs their energies, and renders them more susceptible to the operation of the many exciting causes of disease by which they are surrounded. During the early part of this month we were exposed to very severe weather, in consequence of which five deaths were recorded, and many cases of bronchitis and some of pleurisy found origin. A few days before active operations against the enemy behind Fredericksburg were commenced, the weather, fortunately, became quite mild, and continued so during the four days we spent on the south bank of the river. Had it been otherwise, we would have suffered much, as the men had to lie on their arms in the streets, without fires in many instances, lest, in the darkness of night, they should afford a tempting mark to the enemy's artillery. Many of the wounded, who, unable to crawl from the spot where they had fallen, had to remain for twenty or thirty hours before assistance was permitted by the enemy to reach them, would have been lost if the intense frost of the previous week had still continued.

The mass of our army crossed the Rappahannock on the 12th inst., and, entering Fredericksburg, found it ruined—deserted, save by a few negroes. The only sign of habitation to be seen was, depending from the windows of one or two houses, the red flag, indicating the regimental hospitals of those troops who had the dangerous honour of laying the pontoons, and being the first to cross.

On the morning of the 13th, when the heavy guns on our left told us the battle had already begun, we in the town were drawn up anxiously awaiting the next order. Presently the noise of artillery is heard immediately in our front, and the shells, with their fearful whirr, skim over the housetops. Now, we march slowly along the streets to the front, keeping as much under shelter of the houses as we can. Nothing is heard, save the ceaseless booming of the great guns, and the harsh sound of the death-bearing shells that fly overhead. Scarcely does a man speak to his comrade; each knows that something must happen shortly, and each in fearful expectation awaits death's arrival in the ranks. He has come! See how suddenly that circle is cleared by the men falling back!—no, not cleared, for in it lie three motionless forms, one dead, and two severely wounded. The Surgeon and his assistant are immediately on the spot, and the wounded are carried into the nearest house. A little whisky is given, and some encouraging words spoken, and they feel much more comfortable while their accoutrements are being eut off, and their clothes ripped up, so as to expose the wounds. One, whose leg is found to be shattered, is placed upon a table that chances to be in the room, chloroform administered, the tourniquet applied, and the leg is speedily amputated. The other, whose scapula and upper part of humerus have been laid bare and shattered, has had some loose splinters gently removed, and lint applied as a dressing, so that he may be satisfied the Surgeons are not unmindful of him, and with a slight opiate he is left for after consideration. The house is searched for beds, but, as none are found, blankets are spread upon the floor, the red flag is suspended from the window, and a regimental Hospital is established. By this time the battle is raging fiercely without, and the wounded now come seeking assistance from the Surgeon's hands; severe cases carried in from the field by the men detailed for that purpose, slightly assisted by stragglers—others without any assistance at all—some of these last having barely an excuse for leaving the field. The Surgeons have now a busy time—cheering every one, probing this wound, extracting this bullet, bandaging one limb, supporting that other in a sling, placing a ligature on this little branch severed by a splinter from a shell, and that *will* persist in bleeding, sending those able to walk across the river for safety, and making those unable to do so as comfortable as they can, until orders concerning them shall arrive from the Medical Director of the corps d'armée to which they belong; and all the while the boom of the heavy guns, the sharp and ceaseless rattle of the musketry, and the noise of the travelling shot and shell, as they curve through the air, or crash through the houses, ring in their ears unheard and unheeded.

By the way, I may here tell you of a very useful application of a very useful instrument, which I had great pleasure in observing in one of the Hospitals, and which, I believe, is not yet generally known. I refer to the extraction of superficially-lodged bullets by means of the aneurismal needle; *e.g.*, a bullet struck a soldier on the left side of the chest, pierced the skin, and ran over the ribs and intercostal spaces, lodging a little above and to the right side of the umbilicus. The ball was steadied with the left forefinger and thumb, a puncture made through the skin with a scalpel, and the aneurismal needle hooked round the intruder, which was rendered prominent by slight traction on the handle of the instrument. This traction being continued, a cut through the integuments an inch in length was made, and the lead rolled upon the floor. Several bullets I saw very cleverly extracted after this fashion.

On Tuesday morning, the 16th inst., an order was issued that the wounded be immediately conveyed across the river to the Division Hospital; and until dusk the town presented a busy but sorrowful appearance—ambulances at every door, and wounded men being transported to them on stretchers, blankets, or in the arms of kind-hearted comrades.

On Wednesday, your correspondent paid a visit to one of these Division Hospitals, constituted on the plan originated by Dr. Letterman, the Medical Director of the army, and now, for the first time, on trial, to judge for himself of the success of the new organisation.

In my last, I sent you a circular in which the constitution of a Division Hospital is detailed: permit me here, however, shortly to state that there are—1. One Surgeon in charge and two assistants, one of whom keeps the records, the other providing food, shelter, etc., for the wounded. 2. Three operative Surgeons, each of which is provided with three assistants to aid him in his operations. 3. Additional Medical officers—that is, all the other Surgeons that can be spared from their regiments—to act as assistants, dressers, etc.

The Hospital to which I paid a visit consisted of a long street of handsome walled tents, falling perpendicularly on the centre of a shorter horizontal one: the former was occupied by the wounded and the operating theatres of the three Surgeons; the latter accommodated the Medical staff, their stores and supplies, and afforded shelter to the cooks while employed in preparing the food.

(a) The letter referred to by our correspondent has not come to hand.

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Almost the first thing worthy of record that I observed after entering the street was—shall I tell it?—a Medical officer—a full Surgeon, as indicated by the oak leaves on his shoulder-straps—reeling complacently along with an as yet unopened bottle of brandy in his hand. This was, however, I am happy to state, the only instance of the kind I observed, and I fully expect that ere now this officer will have received the award his conduct at such a time so richly merits—a disgraceful dismissal from the service. Hearing piteous cries proceeding from one of the tents, I entered, and found ten poor fellows, ranged five on either side, shivering, dreary, and comfortless, on wet hay, with a damp blanket thrown over each.

It was bitterly cold; during the night it had rained, and towards morning a hard frost had set in, and the ten men with whom I then spoke, and many more, had been exposed, wounded as they were, to such weather for eight hours. They had arrived at the depôt before the means to shelter them, and, what was nearly as bad, the officer whose duty it was to provide food, shelter, etc., being so much occupied in endeavouring to procure the latter, had but little time to look after the former, so that many of them owed the cup of warm coffee that so comforted them to slightly wounded companions, instead of to those under the orders of the "one assistant to provide food, shelter," etc. Of course, since tents were not on the ground when required, it would be out of the question to expect that stoves would be. Four days afterwards, indeed, every tent was furnished with a capital stove; bed-ticks were filled with *dry* hay; food, varied according to the case, was regularly supplied; bed pans, basins, &c., there were in abundance, and all glided smoothly in this department; but then four days were required to get things into working order. Now, though some of the essentials of a good military Hospital were not to be found when required, yet skilful operative Surgery was not one of them. The operative Surgeons, chosen, as the circular required, for their ability without reference to rank, were busily employed. Amputations rapidly followed each other, the circular operation being the favourite, on the ground that flaps were more apt to get shaken asunder by the jolting while being transported to the General Hospitals at Washington, Philadelphia, etc. I observed some cases of gunshot fracture of the femur in its upper third, in which the Surgeons had declined operating, but had splinted as skilfully as their meagre supply of appliances would permit. In one case I saw an incision, nine inches long, made along the outer aspect of the thigh, and five inches of the bone removed by the forceps and chain saw; the patient died twelve hours afterwards. One case of excision of the knee came under notice: the operation had been performed in Fredericksburg. In my opinion the operator was too much of a conservative. It is useless, however, to attempt to mention in a letter one tithe of the interesting cases to be met with after such a battle as that of Fredericksburg.

With respect to the additional Medical officers detailed to act as assistants, dressers, etc., I found that they had had some difficulty in portioning out the labour. All desired to assist at operations; none to act as dressers. The wounded thus were neglected until about the third day, when the officer in charge remedied this by appointing one Surgeon to dress so many men. Now we have seen that the wounded were fed, sheltered, operated upon, and dressed, yet one thing is wanting. Enter a tent, and listen:—One man complains of a cough; another's bowels have not been opened for so long; a third is so weak, and requires something to strengthen him; and a fourth has been shot in the loins,—motion is lost, and sensation impaired, in his lower extremities,—his fæces are passed involuntarily, and his abdomen is swollen and tense, yet no catheter is, or has been, lodged in his bladder. Since none of the supernumeraries had made it their business to attend to wants such as these, much good would have been effected, and many complaints suppressed, if an officer had been expressly detailed for this purpose.

To conclude, for I find that my letter is assuming a magnitude that I had not intended, I would recall to your memory a remark that I made in my last, to the effect that a process of weeding was going on among the Medical staff of this army, and would state, that since the last battle many Surgeons have resigned their positions. Important private concerns, they said, called them home; but it is known, among a select party, that an order requesting their presence in Washington before a board of examiners was the true cause.

LEEDS.

(*From a Correspondent.*)

January 28.

A case has been made public in Leeds this week, though it has not found its way into the local papers yet, in which a gross piece of injustice was attempted on a Medical Practitioner; and, as it may prove interesting to the Profession, I write to furnish you some particulars.

In May last year, a workman, in the service of one of the extensive forges in Leeds, was driven, by the shaft of a wherry, through a plate-glass window of a shop, smashing the window-frame, and forcing him completely through the window into the interior of the room. The man sustained serious injury to his chest, and from the evidence it appeared, also, there was considerable concussion of the spine. He was most assiduously attended by two Medical gentlemen—Dr. Bishop and his assistant, Dr. Moss—for fifteen or sixteen days, and afterwards for five or six weeks occasionally, and the bill for such services amounted to the not very large sum of £9 7s. 6d. But now come the interesting particulars. The patient is in a club, of which Dr. Bishop is the Medical attendant; but on the day following the accident he requests to be attended privately, expresses a wish to have most assiduous care bestowed upon him, that he would be responsible for the bill, and should sue the owner of the wherry for damages, and should include the Medical bill in his damages. On his recovery, he called for and obtained his bill, expressed no dissatisfaction with it, and placed it in the hands of his solicitors, who commenced the proper legal proceedings. In a few weeks' time, after several consultations between the respective lawyers, in every one of which the Medical bill was duly set forth as part of the claim for damages, the action was settled for £50 to cover all expenses. To those who have met with the ingratitude of which some people are capable, it will not be surprising that the patient did not only delay discharging his Doctor's bill, but resented it altogether, saying he was not liable to pay anything, because he was a club patient; and, on coming into court, this was the plea he set up, and on which he relied chiefly for a verdict, and, what would have been so very surprising to a stranger, the same attorneys who, on the strength of the Medical bill, obtained £50 damages, were the parties who appeared in court with this defence. The judge, in a few very judicious observations, soon upset this plea, remarking that a portion of the original sum obtained for damages should be returned before such a plea could be allowed. The next question raised was as to the unreasonableness of the charges. On a suggestion from the court, this was referred to a highly respectable Medical Practitioner, whose opinion would be respected by all parties.

A point of great importance to Medical Practitioners was raised by the plaintiff during the trial, viz., whether the Medical officers of clubs were liable to attend accidents of any kind, there being no special agreement—the by-laws of each club being the only appeal as to the duties of the Medical officers; and he produced in court the by-laws of the club in which defendant was a member, and proved that these by-laws only provide Medical attendance in cases of sickness. The judge evidently took the same view, though he declined giving his opinion, as the issue was not raised on this point.

There are two other particulars in which this trial was interesting, showing the way in which the lawyers protect each other, and explaining, also, the reason why Medical men are often compelled to suffer indignities and injustice at the hands of the public, in consequence of their taking every opportunity of injuring each other. One of the attorneys, who had been chiefly instrumental in obtaining the damages, was placed in the witness-box, to state what he knew of the transaction, but was speedily removed by the judge, on the ground of "privileged communications." The other point is, that there were two Medical men found who would come into court to state that, as a club patient, he ought not to be required to pay anything, even after hearing the by-law read, and were prepared, also, further to say that the charges were most unreasonable.

The Profession may well receive the snubbings it does, when such things as these occur. It is only right to state, there were several Medical men in court who occupy a respectable position in the town ready to speak to the reasonableness of the charges.

The first part of the lesson has been taught by the judge of

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the court—viz., the "liability" of the person after making such an agreement (both he and his wife, however, denied this agreement on oath, notwithstanding his subsequent conduct in calling for his bill, and presenting it to his attorneys); and it is to be hoped that the gentleman to whom it is left to decide as to the amount, will be able to find for the whole sum claimed, and thereby show the world that the services of the Medical Practitioner are not to be so lightly esteemed as is usually the case by this class of people.

GENERAL CORRESPONDENCE.

A CASE OF STRANGULATED OMENTAL HERNIA.

LETTER FROM MR. JOHN ADAMS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg to record, in the pages of your valuable Journal, the account of an interesting case of strangulated omental hernia, in which the symptoms were unusually severe.

A young woman, about thirty years old, was admitted into the London Hospital on Thursday, January 22. Her account of her condition was, that on the preceding Saturday a swelling had suddenly taken place in the left groin, after which she complained of great pain in the belly, and became excessively sick. She continued to vomit at intervals from that time until I saw her. Her bowels had never acted since the appearance of the swelling, although she had taken numerous aperient medicines. She said, also, that she had once observed a swelling in the same situation, but it disappeared. Her symptoms were now somewhat intense, that is, she vomited more frequently; the pain in the abdomen had increased in intensity; there was much distress in her countenance; and her constipation was confirmed: her abdomen was tense; there was a small swelling in the region of the crural opening, but this was by no means tense, although painful on pressure; and the impression I received from my examination was, that there was a hernia with a small lymphatic gland over the sac.

The House-Surgeon, Mr. Appleyard, had prudently abstained from all but the gentlest manipulation, in consequence of the urgency and lengthened duration of the symptoms, and I was quite willing to pursue a similar line of practice, and I, therefore, resorted to the operation immediately. A small hernial sac was exposed by the ordinary incision; this was much thickened and divided edgeways after I pinched it up with my left finger and thumb. I could feel no gliding of intestine beneath my finger, nor was there any fluid in the sac. There was, however, to be seen a small, dark, thickened mass, which gave me the idea at once that it was a piece of omentum; I cut upon it, and carefully peeled it out layer by layer, until I came to a small cavity containing a drop or two of bloody serum. It was quite shut up, and I could not pass the smallest probe into the abdomen; there was no intestine whatever to be seen; the omentum was thickened and congested, but by no means spoiled. I passed my finger round the neck of the omentum, and divided the stricture, which was situated at the femoral ring, downwards and inwards, by passing a bistoury along a deep-grooved director; for, from the excessive tightness of the stricture, I could not get my nail within it. The entire removal of all constriction was at once indicated by the escape of at least an ounce of clear serum from the peritoneal cavity.

I ordered one grain of calomel and half a grain of opium to be taken every four hours. The operation was performed at 10.30 p.m., and on the following morning, at 10, I found that her vomiting had wholly ceased, and that she had passed five free evacuations. Her gums were touched by the mercury.

All medicine was discontinued, and she is now completely convalescent.

Such cases are not very numerous; I do not remember to have met with more than three in which the operation has been required to liberate the stricture of a strangulated omental hernia. I witnessed one instance of an analogous character, but the hernia was umbilical, and I operated under the impression that strangulated intestine coexisted, but I found nothing but a piece of constricted omentum: I divided a tight stricture, and the case succeeded. It is very curious that a stricture of the omentum should occasionally be attended with precisely similar symptoms as characterise strangulated intestine, and it can only be explained from the sympathy existing between the varied contents of the cavity of the abdomen. In the case now under consideration, the vomiting was severe and the constipation decided, yet the intestinal canal was free. There could be no mechanical obstruction arising from the gut passing under the omentum, for the latter was left *in situ*, and yet the symptoms were relieved by the simple division of the stricture. In former days it was nothing unusual for a Surgeon, if, in operating for hernia, he chose to remove a piece of omentum, to tie the omentum in a single tight ligature to obviate the necessity of securing the blood-vessels separately; but what was the consequence? Why, the symptoms continued until the patient died, because the Surgeon, after removing one stricture, at once placed another ten times as tight on the delicate omentum. I did not attempt to return the omentum, as it was thickened and congested, and the femoral opening was too small to admit it.

I am, &c.

4, St. Helen's-place. JOHN ADAMS.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 27.

SAMUEL SOLLY, Esq., F.R.S., in the Chair.

DR. E. H. SIEVEKING communicated a paper by Dr. A. B. Buchanan on a

CASE OF WHITE FIBRO-SEROUS DISCHARGE FROM THE THIGH.

The author recorded the history of a remarkable case of discharge of white fibro-serous fluid from the posterior cutaneous surface of the thigh, at present under his care in Glasgow. The patient was a woman, in other respects in fair health, aged 46, and mother of six healthy children. The discharge was white, like milk, and flowed from excoriations produced by the rupture of small vesicles scattered over the back of the thigh, and particularly from an infiltrated patch, of the size of the palm of the hand, on which the vesicles and excoriations were most abundant. The milky fluid coagulated a few minutes after being passed. It contained a fatty molecular base, similar to that of chyle, and a few nucleated cells. The results of a chemical analysis closely corresponded with those yielded by "chylous urine." The patient dated the commencement of her malady from a shivering-fit twenty-one years ago, shortly after which she noticed a "lump" in the situation of the affected surface. Fifteen years ago vesicles appeared, from which a brownish fluid exuded on scratching. For the last six years the discharge has been milk-white, and is always worse in wet weather, and while the patient is walking about, when its amount may be half a pint per hour. At night it ceases to run, recommencing about an hour after the patient rises in the morning; but in dry or frosty weather it may occasionally be absent for a week or two. The veins of the affected limb are varicose, but no enlargement of the lymphatic glands can be detected. The author succeeded in controlling the discharge for two months by a long elastic stocking, the use of which, however, had to be discontinued, owing to severe lancinating pains in the thigh. Immediately on ceasing to use the stocking the uneasy sensations subsided, and the discharge commenced anew. After remarking that cases of this affection were extremely rare in temperate latitudes, Dr. Buchanan pointed out, by referring to several recent examples, that they were probably more frequent in warm climates. He cited, however, and gave an account of two unequivocal cases of the same affection, both dating from the seventeenth century, one of which, in a male subject, occurred in Germany, and the other, in a female, in France. While referring to various pathological theories, the author fully recognised the identity of the above disease with "chylous urine," or, as he would prefer to call it, "white fibro-serous urine." He objected particularly to the theory which identified white fibro-serous discharges in general with chyle. He gave his reasons for believing that it was more natural to consider them as equivalent to the white liquor sanguinis—to transudations of the serum of the blood during its periodical milkiness after meals

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but with certain modifications inseparable from the mode of its secretion. Thus, while the water, albumen, and salts, and possibly also the fibrin, would come from the blood directly, he showed that the cells present in the discharge must be derived from the secretory layer of the skin, or from the epithelium of cutaneous glands. He contended that the molecular base was unquestionably derived from the blood; but that the molecules could not be conceived to filter directly through the walls of the vessels without pre-supposing the existence of a uniformly and intensely milky serum while the discharge was flowing, even at long intervals after meals. To avoid this difficulty, it might be supposed that the epithelial cells of the glands of the skin had the power of separating, by a perverted function, fatty matter from the blood, much as the epithelial cells of the intestine are concerned in filtering it into the lacteals. The cells would then become gorged with fatty molecules, and the uniformly white colour of the discharge would be accounted for without its being necessary to suppose that the liquor sanguinis was ever milky except, as usual, after meals. On this view, white fibro-serous discharges would depend immediately on deranged glandular action, and the foregoing case might be defined as a rare functional affection of the glandular apparatus of the skin. The paper was illustrated by specimens of the milky discharge, and by a drawing of the diseased surface.

After the reading of Dr. Buchanan's paper, on which there was no discussion,

A portion only of Mr. Marston's

REPORT ON SYPHILIS AS A CONSTITUTIONAL DISEASE

was read, and its further reading was adjourned to Feb. 10.

Mr. Curling rose, and said he thought it was scarcely judicious to commence the reading of Mr. Marston's paper at so late a period of the evening. It was a communication which was likely to be discussed, and the whole of it should be read the same evening, and in time for discussion. He made these remarks with deference to those who had thought differently.

Mr. Solly said he was not responsible for the paper being read in part. It was thought the evening would have been occupied by a discussion on the first paper.

Mr. Moore was responsible for the division of the paper into two readings. It embraced so many topics, that it would have been impossible to abridge it, and he, therefore, thought it advisable that it should be read in two parts, there appearing to be a natural division in the paper at the point at which he had stopped. There were precedents for this course of proceeding in the early history of the Society.

Mr. Henry Thompson exhibited some

LITHOTRITES OF A NEW CONSTRUCTION,

on behalf of Messrs. Weiss and Son, who wished to show them to the Fellows of the Society before making them generally public. As the alteration appeared to him to be a real improvement, he readily assented to do so. He premised that this related entirely to the mode of applying and disengaging the power, and not at all to the part concerned in crushing the stone. In order to demonstrate the qualities of these instruments, it was necessary to call to mind what are the main points to be achieved in constructing the instrument of a first-rate lithotrite. 1st. Economy of time in its action: anything which shortened the period necessary to a proper performance of the operation in the bladder was so much clear gain to the patient. 2nd. To reduce to a minimum vibration or concussion in its action. 3rd. To permit the utmost delicacy of perception, especially valuable in dealing with small fragments. He showed the deficiency of the old screw instrument in all these respects, and the inferiority of this latter to the instrument known as Charrière's, which was now so commonly substituted for it. He showed the improvement made by Mr. Coxeter, and placed in the International Exhibition; and finally demonstrated the action of Weiss's new instrument as uniting all the characters given above with the greatest strength, comparing it also with the rack and pinion instrument, to the advantage of the former. The power in Weiss's instrument is that of the screw; it is disengaged and converted into sliding action with the most perfect ease, and without moving the hand, while the entire instrument can be changed in direction, or even entirely rotated, by a light application of the finger and thumb. The apparatus for accomplishing this is exceedingly simple, at the same time very strong, and not liable to get out of order.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, January 7.

Dr. Tyler Smith, President, in the Chair.

A preparation of concentrated beef-tea was exhibited to the Society by Mr. Buckle, Culinary Chemist, of North-place, Gray's-inn-lane, convenient for administration in cases where expeditious employment of nutritive material is required.

A paper was read by Dr. Aveling, of Sheffield, on

VAGINAL LITHOTOMY.

The paper commenced by reciting the particulars of thirty-five cases in which this operation had been performed—twelve British, and twenty-two foreign. The author also gave another case, in which he divided the vesico-vaginal septum, and extracted a small rough stone. The wound was brought together with silver wire sutures. Gilt beads were passed over the ends of these, and run down to the lips of the wound. These were kept in position by a perforated shot, also passed over the ends of the sutures, and tightened upon them by a pair of forceps. He proposes in future to use a coil, made by winding a piece of the suture wire round a pin, instead of the beads. The wound healed in a week, and the patient returned to her home in a fortnight.

Mr. Spencer Wells congratulated Dr. Aveling upon the successful result of his interesting case, and heartily concurred in the tribute he had paid to the services of Dr. Marion Sims. But he (Mr. Wells) had begun to doubt whether the success which had followed the operation for the cure of vesico-vaginal fistula of late years was so much due to the use of wire sutures as to the improvements which Dr. Sims had originated in the mode of bringing the fistula into view, accurately paring the edges, and bringing them into perfect apposition. Provided the edges of a fistula were thoroughly pared, and kept in close apposition, it was probably of little importance how this was done. A year ago he (Mr. Wells) was as strongly in favour of metallic sutures as anybody; but latterly a wider experience had taught him that it is only after five or six days that wires show any advantage over silk, and before that time the sutures ought to be removed. Then silk offers the great advantages over wire of being more easily applied, of not requiring so large a needle to pass it, of the ends being much less irritating, and of being more easily removed. After many comparative trials on different parts of the same wound with wires of silver, iron, lead, platinum, and aluminium, and with fine catgut, horsehair, telegraph wire, India-rubber thread, and the fine strong silk known as "Chinese twist," he had become convinced that wires offered no advantage over silk, while silk offered many advantages over every other material used for sutures. In a recent case he had closed a vesico-vaginal fistula by five silk sutures, and perfect union resulted, although no catheter was used. The supposed necessity for the use of the catheter after closing vaginal fistulæ, was another error which time was correcting. The urine is by no means so irritating a fluid as some believe. The lower orders use it as a lotion to the eyes and to sore legs; and it certainly cannot differ much from the dilute saline solutions constantly prescribed as astringents or stimulants. The use of the catheter is the most troublesome part of the after treatment, and often most distressing to the patient. One of his patients really could not bear it, yet she did perfectly well; and lately he had not used it at all, union taking place quite as well as when it was used, and the patient being much more comfortable. With regard to stone in the bladder during labour being a cause of vesico-vaginal fistula, he had once removed in the Samaritan Hospital a large stone through a fistula before closing it; but it was very questionable whether it could often be necessary to remove a calculus through the vagina when no fistula existed, or to run the risk of making a fistula to remove a stone. Lithotrity was very easily performed in women; and large fragments of stone passed readily through the short female urethra, so that no form of lithotomy could often be called for. Simple dilatation of the urethra was not likely to answer in any case not suitable for lithotrity, and its effects are very uncertain; a large stone might be removed and no incontinence follow; but incontinence might follow removal of a very small calculus. The usual aid to dilatation by incising the urethra was still worse. A Surgeon of very large experience had told him

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that he had done it for two adults and seven children, and "they were all dribblers." Where, from some exceptional condition of bladder or stone, lithotrity was inappropriate, vaginal lithotomy might, therefore, become a valuable operation; but experience was still wanting to show that it was better than, or as good as, the lateral operation so successfully practised by Dr. Buchanan, of Glasgow. The subject was a comparatively new one, and Dr. Aveling deserved the thanks of the Profession for the light he had thrown upon it.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen passed their First Professional Examinations during the January sittings of the Examiners:—

William Thomson Crawford, Midlothian; William Chambers, Banbridge; James Johnstone Hyslop Hope, Lanarkshire.

The following gentlemen passed their Final Examinations, and were admitted Licentiates of the College:—

John Rogerson Dickson, Dumfriesshire; Alexander Doig, Forfarshire; William Fettes Murray, Forfar; Thomas Francis O'Dwyer, County Tipperary; David Ross, Edinburgh.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, January 29, 1863:—

Joseph Handley, King-street, Oldham; James Mercer Johnson, Everton, Liverpool; Samuel Alexander Patrick, Tipping-street, Manchester; John Dixon Mann, West View, Kendal; Frederick John Gray, March, Isle of Ely; Heber Dowling Ellis, St. Bartholomew's Hospital; Thomas Lewis Brittain, Chester; John Nicholas Miller, The Square, Hampstead; John Lyman, Guy's Hospital; James Matthews, Cowes, Isle of Wight.

The following gentlemen passed the Preliminary Examination in Arts on January 30 and 31, 1863:—

Frederick John Burge, Hammersmith; Henry Trenshaw Butlin, Camborne; Nathaniel Edward Davies, Billesdon; Thomas Bradford Donaldson, London; Alfred Stanbank Drew, Stow-on-the-Wold; James W. G. Farwell, St. George's Hospital; Thomas Flower, Middlesex Hospital; Richard Murhall Hickman, Shrewsbury; J. J. Hughes, Congleton; George Askew Hull, Kensington; Stanley Peacock, London; Charles Richardson, Gomersal; Julius Ottaway Sankey, Witney; John H. Waters, Nottingham; James C. Worthington, Lowestoft.

APPOINTMENTS.

BALFOUR, DR. JOHN HUTTON, has been elected Honorary Member of the Edinburgh Geological Society.

FOLEY, JAMES J., M.R.C.S. Eng., has been appointed Surgeon to the Constabulary, Killeagh, County Cork.

HELPS, DR. WILLIAM, has been appointed Resident Physician and Medical Superintendent to the Royal Bethlehem Hospital, Lambeth.

MACKENZIE, MORELL, M.D. Lond., has been appointed Physician to the Metropolitan Free Dispensary for Diseases of the Throat and Loss of Voice.

MATTHEWS, MR. CHARLES S., F.R.C.S., late House-Surgeon to King's College Hospital, has been elected Surgeon to the Farringdon General Dispensary.

M'DONNELL, DR. ROBERT, has been elected one of the Medical Visitors of the Jervis-street Hospital, Dublin.

MURRAY, J. JARDINE, F.R.C.S. Ed., has been appointed Surgeon to the Brighton and Sussex Infirmary for Diseases of the Eye.

OFFOR, MR. CHARLES, has been appointed Resident Dispenser to the Clapham General Dispensary.

WHYTE, MR. WILLIAM DUDLEY, has been appointed Resident Apothecary to the Jervis-street Hospital, Dublin.

WILLIAMS, DR. WILLIAM RHYS, has been appointed Resident Apothecary to the Royal Bethlehem Hospital, Lambeth.

DEATHS.

AURANEL, DR. HONORÉ, Physician-in-Chief of the Lunatic Asylum at Marseilles, Chevalier of the Legion of Honour, well known for his enlightened treatment of the insane, has just died of apoplexy, age 53.

BEALE, MILES, M.R.C.S. Eng., at 21, Finsbury-square, E.C., on February 2, aged 65.

BEVAN, WILLIAM, M.D., at Sydney Avenue, Blackrock, co. Dublin, on January 26.

BUCKNILL, SAMUEL, F.R.C.S. Eng., at Rugby, Warwickshire, on February 1, aged 78.

CEJKA, DR. JOSEPH, Extraordinary Professor in the University of Prague, and Dean of the College of Physicians, of phthisis, on December 26, 1862, aged 51. He bequeathed 15,000 florins to the widows' fund of his College.

CHALMERS, WILLIAM, Staff Assistant-Surgeon, at Union-street, Aberdeen, on January 22, aged 28.

DAVIS, THOMAS, at Upton-on-Severn, on January 16, aged 73.

DOYLE, ANDREW JOSEPH, M.R.C.S. Eng., at St. Michael's, Lewes, Sussex, on January 31, aged 55.

HALLAM, WILLIAM, M.D. Aberd., at Newcastle, Staffordshire, on January 30, aged 49.

HARRIOTT, WILLIAM, at Rainford, on January 30, aged 38.

HARWOOD, THOMAS, jun., M.R.C.S. Eng., at Boston, Lincolnshire, formerly of Kuton, on January 28, aged 51.

HEMING, GEORGE OAKLEY, M.D., at Kensington, Bath, on January 28, late of Manchester-square, London.

LEHMANN, DR., the celebrated Professor of Chemistry at the University of Jena, whose works are so familiary known in England, on January 6, in the prime of life.

SHIRREF, JAMES, M.D., at Dunlilquin, New South Wales, on October 6.

ROYAL COLLEGE OF SURGEONS.—The readers of the *Medical Times and Gazette* will, no doubt, be glad to be reminded that the Hunterian oration will be delivered on Saturday next, in the theatre of the College, at three o'clock, by our esteemed contributor, Professor Gulliver, F.R.S.; and on the following Tuesday, Professor Huxley will commence his course of lectures.

ALL old genuine English surnames, derived from nicknames and occupations, are now threatened with extinction. Bug becomes Norfolk Howard, and Stubbs is transmogrified into De Montmorency; and it is said that a Medical student of Guy's, named Caudle, has announced his intention of assuming a surname which will render him less of a mark for witticisms when he practises Midwifery.

ROYAL RECOGNITION OF MEDICAL SERVICES.—On the occasion of the christening of the infant son of Dr. William Jenner, yesterday morning, her most gracious Majesty was pleased to stand sponsor, being represented on the occasion by Lady Augusta Bruce, who, in obedience to the wishes of the Queen, gave the boy the name of Albert Victor, accompanied with the present of a magnificent tankard, bearing a suitable inscription, and as a royal recognition of the great Professional attention paid by Dr. Jenner to his Royal Highness the Prince Consort.—*Times*, January 31.

WE are glad to hear that a Cottage Hospital is proposed for East Grinstead and surrounding parishes. A cottage on East Grinstead Common, enlarged and adapted for the reception of seven patients, is offered by the proprietor rent free, on condition that a sufficient amount is contributed to pay for the beds, bedding, furniture, and other requisites for the accommodation of the patients. About 120*l.* will be required for this purpose.

DEATH BY DROWNING IN SIX INCHES OF WATER.—The *Freeman* states that a man, named Macabe, aged about fifty years, was found on Friday lying in a ditch in Bishop's Field, near Stillorgan. Deceased had been in a weak and almost helpless state for some time previously. It appears that he fell into the ditch head-foremost, and his foot being entangled in a brier he could not extricate himself, and was drowned, although the water was but six inches in depth.

THE MEDICAL DEPARTMENT OF THE ITALIAN ARMY.—The military Surgeons of the Italian Army, who, in 1858, numbered 155, now, in consequence of the various annexions, amount to 755. The following is the distribution, according to grade:—President of Council, 1; Inspectors, who are also members of Council, 6; Surgeons of the Military Department, 6; Surgeons of Division, 44; Surgeons of Regiments, 227; Surgeons of Battalions, 334; Assistant-Surgeons, 137; total, 755.

A VETERAN MEDICAL JURIST.—Casper, the renowned Professor of Legal Medicine at Berlin, a few weeks since celebrated a remarkable day in his long and laborious scientific career, viz., the day on which he executed his thousandth Medico-legal autopsy. He certainly was justified in placing on the title-page of his "Manual of Legal Medicine," the epigraph, "*Quod vidi scripsi.*"

PROPORTION OF VIOLENT DEATHS IN AUSTRIA.—Taking the entire Austrian monarchy, the proportion of deaths from diseases is 987 per 1000, and of deaths from violent causes, 13 per 1000. This proportion varies, however, considerably in different parts of the empire; thus, in the mountainous regions, as well as on the coast, the violent deaths rise as high as 19 per 1000. A vast majority of the violent deaths arose from accidents, as in 1000 deaths there were only, on an average, 1 from murder or manslaughter, and only 2 or 3 from suicide.

AMATEUR THEATRICALS.—On Monday night, the students of the University of Aberdeen gave a dramatic and musical entertainment in the Music Hall Buildings, in aid of the Lancashire Distress Fund. The hall was crammed to suffocation by a very fashionable audience, and numbers w

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turned from the door. So great was the crush, that the Lord Provost, the patron of the performance, finding an entrance impracticable by the ordinary way, had to procure admission for his party by crossing the stage. The dramatic portion of the entertainment consisted of Townley's "High Life below Stairs," and Rhodes' "Bombastes Furioso." The students who took part in this entertainment were chiefly Medical, although not exclusively. The amount realised, after deducting all expenses, was £46 14s.

ROYAL INSTITUTION OF GREAT BRITAIN.—General Monthly Meeting, Monday, February 2, 1863; William Pole, Esq., M.A., F.R.S., Treasurer and Vice-President, in the Chair. The Earl of Clanwilliam, Edward W. Cox, Esq., Sir William Augustus Fraser, Bart., General Charles H. Hamilton, C.B., and Peter Vanderbyl, Esq., were elected members of the Royal Institution. The secretary reported, that the executors of the late James Walker, Esq., F.R.S., M.R.I., had bequeathed to the Institution a marble bust of Professor Faraday, by Mr. Matthew Noble, M.R.I. The thanks of the members were returned to Professor Tyndall, and to his Eminence Cardinal Wiseman, for their discourses on the evening meetings on Fridays, January 23 and 30. The presents received since the last meeting were laid on the table, and the thanks of the members returned for the same.

ILLEGAL PRACTICE OF PHARMACY BY THE SISTERHOODS IN FRANCE.—Although we have in this country charlatanism enough to contend with, we are not subjected, like our neighbours across the Channel, to the invasions of bands of religious sisterhoods. The complaints are incessantly occurring in the provincial districts of France of this nuisance, and its abatement (supported as the Sisters are by the local authorities) seems a matter of great difficulty. The most recent instance is stated on the authority of Dr. Fouquet, Vice-president of the Medical Society of Morbihan. It seems that the religious sisterhoods of that department not only give away but sell medicines, while their pharmacies, or rather shops, are conducted with gross negligence. Bottles of laudanum or of Pearson's arsenical solution were found in the kitchen drawers, while illegal weights are employed, even grains of wheat being used for weighing active substances. The Medical Society represented these facts to the authorities, and received the reply that the Sisters must be prohibited selling medicines, but may distribute them, and give gratuitous Medical advice to the poor.

ST. THOMAS'S AND BETHLEHEM HOSPITALS.—Mr. W. J. Nixon, secretary to the London Hospital, in a letter to the *Times* of the 4th inst, announces that a Surrey magistrate, an old supporter of this charity, makes the following munificent offer:—"Convinced that the best site for the future St. Thomas's Hospital is the present site of Bethlehem Hospital, and agreeing with the general verdict, that lunatics should be located in the country, he is prepared to give a freehold site of seventy-three acres for the new Hospital of Bethlehem on condition—first, that St. Thomas's Hospital be built on the site of Bethlehem; and secondly, that the sum of 21,000*l.* (20,000 guineas) be added to the capital stock of the London Hospital in the Whitechapel-road." "The estate (which is freehold and land tax redeemed) occupies the southern slope of one of the finest hills in Surrey, has a frontage of nearly a quarter of a mile to the high (Croydon) road, is close to an intended station on the Brighton railway, is eight miles from the city, and seven from the West-end, and is worth at least 300*l.* per acre, less eligible neighbouring land having sold at half as much more."

METROPOLITAN FREE HOSPITAL, DEVONSHIRE-SQUARE, BISHOPSGATE-STREET, CITY, N.E.—A most interesting ceremony took place in this establishment on Thursday week, in the presence of a large and influential assembly. The occasion was the opening of two new wards which have been prepared for the reception of Jewish patients. At three o'clock the Rev. the Chief Rabbi, attended by several of his colleagues, proceeded to inspect the several apartments, including the wards (male and female), the kitchen, and receptacle for the dead, with all of which all present expressed their entire satisfaction and approval. Some appropriate psalms were then intoned by the Rev. A. Barnett, of the Great Synagogue, and the responses by the choir of the same place; after which the Rev. the Chief Rabbi offered up a most beautiful and impressive prayer for the prosperity of the institution, and for the blessing of God upon all connected with it; and after partaking of some slight refreshment in the board-room the company separated. Amongst the gentlemen present we noticed the Revs. A. Levy, A. L. Barnett, Myers, and Asher; Drs. Ramskill, Jones, and Warner; John Gurney Fry, Joseph Fry, S. B. Power, H. E. Murrell, Coleman Defries, R. L. Ogilby, E. J. Chance, G. Borlase Childs, and Henry Defries, Esquires.

LONDON INSTITUTION.—On Wednesday last, Mr. Carter Blake, F.A.S.L., commenced a course of lectures on the "Zoology of Warm-blooded Vertebrates." After offering a few definitions of the prevailing distinctions between the animal and vegetable kingdoms, in the main consonant with those of Mr. Hogg, the lecturer called attention to the characters of the kingdom *Acrita*, or *Protozoa*, composed of the most simple organic beings, retaining the primitive form of the nucleated cell, and intermediate between the plant and the animal. The latter great kingdom of nature was divided into four distinct sub-kingdoms, the *Vertebrata*, *Articulata*, *Mollusca*, and *Radiata*. Amongst the latter Mr. Blake preferred to retain the *Bryozoa*, admitting, however, their affinities to the *Mollusca*. The *Echinodermata* were likewise doubtfully retained in the radiate sub-kingdom. The proposal made by some authors to institute a sub-kingdom, *Cœlenterata*, was commented upon at length. Discussing the primary principles of biological classification, examples were adduced of the operation of such laws as those of subordination of character, as exemplified by the usual modes of scientific notation. The relations of the osseous, tegumentary, respirative, digestive, circulatory, and nervous systems in *Vertebrata* were briefly discussed; and the demonstration of the existence of ideal patterns of construction, as proved by the laws of morphological osteology, was prominently insisted on. The next lecture will be devoted to a detailed exposition of the classification of *Aves Præcoces*.

SUFFOCATION OF FIRST-BORN CHILDREN.—On Saturday afternoon an inquiry was held by Mr. H. Raffles Walthew, the deputy coroner, at the Pitt's Head, Tyson-street, Bethnal-green, respecting the death of Eliza Short, aged three months, who was suffocated under the following circumstances:—Deceased was a healthy child, and on Wednesday evening last was placed in bed as usual, and at half-past twelve the parents went to bed. The mother pressed the child close to her to keep it warm, and in two hours afterwards it was found dead from suffocation. The mother was only 20 years of age, and deceased was her first child. The coroner said that the number of children destroyed by suffocation annually was much to be deplored. One great source of the distressing extent of infant mortality from this cause was the inconsiderate and over-eager fondness of young mothers, who clasped their first-born close in their arms, and believed they were doing their infants a kindness, when they deprived them of all access to the air, in order to "keep off the cold." By such means, children, even when healthy, but especially when delicate, were killed as effectually as if they were strangled. Even where death did not immediately result from asphyxia, there was no doubt that in numberless instances the constitutions of children were undermined, and death eventuated from consumption or other diseases, which the most ordinary attention to common-place hygienic rules might have obviated. The jury returned a verdict that deceased died from suffocation—how caused there was no evidence to show.

THE SECOND FRENCH EXPEDITION TO MEXICO.—The small amount of sickness and few deaths which have attended the transport of an army across the Atlantic are regarded, with reason, by the French Medical officers, as a triumph of naval hygiene. Great advantage is considered to have accrued from each detachment, as it arrived, remaining a week at Martinique. The men, beasts of burden, and cavalry horses were all landed while the vessels were cleansed and re-victualled. By some, this was thought to be a risk, on account of the frequent prevalence of yellow fever in the Antilles, and which, in fact, did then prevail in the English possessions there. However, the men were landed, and placed in barracks or in improvised camps. This agglomeration of Europeans, and the fact that, at the same time, there were going on extensive alterations in the harbour, giving rise to severe intermittents, justified alarm, which fortunately proved groundless. It might have been different had a chance case of yellow fever been imported, seeing the destructive effects upon the first expedition caused by such an incident. Thus, 20,000 troops of all arms were landed there, in the course of three months, for the space of one week; and, of this number, only 218

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entered the Hospital, of which number 2 died, and 155 rejoined the expedition, 61 remaining in the Hospital on October 1. This immunity from disease is the more remarkable, as the soldiers gave way to great excesses on landing, especially as regards drink, exposure to the sun, etc.; and the weather, at this time of the year (the expedition arriving at Martinique between the beginning of September and October 10), was characterised by torrential rains, intense heats, and great atmospheric vicissitudes.—*Gazette Hebdomadaire*, January 23.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.—A half-yearly general meeting of the members of this Society was held on January 28; T. A. Stone, Esq., President, in the chair. It appeared that, during the past year, £1933 had been distributed in half-yearly grants amongst 43 widows and 26 orphans of former members; £10 10s. in immediate relief to a family; £45 towards the self-maintenance of two older orphans; £15 for extra relief to a widow; and £20 as a special grant to an adult son in great distress and illness abroad. We are happy to state that a much larger number than usual of new members had been elected by the Society, and we hope that this increased ratio will continue,—so lamentable, and often so unexpectedly, is the condition of families of deceased Medical men. The following officers and directors for the ensuing year were elected on January 26. The names with the asterisks prefixed are fresh elections:—*President.*—Thomas Arthur Stone, Esq. *Vice-Presidents.*—Martin Ware, Esq., Everard A. Brande, Esq., Peter M. Latham, M.D., John Bacot, Esq., Thomas Turner, M.D., D. Henry Walne, Esq., A. J. Sutherland, M.D., F.R.S., Edward Tegart, Esq., Geo. Burrows, M.D., F.R.S., *John Miles, Esq., *Sir John W. Fisher, and *Cæsar H. Hawkins, Esq., F.R.S. *Treasurers.*—James T. Ware, Esq., G. Hamilton Roe, M.D. (Atg.), *Richard S. Eyles, Esq. *Directors.*—B. G. Babington, M.D., J. Wetherfield, Esq., John J. Sawyer, Esq., Thomas Brown, Esq., C. J. B. Aldis, M.D., Wm. Dickinson, Esq., J. C. Salisbury, Esq., Henry Blenkarne, Esq., T. King Chambers, M.D., John Clarke, M.D., Daniel Scannell, Esq., Prescott J. Hewett, Esq., *William Cathron, Esq., W. J. Little, M.D., J. Gregory Forbes, Esq., Wm. Munk, M.D., Barnard W. Holt, Esq., Charles Miles, Esq., *Henry Sterry, Esq., *Alder Fisher, Esq., *Henry Jeaffreson, M.D., *James Paget, Esq., *H. S. Illingworth, Esq., and *Francis Hawkins, M.D. The seventy-fifth anniversary dinner of the Society is appointed to be held on May 20, at the Albion Tavern. Stewards' names are requested.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

We think *J. T. B.* is a little too severe.

Dr. C. Kidd.—We are delighted to receive the communications of Dr. Kidd, but, probably, a history of misunderstandings with other journals would possess no interest for our readers.

Dr. J. P. O'B.—We are sorry that our arrangements do not permit our inserting any notices of deaths but those of Medical men.

Papers by Professor Laycock, Dr. Ramsbotham, Dr. Althaus, Dr. Venables, Mr. R. Ellis, Mr. F. Bainbridge, Dr. J. Robertson, and Mr. E. L. Hussey, are in the printer's hands, and will shortly appear.

Consultations with Homœopaths.—The man who consults with these slippery personages, *of malice prepense*, who cultivates their acquaintance, and thirsts for the fees that they bring to his consulting-room, deserves all reprobation. But we do not think that it is fair or honourable to drag a respectable Physician before his brethren, because he has been entrapped into consultation with such a person, or has met him under peculiar and exceptional circumstances, of which every man of honour is judge for himself. How is a man to know who is a homœopath? or, why should a sick person be refused advice because he is a fool? The practice of homœopathy in a country town is a regular imposture. Country people will have their bowels moved, and the so-called homœopath uses the ordinary powerful remedies in secret, whilst he hangs out his homœopathy to delude the vulgar with something supposed to be German and mysterious—patronised by some clergymen, and many courtiers, people of fashion, loose women, and old *roues.* By all means do not let respectable Physicians give to an adventurer the sanction of a consultation. But we must take care equally to avoid flunkeyism, *espionage*, and the idea of dogging the steps of gentlemen, and showing them up if they are supposed to call at houses where a homœopath attends. Homœopaths are bad; but no man of honour will consent to lose his freedom of action, and live under a system of *espionage* and tale-bearing.

MEDICAL CHARGES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I beg the favour of your informing me what I ought to charge for attending a lady, suffering from phthisis, for seven months. She resided in my house, with the consent of her trustees, and I had the entire Medical charge of her. She required me to visit her morning and evening, which I invariably did, and, on any emergency, at all times gave her my advice. She was a young lady, with £400 to £500 a-year. I charged for her board £100 a-year. Would £75 be a proper fee? I paid 432 visits.

I am, &c.

Hertford-street, Coventry, February 2. A REGULAR SUBSCRIBER.

[£100 per annum is little enough for the board of a person who lives as a consumptive patient should live. The sum of £75 for Medical attendance is also very moderate.—ED.]

ON THE WIRE COMPRESS, A SUBSTITUTE FOR THE LIGATURE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In the *Medical Times and Gazette* of January 24 is a report of the meeting of the Royal Medical and Chirurgical Society on January 13, from which I learn that a paper was read by Mr. Dix, Surgeon to the Hull Dispensary, on "the Wire Compress, a Substitute for the Ligature." In describing the compress, Mr. Dix states, that it is a modification of the method of arresting hæmorrhage devised by Professor Simpson, which is believed will obviate all the disadvantages inherent to that method, and that "the idea was promulgated in a paper on Acupressure, June 2, 1860," and put to proof in a case of amputation of the finger in September, 1860, and afterwards in more important cases, which Mr. Dix details, and he affirms the superiority of the compress over the ligature both in amputations and aneurisms.

Having read the report of the paper with the carefulness of an interested party, it appears to me that Mr. Dix has led his audience to infer that he was the originator of the compress he described and eulogised, and that his hearers understood him to be so. If correct in these suppositions, Mr. Dix has done me some little injustice, though I trust not intentionally. In strict right, and by written promise, Mr. Dix was under obligation to state that I originated the compress, and presented it to him with explanations how to apply it, and that he had applied it as instructed. I devised the compress in January, 1860, in the hope that it might prove more simple of application than Acupressure, and I took the liberty of submitting it to Professor Simpson about the 18th of that month. In June following I saw Mr. Dix's letter on "Acupressure," which enumerated "certain disadvantages" attending that method. I, therefore, forwarded to that gentleman the compress which I had planned five months before, believing that it would obviate the disadvantages he mentioned as belonging to acupressure. The receipt of the compress was, I thought, somewhat unkindly acknowledged, and the plan ridiculed. I heard no more of the matter for eighteen months, when, in November, 1861, Mr. Dix favoured me with a letter, informing me that he had found the value of my suggestions, and had fully tested the compress in three cases of amputation—that the subject would soon probably be brought forward in the Medical societies and periodicals, "when," he says, "I shall take care to mention your name, as is just and due." Mr. Dix has now brought the subject before the Royal Medical and Chirurgical Society, and ably defended the compress in the discussion which arose; but he altogether omitted to state what was "just and due," that, if the simple method of arresting hæmorrhage which he was advocating possessed any merit, it belonged in all fairness to me. I am, &c.

WILLIAM B. HILLIARD,
Instrument Maker to the Glasgow Royal Infirmary.

IS PODOPHYLLIN A CHOLAGOGUE?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A clever, though somewhat over-sanguine, friend has frequently vaunted to me the powers of podophyllin in producing a flow of bile. Having learnt to distrust the evidence offered in favour of this power in other remedies, I listened, but waited. After waiting some time, there came before me a young soldier, aged 23, well made, well fed, and healthy in constitution, but as yellow as a bottle of the best Durham,—an appearance which had been gradually coming on for about a week, and the result, apparently, of continued exposure to cold during rifle practice. Otherwise, he looked well, spoke cheerfully, slept well, and had a good appetite, and no dyspeptic symptoms, though his bowels were "rather bound." On examination, there was no enlargement of the liver, nor tenderness, but the stools were formed and white, and the urine over copious, very turbid, and so loaded with biliary matter as to look like a thick muddy decoction of—as I should say—cinchona, oak bark, and logwood.

After the usual warm bath, he had, on the 2nd, a purgative of comp. jalap, ʒj., and podophyllin, gr. j., and was ordered podophyllin, gr. ¼, James' p., gr. ij., and ex. of conium, gr. iij., in pill, thrice a-day. On the 3rd, the purgative proving ineffective, he had a two-pint injection, containing turpentine, ʒiv., sulph. magnes., ℥iss., and ex. of henbane, gr. iv. On the 6th, the podophyllin was increased to gr. ½, in a pill thrice a day, without admixture, and this, on the 7th, purged him seven or eight times with pain, his expression, on the 9th, after the omission of the medicine, being, that he had been much better, and felt no pain,—an expression which, as I had been absent on the previous day, puzzled me until he explained himself. His diet during this period was—tea and eight ounces of bread on the 2nd; the same, with two ounces of sago, on the 3rd; tea, twelve ounces of bread, and the beef-tea of eight ounces of meat, from the 4th to the 6th, inclusive; and tea, fourteen ounces of bread, butter, beef-tea as before, and a pudding of two ounces of rice and one egg, from the 7th onwards.

On the 9th, the complexion remaining unchanged, and as I considered him not quite as a *corpus vile*, but as a favourable case for continuing an experiment, he was ordered fluid extract of tarax., ʒj, in two ounces of an infusion of chiretta or gentian thrice daily; and, on the 13th, the stools, for the first time, showed a tinge of the ordinary colour, and, the next day, the legs were less coloured; the urine, however, continued as copious, and much loaded with bile for three or four days, and then showed a good deal of white sandy sediment, after which it became clear. His diet was changed to half on the 17th, and to "entire" on the 24th; and on the 27th he was discharged, still somewhat coloured, but well.

Remarks.—There is nothing in this case to show decisively that the return of function was due to anything more than time and Hospital residence, and there is certainly nothing to show that podophyllin ha-

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any effect beyond uncomfortably purging the patient. My personal experience of this medicine as a purge is, that it produces watery stools, and may gripe, even when combined with henbane. It has been said that this is an evidence of the flow of bile over the intestinal surfaces; and, again, it has been told me that podophyllin gripes until one is used to it. I cannot see the advantage of a purge that requires a course of acclimatisation on the part of the intestines; and I believe the "flow of bile" theory to be a pleasing *placebo* for the mind of the griped patient. Lastly, I forward this case in the hope of producing a flow of facts, of a non-acrid character, as to the observed effects of this new medicine.

I am, &c. STAFF-SURGEON.

DIABETES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I suppose your two correspondents of last week, who have made use of my case for the purpose of castigating me, would expect a groan of thankfulness. To neither of these gentlemen should I have replied, were there not two accusations therein made, one reflecting on myself, the other touching the fair fame of Dr. Pavy. I do not yield to your correspondent in my respect and admiration for that gentleman, although he is personally unknown to me, nor do I think any disrespect can be fairly implied from the supposition that certain things ought to follow if so-and-so is true; but it is quite another thing to affirm that, in the absence of such a sequence, A. or B.'s statement is false. I cannot refer to the exact words of my case, as all my notes are packed away, and I am at this present time a bird of passage. With regard to myself the accusation comes double-tongued—an inclination to homeo quackery, because, forsooth, I mention the use of sugar in connexion with diabetes, or give minute doses of strychnia. Dr. Budd, in his paper on this subject, had some misgivings that this "jaw-bone of an ass" would be raised to strike him; and surely I, as a poor honest workman in the ranks, must be content to be "written down an ass" if by means of it I can in any way subserve the advancement of the "great commonwealth of Medicine." I utterly detest and disown any approach, even in thought or otherwise, to a craft which I know to be untrue, and believe to be dishonest; but had the "Four Years Old" been a little more modest before he (unaccredited as yet to the Profession of Medicine) began to pick holes in my prescriptions, he would have seen that this one drachm of my liquor strychniæ was increased to three, and I relinquished it when the man's muscles were twitching violently, an indication to a practical man of more moment than the subdivision of his doses. Strychnia with some is a very violent remedy, with others not so. It can hardly be a mortal sin to stand on the side of caution; but with regard to my other prescriptions I have this to say, that I am quite aware of their unchemical nature, but having once proved the worthiness of a friend, I do not pass him by because he has faults, and so with my medicine: the result in this case, as well as many others, is, I trow, worth a head full of chemical ideas.

Will my young friend undertake to say how far the chemical relations of any given mixture remain unaltered after their entrance into the stomach? Chemistry is but the handmaid, not the parent, of experience. Country Doctors do not study nicety for pauper patients; they do not sit down to escritoires, and, with diamond-laden finger, pen equipped, write on perfumed paper elegant prescriptions in irreproachable Latin, but to bring about good even by the veriest "hotch-potch" that ever was concocted is always their aim. Why, with the tea and coffee and mixtures of all kinds that enter into our stomachs, a perpetual metamorphosis must be going on between food and physic, and several unchemical mixtures are of utility, perhaps, from the very decomposition which takes place. I will mention one very common example—the mixture of acetate of lead and opium, commonly used as an astringent in diarrhœa: here we have learned in the lecture-room, that there is a decomposition into a meconate of lead; is it now disused?—I opine not. Chemistry is a very fine exercise for the minds of young gentlemen, but it will not cure our patients; nor do we see its professors always Physicians *par excellence*. No. 1 correspondent, I presume, is also a student, otherwise he would gladly have put down his degree or diploma instead of signing himself "Hyperborean." In common courtesy, he might have given me the benefit of *my* degree, which I obtained at great labour, and no small expense. If I have unwittingly fallen into an error, in considering glycerine to be allied to grape sugar, I crave pardon, on the grounds that I carried such an impression from the lecture-room; but years make a wonderful difference in chemistry, and in the exigencies of country practice; I have had neither time nor inclination to indulge in the beatitudes of that study. If glycerine has no relation whatever to sugar, then the case simply resolves itself into the treatment of diabetes by remedies, the most prominent of which are glycerine, strychnine, and iron. Simply saccharine food could not produce such a result as this case furnishes, inasmuch as the other cardinal requisites, oleaginous, saline, and albuminous, must be somewhere forthcoming. Is it, then, too presuming to say that other constituents exist, as yet, perhaps, undetermined by chemists?—and it may be that glycerine will yet hold a very important place as a therapeutic agent. This, however, can only be determined by practical Physicians. In the diet of my patient I may remark, that an abundance of sugar was allowed, and those vegetables said to be rich in it; whilst he was also advised to carry candied sugar in his pocket. The condition of the patient when first seen was the result of nine months' constant illness, and he had sojourned meanwhile in Hospital. When I first visited him his condition was precisely as I have stated it. The printer's trivial omission need not afflict No. 1.

I believe that a communication between the liver and the skin is established by nerves passing through the ligaments of the former, and that the action of these nerves become exalted at times by the congestion of that organ stretching the inflamed capsule, just as the nerves of the tense and inflamed pleura become exquisitely sensitive under similar circumstances.

Having stated thus much for their mutual edification, I think the "Four Years Old" ought to be able to illustrate my meaning for himself, if he has spent his time to any purpose. For them, as well as myself, I would, in the words of old Dr. Alvary, of school memory, express this hope—"Experientia te plura docebit." May I also hope that they will have the courage, when they again raise the pen of the critic, to affix their names, and not adopt the concealment of anonymous writers?

I am, &c.

Late of Canterbury, February 3. HENRY USHER, M.B., Surgeon.

COMMUNICATIONS have been received from—

Mr. LE GROS CLARK; Messrs. A. and E. COHEN; Rev. W. W. CAZALET; Dr. R. LEE; Dr. ED. BISHOP; Mr. W. J. WILSON; THE SECRETARY OF THE WESTERN MEDICAL AND SURGICAL SOCIETY; Mr. WM. NICHOLS; Dr. R. D. THOMSON; Dr. ANSTIE; Dr. BRINSLEY NICHOLSON; A REGULAR SUBSCRIBER; Dr. HENRY ROGERS; Dr. MERRIMAN; Mr. J. ADAMS; BRESLAU; Mr. R. LAWRANCE; Dr. H. JACKSON; Mr. J. BRUCE; Dr. KIDD; Dr. BUCHANAN; Dr. BLACK; Mr. HILLIARD; M. A. B.; Dr. GEORGE JOHNSON; Mr. HOLMES; Mr. JAMES TUTLE; Dr. BARRIE; Dr. McCALL ANDERSON; Dr. J. BEDDOE; Professor GULLIVER; M.D. 100; Mr. R. E. THREADGALE; Dr. McCORMACK; Mr. W. J. NIXON; Mr. YEARSLEY; SECRETARY OF JUNIOR MEDICAL SOCIETY.

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 31, 1863.

BIRTHS.

Births of Boys, 1123; Girls, 988; Total, 2111.
Average of 10 corresponding weeks, 1853-62, 1825·6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	695	659	1354
Average of the ten years 1853-62	672 7	660 0	1332 7
Average corrected to increased population..	..	..	1466
Deaths of people above 90	..	..	2

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	2	10	8	4	8	10	11
North ..	618,210	11	5	19	2	11	9	2
Central ..	378,058	1	3	5	..	12	9	..
East	571,158	17	5	6	4	12	28	3
South ..	773,175	8	11	11	5	16	15	2
Total.. ..	2,803,989	39	34	49	15	59	71	18

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·857 in.
Mean temperature	44·5
Highest point of thermometer	55·2
Lowest point of thermometer	32·2
Mean dew-point temperature	39·5
General direction of wind	S.W.
Whole amount of rain in the week	0·60 in.

APPOINTMENTS FOR THE WEEK.

February 7. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

9. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Lettsomian Lectures on Surgery—Lecture I.—Thomas Bryant, F.R.C.S., "On the Differences Between the Physiological and Pathological Processes in Children and Adults, and on some Congenital Deformities, as Hare-lip and Malformations of the Rectum."

10. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Marshall, "On Animal Mechanics."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY (Ballot at 8), 8½ p.m. Continuation of Dr. Marston's Paper on "Constitutional Syphilis." Mr. T. Longmore, "On Two Cases of Kelis."

11. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

HUNTERIAN SOCIETY, 7 p.m. Annual Election.

12. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Dr. E. Frankland, "On Chemical Affinity."

13. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

HUNTERIAN SOCIETY. Annual Dinner.

ROYAL INSTITUTION, 8 p.m. Dr. E. Frankland, "On Artificial Illumination."

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ORIGINAL LECTURES.

LECTURES ON THE

BLOOD OF VERTEBRATA.

DELIVERED AT THE

Royal College of Surgeons of England,

DURING THE SESSION 1861-62.

By GEORGE GULLIVER, F.R.S.

Professor of Comparative Anatomy and Physiology to the College.

LECTURE XI.—*View of the Corpuscles as Animalcules—The Cell Doctrine and Endocystics—The Fibrin—Its Diagnostics and Diffusion in Animals and Plants—Its Structure—Its Viscidity—False Membranes and the Cell-Doctrine.*

View of the Corpuscles as Animalcules.—After the history of the coagulation of the blood, and the description of the corpuscles, we come to the consideration of that fluid in which they are moved, and live, and have their being. Live? Certainly. We have amply proved this by their power of reproduction and self-preservation; in short, by their vital endowments. And so, before finally quitting the corpuscles, and proceeding to treat of the fibrin, let us take a parting look at them in the further point of view as zoological entities; and this in company with and under the guidance of a very eminent zoologist, happily still spared to adorn that science the bounds and prospects of which he has so greatly extended. Numberless observers, such as Treviranus, Doellinger, Pander, Prevort and Dumas, Schultz, and Dr. Alison, and more especially Wolff, have described a power of self-motion in the red corpuscles of the blood. But Professor Grant maintains that not only all the different kinds of blood corpuscles which we have been describing, but the globules of chyle, of milk, and of the secretions and excretions, are really so many distinct animals. He arranges them accordingly in his class *Cystodia* and order *Endocystica*. Should his views be confirmed, it follows that the different solids of the body,—among which he specially indicates the genera of bone, muscle, cartilage, nerve, etc.,—nay, even the entire frames of the highest animals, originate from or are composed of a congeries of the lowest; in short, that each portion of the soft and hard textures, as a bit of fat or cartilage, of the highest animals, and, indeed, throughout the animal kingdom, is originated or formed by these animalcules. It would follow that the highest Phanerogams of vegetables are but a congeries of the lowest Cryptogams, just as a fragment of animal fat would be a mere collection of Endocystica. The starch-cells and pollen grains, and, indeed, the cells of plants, high or low in the scale of organisation, would be only so many masses of different and lower plants. So the phenomenon of rotation, with which we are so familiar as a beautiful microscopic object, might be regarded as a number of smaller vegetables confined, but yet circulating, within a larger and different cell or vegetable. Indeed, it seems possible that we may even be called upon to raise these imprisoned globules, of starch, chlorophyll, or mucus, to the dignity of animals, since their movements have been repeatedly described as "evidently spontaneous"; not by Dr. Grant, but by certain French physiologists, as M. Donné. In starch granules, as well as in the particles of the fovilla of pollen, we are familiar with motions, which have also been regarded on the Continent in a more or less similar point of view. It is fortunate for science that the discovery of the so-called "molecular motions" was made in this country by such a profound observer as Robert Brown, who at once placed them in their proper position, and for ever deprived this phenomenon of any necessary relation to animality, since he proved that these motions might be excellently seen in the minutest particles of mineral matter. Fortunate; for had this fallen into the hands of a second Bywater, that ingenious speculator on the composition of vegetables by animalcules, we might have missed the truth, and got into a maze of error. But it is to animals that Professor Grant's views are confined and expressly applied. He maintains that these animals of his order *Endocystica*, by their multiplication and metamorphoses, originate all the soft and solid textures, healthy and morbid, throughout the animal kingdom; and, as we have said already, besides the solids, the fluids—as blood, chyle, lymph, milk—the secretions and excretions are inhabited by these animalcules. And so, of course, all the corpuscles of which we have been discoursing in the preceding Lectures are regarded by him as so many different animals, and by no means as mere parts of this or that animal to which they belong.

To go into all the evidence which might be adduced either for or against this transcendental doctrine would far exceed our present purpose and limits; and so it may be briefly noticed what we should be prepared to admit, provided we accept it as completely valid. We might have to regard the regular corpuscles of certain vegetable fluids as animals; to conclude that fibre or membrane *must* be formed by a multiplication or metamorphosis of animals; and that the two leading subdivisions of the vertebrates have red corpuscles entitled to rank at least as two or three different genera of these animals. Species merely would hardly be sufficient for the two kinds; for, as we have already shown, the distinction is not merely one of form and size, but an essential and fundamental difference of structure, which in this point of view constitutes the most extensive and certain single diagnostic ever yet recognised between the two great and leading divisions of the vertebrata—to wit, Pyrenæmata and Apyrenæmata, as more particularly described in Lectures III. and VII. And then we should have one genus of these Endocystica inhabiting the blood of the early embryo of Apyrenæmata, when the temporary red corpuscle with its nucleus is the equivalent of the permanent red corpuscle of Pyrenæmata, and another genus afterwards inhabiting this blood of these same Apyrenæmata when this corpuscle is devoid of a nucleus.

As to vegetables, we have just mentioned the globules in cells exhibiting the phenomenon of rotation; and, independently of caoutchouc, in the latex there are certainly, at least, two different kinds of particles to which the opacity of this milky juice is owing. Of one set these particles are remarkable for their extreme minuteness and equality of size, like those forming the molecular base of the chyle in the higher vertebrates, and to which, also, the opacity in that chyle is owing. Of the other variety of vegetable latex, the particles, on the contrary, are remarkable for their inequality of size, and their definite spherical or spheroidal form, and, in short, for their resemblance to the globules of milk; nor is there the slightest evidence that these vegetable globules contain any cellulose or sclerogen. If, then, the globules of milk are to be considered as distinct animals, how soon may we be called on to accord the same dignity to these vegetable globules?

Fig. 11

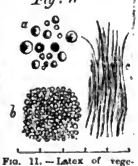

FIG. 11.—Latex of vegetables: *a*, Molecules in Urticaceæ, Convolvulaceæ, Cynarocephaleæ, &c.; *b*, Molecular Base in Papaveraceæ, Campanulaceæ, Cichoriaceæ, etc.; *c*, Fibrin of some Cichoriaceæ coagulated into fibrils.

The Cell Doctrine and Endocystics.—Next, as to all the soft textures, throughout the animal kingdom, being formed by a multiplication or metamorphosis of cells—these Endocystica—as stated by Professor Grant. My excellent predecessor here, Professor Savory, in a lecture delivered last season at the Royal Institution, truly asserts of the higher animals that they have many parts not proved to be formed from cells; for example, the clear, transparent, structureless and homogeneous basement membrane; and, to descend to insects, the equally structureless membrane of the Malpighian tubes. Again, to revert to the vertebrates, the common simple white fibrous tissue may be formed by fibrils produced directly in the previously homogeneous plasma; while even the warmest advocates of the cell-doctrine have recently admitted that the fibrous matrix of fibro-cartilage is really thus formed. Further, as a result of his own observations, he questions whether cells have the share commonly assigned to them, if, indeed, any share, in the development even of such complex tissue as muscle. I have been for upwards of twenty years asking how this doctrine of Schleiden and Schwann—this fundamental part of Professor Grant's system—can be reconciled with the undoubted fact of the formation of fibres or membranes by the simple act of coagulation in the blood; and the question has never been satisfactorily answered to this day. My figures on the subject were published in the appendix to the English version of "Gerber's Anatomy," and in the *Philosophical Magazine*, at a time when this objection to the universal doctrine was either neglected or despised. The

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diagrams represent these fibrils thus formed, independently of any cells whatever, by the mere act of coagulation in fibrin of the blood of vertebrate animals (Fig 12); and similar fibrils will form in like manner in vegetable juices (Fig 11, c). Further, in another diagram (Fig. 13), is shown a membranous sac, to be more particularly explained presently, the intimate structure of which is made up of fibrils, with a sprinkling of minute molecules, and which was formed by the simple act of coagulation in pure animal serum, and certainly without "the development or metamorphosis of cells." Well, then, here is a bulky closed sac, surely as much entitled to the rank of an independent animal as many of Dr. Grant's Cystodia; and yet produced utterly independent of cells or of any principle involved in that doctrine which is assumed as the very key-stone of his system. Nor, considering the potency of such forces as isomerism, which render the metamorphosis of one substance to another merely dependant on contact, can we doubt but that that mysterious agency, under which this curious and really typical structure was created in dead serum, may be in operation within the living body for similar formations?

Fig. 13.

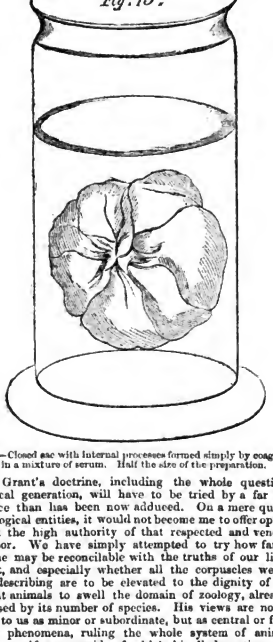

Fig. 13.—Closed sac with internal processes formed simply by coagulation in a mixture of serum. Half the size of the preparation.

Dr. Grant's doctrine, including the whole question of equivocal generation, will have to be tried by a far wider evidence than has been now adduced. On a mere question of zoological entities, it would not become me to offer opinions against the high authority of that respected and venerable professor. We have simply attempted to try how far that doctrine may be reconcilable with the truths of our limited subject, and especially whether all the corpuscles we have been describing are to be elevated to the dignity of independent animals to swell the domain of zoology, already so oppressed by its number of species. His views are not presented to us as minor or subordinate, but as central or fundamental phenomena, ruling the whole system of animated nature; as if a pyramid, of which his Endocystica would form the base, becoming modified or more select, yet always predominating, in their ascent, till man himself, still composed of, or originating from them, stand alone on the apex. Nor even here in undisputed pre-eminence, for that, or any material system, would be disputed by the monkeys; though he is surely not a mere aggregation of brute matter, and differs from all beasts by his mental endowments, not so much by that understanding which they share with him, as by his reason, to which in its essence they have no claim—that faculty by which he comprehends religion and acknowledges a God, discerning his laws to be "holy, just, and good;" that elevation of man by "the divinity that stirs within;—those thoughts that wander through eternity;" and which comprise something far beyond and above this troublous world and all its systems.

The Fibrin.—Before its coagulation, the fibrin exists in a fluid or liquid state with the serum, a mixture which was happily called "liquor sanguinis" by Dr. Babington, in 1830; but when the blood is drawn from its living vessels, it coagulates in the course of a few minutes. A pellicle first appears on the surface of the blood; next, the whole of it forms a homogeneous red clot, of the consistency of soft jelly; and, lastly, the clot contracts, becomes firmer, and squeezes out the serum, which then surrounds the clot. Some of the serum always remains in the clot, and the relative quantity of clear serum will appear more or less, according to the degree of contraction in the clot. It is the fibrin only that thus coagulates spontaneously, and forms the framework of the clot, which contains, in its interstices, the red corpuscles and the other solid particles, and that portion of the serum which has not been pressed out by the contraction of the clot. Thus, this clot will be soft and diffluent, or consistent and firm, in proportion to its contraction. All the serum and corpuscles which it may include will only make it softer than it would be without them; so that a portion of fibrin coagulated, free from red corpuscles, and containing but little serum, may be as tough almost as the coats of an artery, as opaque, too, and somewhat elastic; while another portion of fibrin, equally free from red corpuscles, but retaining in its meshes a large quantity of serum, may be like a soft, trembling, and transparent jelly. Bearing in mind the three phases just described in the coagulation of the blood, to wit: 1. The film or pellicle on the top. 2. The formation of the whole into a clot; and 3. The separation of the serum by the contraction of the fibrin; we shall be better able to understand the details of some of the best experimentors, and to perceive how useless it may be to attempt to get reliable information from others. The clot is as well known under the term "crassamentum;" and a soft mixture of serum and red corpuscles, whether containing fibrin or not, is mentioned by our best older writers under the name of "cruor." Thus you may often find a cruor in the heart after death, quite red and without any distinct separation of fibrin or serum, but with soft, pulpy clots, as if the ventricles had been acting after the commencement of a feeble coagulation, as Dr. Davy has noticed. The largest part of the serum commonly exudes from the clot; the red corpuscles may be obtained by breaking it up in the serum, and the fibrin in various ways. You may procure it by washing away all the other parts, by whipping fresh blood with twigs, also by shaking shreds or strips of heavy things, as metal or glass, with the fluid blood in a bottle. The last is the best way when it is desired to get the fibrin as free as may be from the contact of atmospheric air, which will be done by receiving the blood to overflowing in a bottle previously charged with the metallic or other strips, quickly closing it, and then passing the heavy foreign bodies backwards and forwards through the blood until the fibrin coagulate around and on them. I have commonly used for this purpose cuttings of glass or lead, nails or bits of iron wire. Whatever method be adopted, the agitation should be continued until all the fibrin be separated, or nearly so, for some portion of it may remain for hours and more, either fluid or in the state of minute flakes or particles. But, after all, we know not how to get rid of the pale globules, molecules, and a large proportion of the membranous frames of the red corpuscles, as more or less of these will remain entangled in the washed coagulated fibrin. Still, fibrin often occurs quite free from these last, for, as it is specifically lighter than the red corpuscles, it may form a pale yellowish coloured layer on the top of the clot, and is then well-known as the buffy coat of the blood, which is so often and properly looked for as a pathological sign in certain cases. Yet, though a manifestation of disease in man, the buffy coat is really the healthy or regular condition of the blood clot of some lower mammalia, as well as in women at a certain period of utero gestation.

Diagnostics of Fibrin; its Diffusion in Animals and Plants.—The most obvious and peculiar character of the fibrin is

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its power of coagulating spontaneously, and its disposition thus to assume a fibrous texture. And if we accept these as its diagnostics, the wide distribution of fibrin through the animal and vegetable kingdoms must immediately prove to us its immense importance in organised beings. As already described, the red corpuscles are characteristic only of the vertebrata, though it will be recollected that some invertebrata have coloured corpuscles. But the fibrin may be traced more or less through the animal kingdom, and even through part of different orders of phænogamous vegetables (Fig. 11, *e*). Though very little mention, much less description, of this interesting and important subject occurs in books of botany—this limpid fluid, endowed with the property of self-coagulation and the formation of fibrils—I have found it abundantly in many parts of flowering plants of different orders and in species too numerous for detail at present. Softened fibrin in man and animals used to be mistaken for pus; but the truth is that a clot of dead fibrin is reduced to a pultaceous matter when kept for awhile at a heat of about 100°; and this is another property in which a clot of fibrin differs from a clot of albumen, as particularly described in the *Medico-Chirurgical Transactions* for 1839.

Structure of Fibrin.—Animal fibrin often occurs in membranous expansions or in shapeless clots, and indeed it is seldom that pale clots of fibrin are not found either in the heart or great vessels after death, for coagulation is then so slow, and the corpuscles often run so much together, that they are very apt to sink and leave the upper parts of the clots more or less pale. Hence, as Mr. Paget has well observed, in conformity with the old observations of Petit, evidence might be obtained in medico-legal inquiries as to the position of the body in the first hours after death. Now what is the structure of these clots? Their proximate structure may or may not be laminated: it often is so, and is always fibrous. You may frequently pull off membraniform layers, and can easily tear them or the whole clot in one direction, generally lengthwise, but not at all, or with difficulty, in another. In short, these clots are easily torn in a line with their fibres, but not across those fibres. The diagrams represent clots thus treated from the heart. The ultimate or intimate structure is also fibrous, made up of fibrils of extreme tenuity, "fibrillated," as it is commonly termed; but you will probably not much like this bastard word any more than many others of its tribe, without legitimate paternity, which have crept into our scientific descriptions. There are also molecules, about $\frac{1}{25000}$th of an inch in diameter, which are mostly of a fatty or oleo-albuminous nature, in these clots, besides a finely granular matrix. It is not till the fibrin has completely coagulated

Fig. 12.

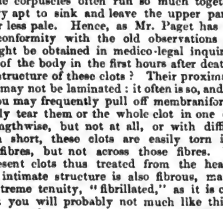

Fig. 12.—Fibrils, minute molecules, and granular base of fibrin *c*, the fibrils teased out; *b*, parallel arrangement of the fibrils; *c*, granular base.

that the contraction takes place and the fibrils become plainly visible. Previously, they are more or less indistinct, though coagulation is demonstrable, and you only perceive a hyaline, homogeneous matrix, with a very few pale globules and some molecules, or merely a minutely granular matter. But, in whatever way the fibrin may have coagulated and contracted, its intimate structure is mainly composed of the fibrils. They are of extreme tenuity, about $\frac{1}{25000}$th to $\frac{1}{20000}$th of an inch in diameter, with an indefinite length; and it is probable that they would appear to be composed of still finer fibrils under a still greater magnifying power than we are yet able to use, for by microscopic analysis, from a lower to a higher enlargement, every fibre seems to be resolved into fibrils to the utmost verge of distinct vision with the best object glasses.

Viscidity of Fibrin: False Membranes and the Cell Doctrine.—We have treated of the fibrin in those states—the fluid and the solid—in which it is commonly observed and described. But there is an intermediate condition, little or not at all noticed in the books of physiology, though very interesting and important for us. This is the viscidity with the fibrin acquires in passing from a fluid to a solid, and which viscidity, with a slight degree of elasticity, you may easily witness in fibrin at that period. So remarkable is this viscidity, that you may smear your fingers with the fibrin in this state, slowly separate them, and draw it out into strings or membranes. And then microscopic analysis, after final coagulation, will show the fibres arranged always in the direction of the extension. Nor can you fail to recollect, when making such trials, numberless instances of similar forms in the false membranes of serous sacs, and how this viscidity of fibrin will most readily account for those false membranes or strings. The true nature of these was well known to Hewson and Mr. Hunter, though Dr. Hunter held less accurate views on the subject. Hewson mentions that, when the inflammatory crusts appear on membranes, the effused lymph composing the crusts is "more viscid and coagulable." But, I believe, Dr. Davy first described this viscidity as a regular property of fibrin between its fluidity and solidity, and this so as to explain the appearance of false membranes. Now, we are familiar with the frequency and extent of these morbid products as part and parcel of the living body, and must perceive how they are formed by a simple coagulation of the fibrin into the shape of membranes and strings, made up of an intimate texture of fibrils. And the question must again occur to us whether this structure, so common and abundant, has any origin explicable by the cell theory? For, though it is true that these adhesions, in the recent state, abound in free cells or pus-like globules, there is not a tittle of evidence that these either give shape or frame to, much less originate the texture of, these false membranes. In short, it must be asked again, what is the proof that these fibrils of fibrin, both in health and disease, may not be the primordeal fibres of animal or even of some vegetable textures, thus formed at once by the coagulated lymph, and ready for further organisation, according to the simple, beautiful, and original doctrine of Mr. Hunter?

We owe to Dr. Buchanan the important discovery, about the year 1844, that serum may be made to coagulate, at the atmospheric temperature, by putting into it bits of fresh muscle or blood-clot. On repeating some of his experiments soon afterwards with simple mixtures of different varieties of clear serum, I unexpectedly observed these further interesting facts: the transparent coagulum would sometimes assume the form of a closed membranous sac, with delicate processes forming lacunæ within it, while the outer membrane, also very fine, might become so puckered at one part as to form an opaque white spot there (Fig. 13). As already stated, cells had nothing whatever to do either with the production or intimate structure of this typical form. In short, it belongs to the class generated by the mere coagulation of fibrin; and this is as perfectly in accordance with the simple doctrine of Hunter as it is at variance with the more complex tenets of Schwann. As to the cause of such coagulation of serum on the addition of the solids just mentioned, Dr. Carpenter supposes it may be similar to that by which we get a further crystallisation of a salt by putting a hard or insoluble substance into the mother liquor. But this explanation is not applicable to the prompt coagulation of mere mixtures of serum, and which, when kept separately in glasses for some days, had remained perfectly liquid, as was the case with the preparation depicted in Fig. 13. Indeed, the phenomenon seems rather consistent with isomerism; and thus may agree with the observations of Dr. Brown-Séquard concerning the immense quantity of fibrin which must be daily formed in the body, as inferred from the regular disappearance of all the fibrin from the renal and hepatic blood each time after it has traversed the kidneys and liver.

PRESIDENCY OF THE LEOPOLDINO-CAROLINA ACADEMY.—This, the oldest and most renowned Academy of German Naturalists, has just elected to its Presidency, in the room of Professor Kieser, deceased (in his 87th year), Privy-Councillor Dr. Carl Gustav Carus, of Dresden, by a majority of 11 voices out of 15 of its Council.

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ORIGINAL COMMUNICATIONS.

CLINICAL OBSERVATIONS ON THE EFFECTS OF DIET AND DRUGS IN THE TREATMENT OF TWO CASES OF DIABETES MELLITUS,

Conducted at the Royal Infirmary, Edinburgh, under Dr. LAYCOCK,

By DR. ANDREW SMART,
Clinical Clerk.

The two diabetic cases here referred to have been under observation for a period of six months, but the following results do not include more than ten weeks.

First series of observations were instituted with the object of determining the sugar-producing agency of certain articles of diet. They were conducted simultaneously on the two patients, both of whom, during the course of the researches, were placed in as nearly as possible similar conditions, and all sources of fallacy were carefully avoided. The substance to be tested was given to both patients in like amount at the same periods of the day; and the analyses of both urines were made repeatedly during the course of each trial. No trial was considered complete which was not confirmed in both cases; and the time allowed to conclude any observation was seldom under forty-eight hours, but it more generally extended over a period of several days.

In all cases, it was considered necessary, for the sake of accuracy, to note other characters of the urine besides its merely saccharine condition; and the amount of the urea with that of the sugar was in nearly every instance carefully determined. Besides these precautions, the amount of urine was accurately measured. The exact quantity of solid aliment (exclusive of its water) partaken by the patients was ascertained by weight—the proportion of water contained in the solid as well as fluid articles of food being previously estimated, deducted, and added to the fluid column. The total quantity of fluids taken was, in like manner, exactly ascertained. The weights of the alvine excretions were known, and the patients were weighed from time to time.

The following articles are arranged in the order in which they were found to act as sugar-producers. The exact ratio of saccharine elimination produced by each has been ascertained and recorded, but general results only are here indicated.

1. *Sugar* (cane), whether used as an article of diet or medication, besides undergoing transformation into grape sugar, acted as a powerful diuretic and stimulant to the morbid production of sugar. It also greatly increased thirst.

2. *Rice*, contrary to general belief, was next to sugar in its influence on the production of diabetic sugar and increase of urine. Its action in these respects was much greater than can be explained by reference to the proportion of starch and sugar which it contains.

3. *Potatoes* were inferior to rice in their sugar and urine-producing powers, but exerted a markedly greater influence than the ordinary sorts of wheaten bread.

4. *Gluten Bread.*—We have not succeeded in ascertaining the exact composition of the bread usually sold under this name. It is decidedly sweet to the taste (but this saccharine quality does not depend on admixture with sugar). It is also very palatable, and preferred by diabetic patients to ordinary bread. It has been much recommended in diabetes, under the belief that, as an article of food, it operated more mildly in exciting and maintaining morbid action. This opinion was contra-indicated by repeated and careful trials, the results of which demonstrate that its influence as a sugar eliminator exceeds that of ordinary white and bran bread.

5. *White Bread.*—The trials with this bread, as with the others, were extremely varied, but invariably with like results. It undoubtedly produced less sugar than gluten bread, but was superior in that respect to brown bread and oatmeal. It is interesting to know that the amount of sugar found in the urine invariably maintained a fixed relation to the combined proportions of sugar and starch contained in the bread, the proportion of diabetic sugar always exceeding that of the starch and sugar elements as two to one. Thus, for example, if the amount of bread taken in twenty-four hours contained, say 500 grains of combined sugar and starch, and no other substance interfered with the experiment, a careful analysis of the urine during the same period yielded, with remarkable uniformity, nearly double that amount, *i.e.*, somewhere about 1000 grains.

6. *Bran Bread.*—This bread differed in no important particular except in its milder action in the production of sugar. But this difference was trivial.

7. *Oatmeal.*—The influence of this cereal, when given weight for weight with the others, was so decidedly less that there can be no doubt in placing it last in the list now given. It diminished the amount of urine while rather heightening its density, but, as an article of diet, it was not relished by the patients.

8. *Eggs.*—When the patients were put on an exclusively egg diet, the amount of urine and sugar progressively diminished, and the latter would probably have entirely disappeared from the urine had it been possible so to restrict the diet for a sufficiently lengthened period.

9. *New Milk*—Contains sugar as sugar of milk; but, judging from all the trials which were made with it, we were led to infer that this constituent does not undergo glucose transformation. Under this, as in egg diet, the sugar progressively disappeared from the urine. But the great difficulty always experienced was, to confine the patients for some time to one or two kinds of food.

10. *Animal Diet.*—When eggs, milk, fish, beef, mutton, and all other kinds of animal diet, were given either alone or in combination, the following results invariably followed:—1. Marked decrease in the elimination of sugar and secretion of urine, which was progressive with the continuance of the diet. 2. Sense of hunger and thirst greatly lessened. 3. Increased density of urine.

11. *Vegetables*—Such as cabbages and turnips, sensibly augmented the production of sugar, but to a much smaller amount than is generally supposed. They were also apt to derange the digestive system. Cabbage invariably produced diarrhœa in one of the patients, and in the other indigestion and flatus.

12. *Cod-liver Oil and Fats.*—Their use was followed by the same results as were found in the animal diet trials; but they could not be taken by the patients for some time, or in considerable quantity, without inducing nausea.

13. *Mixed Diet.*—The production of sugar under this diet, of whatever substances it may be composed, was found to be invariably proportional to the amount of sugar and starch contained in the articles which were used (a).

II. *Second Series of Trials to Determine the Influence of Remedies on the Elimination of Diabetic Sugar.*

1. *Permanganate of Potash*—Allayed thirst, lowered the density, but increased the amount of the urine and also of the sugar.

2. *Sesquinitrate of Iron*—Stimulated appetite for food; did not allay thirst; did not materially influence the amount of urine, but increased that of the sugar.

3. *Glycerine*—Markedly increased thirst and the amount of urine; lowered density of urine, but total amount of sugar greatly increased.

4. *Chloroform.*—This was exhibited by inhalation, which was repeated every two hours during the experiment. Quantity of urine greatly increased; its density lowered, but total amount of sugar in twenty-four hours increased. Chloroform increases sugar simply by acting as a diuretic.

5. *Sulphuric and Chloric Ethers.*—Both these agents operate as chloroform, but in a much less marked degree.

6. *Strychnia.*—The experiments with this powerful agent were begun by administering $\frac{1}{40}$th of a grain thrice daily, and the dose progressively increased until its physiological action on the nervous system became incipiently apparent.

The result was a progressive and commensurate decrease in the amount of urine and sugar. The patients' diet during the course of this and the other trials of remedies was uniform. The patients' general health was good, and they gained weight.

Edinburgh.

(a) *Porter and Ale.*—It is generally supposed that all malt liquors very powerfully stimulate to the morbid production of sugar in diabetes mellitus; but the experiments made with ale and porter do not support that opinion. Their use, to the extent of twelve or twenty-four ounces daily, be attended with little more than an appreciable increase in the amount of sugar. The rate of increase, as in the other articles, was ascertained and recorded.

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SUGGESTIONS FOR FACILITATING THE USE OF THE LARYNGOSCOPE.

By GEORGE JOHNSON, M.D.
Professor of Medicine in King's College; Physician to King's College Hospital.

The use of the laryngoscope being unquestionably of great practical value in the investigation and treatment of diseases of the throat and larynx, every suggestion tending to facilitate the application of the instrument, and so to render its use more general and more successful, must be deemed worthy of attention. With this view I venture to make the following observations:—

1. *On the Position of the Concave Reflector.*—Hitherto, in whatever way the reflector has been supported, whether between the teeth, or in a spectacle frame, or on a band passing round the head, the practice, so far as I know, has always been to retain the reflector in front of one eye—usually the right eye—and the observer has looked into the throat, either with the one eye applied to the central opening in the reflector, or he has used only the uncovered eye; or he may, perhaps, have succeeded in using both eyes. Every manipulator, however, must have experienced a degree of discomfort and inconvenience, resulting from one eye being kept behind the reflector, and from the effort required to keep the eye adjusted to the aperture; more especially is this found to be inconvenient and troublesome when both hands have to be used in the performance of any operation on the throat. The discomfort and inconvenience here referred to are completely obviated by the plan, which I have recently adopted, of having the reflector so attached to the frontal band, that it shall come to the middle of the forehead, and leave both eyes uncovered, as in the accompanying diagram. I am not aware

that there is the least advantage to be gained by peering through a hole in the reflector. On the other hand, the advantages resulting from having the reflector in the position here indicated are that the manipulator, having the free and unrestrained use of both eyes, finds it much easier to direct the light into the patient's throat, to keep the faucial mirror in the required position; and, in short, to do everything for the performance of which two eyes are more helpful than one. The reflector can be fixed in the position represented in the diagram, by shortening the hook which attaches it to the frontal band. This can be done with the greatest ease. I made the alteration in my own instrument with a file and a pair of pincers in about five minutes. With the reflector on the forehead there is no need for the central hole. The manufacture of the instrument, therefore, may be more simple, and in the same degree less costly.

2. *A Darkened Room is not Necessary for Satisfactory Laryngoscopic Examinations.*—I am in the habit of examining patients in the wards of the Hospital, with only such a moderate exclusion of light as is to be obtained by drawing down the blinds of one or two of the nearest windows. The illumination of the throat certainly is easier and better with a good light in a dark room, but, since a darkened room is not always to be had, it is important to be able to make a satisfactory examination of the larynx in a room which is not completely darkened. All observers agree that the light of the sun, when it can be obtained, is the best means of illuminating the throat.

3. I have found, as others must have done, that the concave reflector is invaluable as a means of illuminating the throat, for the purpose of examining the tonsils, palate, and pharynx. Placing a candle or a lamp on a table by the side of the patient, the operator, with the reflector on his forehead, throws the light into the throat, and has both his hands free to do whatever requires to be done—to depress the tongue, to apply caustic or other local remedies, etc.

4. *Since the preceding was written, I have devised a simple and very satisfactory method of autolaryngoscopy.*

Sitting at a table of a convenient height, I place a common dressing-table looking-glass at a distance of about eighteen inches in front of me, and a moderator or gas lamp at one side of the glass, but three or four inches further back, so that no light may pass directly from the lamp to the mirror. Now, with the concave reflector on my forehead, as before described and represented, I throw the light from the lamp, as it were, into the open mouth of my own image in the looking-glass; then introducing the faucial mirror, I at once see the reflection of my larynx in the glass before me, and any one looking over either of my shoulders can see the image at the same time. This method, therefore, serves for autolaryngoscopy and for demonstration: in plain English, the experimentor can thus see his own larynx and show it to others; and the method here described possesses some advantages over that employed with such wonderful success by my friend, Professor Czermak.

I find that, while holding the faucial mirror with my right hand, and changing the position of my head and neck so as to obtain different views of the larynx, I can keep the light directed where it is required by adjusting the frontal reflector with my left hand. This cannot readily be done with Professor Czermak's apparatus, on account of the distance at which the reflector is fixed.

It is no small advantage that this method requires no special and costly apparatus. The concave reflector and the faucial mirrors used for the examination of patients, with a common looking-glass, suffice for the purpose.

For beginners in the art of laryngoscopy this method will afford a very useful means of training. One of the chief difficulties at first is to reflect a steady light into a patient's throat. Now, the student, after arranging his looking-glass and his lamp, may direct the light from the frontal mirror into his own open mouth as reflected in the glass. This process scarcely differs from that which he will have to practise on his patients. Then, having learnt to keep the light steady, he may practise the introduction of the faucial mirror, and he will soon see the interior of his own larynx.

This method of autolaryngoscopy requires a greater angular movement of the frontal reflector downwards than is needed in the ordinary examination of a patient. In order to give this free movement, and to prevent the lower margin of the reflector from coming in contact with the nose, I have found it convenient to throw the reflector forwards from the forehead, by placing a small movable pad or cushion, about half an inch thick, between the forehead and the frontal band to which the reflector is fixed.

CLINICAL MIDWIFERY.

By FRANCIS H. RAMSBOTHAM, M.D.
Physician-Accoucheur to the London Hospital, etc.

(Continued from page 106.)

The following three cases of puerperal convulsions occurred in my practice during the first four months of the year 1840:—

Convulsions after Delivery.

Case 175.—On September 27, 1840, at 7.30 p.m., I was requested, by one of the district Surgeons to the Royal Maternity Charity, to see Mrs. P., in the Kingsland-road, after her first labour. The membranes broke on the previous

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morning at three o'clock, before any painful sensations, and the os uteri did not begin to dilate till 3 p.m., twelve hours after. From that time the pains were frequent, and she was delivered naturally of a live child at 10 p.m. During the whole of the labour she was harassed with incessant sickness, and, though she appeared quite sensible to everything around her, there was great drowsiness and much snoring between the pains. She did not complain of headache, nor, indeed, of any unusual sensation within the skull. After the birth of the child, the stertor ceased, and she appeared progressing favourably, when, at 3.30 a.m. of the 27th, five hours and a half after delivery, she was attacked by a convulsion, a second soon followed, and they continued to recur every thirty or forty minutes. The district Surgeon saw her at 6 a.m., bled her to the amount of twenty ounces, and applied twelve leeches to the head. For a time she seemed relieved, but soon gradually became quite insensible, the fits continuing as frequent and severe as before the bleeding. When I saw her, sixteen hours after the seizure, there had been about twenty-four. She was perfectly insensible, constantly rolling about the bed, and moaning. From twenty to twenty-five ounces more blood were abstracted from the arm, with considerable difficulty. Ten grains of calomel mixed with sugar were put upon the tongue, and one tablespoonful of a strong purgative mixture was ordered to be given frequently. From the time of the last bleeding, the convulsions ceased, and there was no return of them; she fell into a quiet sleep, and was, by degrees, perfectly restored to consciousness by ten o'clock on the following morning. She then would not believe she was delivered, as she had felt no pain; and she declared the child could not be hers. She recollects the membranes breaking early on the morning of the 26th, and also remembers the midwife being fetched to her in the course of the afternoon, but nothing that occurred in her labour, although she appeared perfectly conscious during the whole of it. She recovered perfectly, and nursed her child satisfactorily.

Convulsions before Delivery, at Seven Months.

Case 176.—On November 11, 1840, at 3.30 p.m., a Medical friend sent for me to Mrs. G., at the "Duke of Kent," Lower John-street, Commercial-road East, in labour of her first child, at seven months. She had suffered from severe headaches for a week, and, about eight o'clock that morning, was seized with a convulsion fit, without any indications of labour. Her Medical attendant was called to her, and he applied sixteen or eighteen leeches to the temples, without any good effect. When I saw her, she had had ten or twelve fits, and was perfectly comatose. I directed twenty-four ounces of blood to be taken from the arm. Ten grains of calomel were administered, as in the last case, and a strong purgative mixture was written for, of which a tablespoonful was to be got down as often as possible. From that time there was no return of convulsions, but she remained quite insensible. The os uteri was not at all dilated, and I left her. It would seem that labour soon commenced after my departure, though the people about her knew nothing of it; and the first intimation they had that labour had been progressing was their finding the child born, of course, dead, and in the absence of the Medical Practitioner, at 7 p.m. She speedily recovered her senses after delivery, and when I visited her the next day she was perfectly herself and rational; but we could not without great difficulty persuade her that she had been delivered, as she had not the slightest knowledge of her labour. Her recovery was better and quicker than might have been expected.

Convulsions before the Commencement of Labour at Seven Months.

Case 177.—On December 8, 1840, at 12 noon, a Medical friend requested me to see Mrs. D., Liverpool-street, Bishopsgate, seven months pregnant with her first child. She had been out walking on the previous evening, and on her return home complained of a sudden and violent pain in the head; for a time she lost her sight. She went to bed, and at 1 o'clock in the night she had a convulsion fit. On her Medical attendant being summoned, he took, at two bleedings, fully three pints of blood. This moderated the violence of, though it did not stop the fits, and when I visited her there had been fourteen or fifteen, more than one an hour from the commencement. She was perfectly insensible, rolling about the bed and moaning. The os uteri was quite close. I directed her to lose another pint of blood, and ordered her calomel and a purgative mixture as in the cases just detailed. She had no more fits after that bleeding, though she continued insensible. The purgative medicine acted freely at 7 p.m.; and at 10 o'clock the next morning she had by degrees perfectly recovered her senses. Labour did not come on until the morning of the 13th, and she was delivered naturally of a dead child in the course of the day, and made a favourable recovery.

N.B.—We should be prepared to expect that a patient, after having suffered a convulsive seizure, would have no remembrance of anything that occurred between the commencement of the attack and the time when she regained her sensibility; but this *obliviscence* of occurrences that had taken place frequently extends much further back, for the disease seems to wipe away all recollection of events that had happened some time before the accession of the fits, while the patient was to all appearance perfectly conscious. Thus, I have attended many women who were apparently well and perfectly conscious when delivered, but who, having been attacked by convulsions some hours after, have (like the subject of the 175th case just related) had no recollection of their labour, and were only convinced they were delivered by their infants being brought to them. My father mentions a case in which, "although the lady at the time of her delivery appeared in perfect health, she had no recollection whatever, after her recovery, of the occurrences during her labour, or indeed of those of some days preceding that event; they appeared a blank in her existence." A case in point occurred to me on August 8, 1845, in which the lady, after her recovery from a succession of convulsions, recollected nothing that had occurred for three days before the attack, although she seemed quite well all that time, and was going about as usual. But the strongest instance of this forgetfulness of foregone events that ever came under my notice was in the last case which I have just related. It was on the Tuesday morning that this patient was first attacked, and when she came to herself she had not the least consciousness of anything that had happened since the previous Wednesday, nor did she ever after recollect any one of them. Her sister came from the country to spend a few days with her on the Saturday before; she welcomed her with pleasure, and yet she had not the least remembrance of her arrival. On the Monday before her attack she had visited another sister, a patient in St. Thomas's Hospital; in the evening she had walked from the neighbourhood of Bishopsgate Church to Temple Bar with her husband and sister: having been only a few days here, her husband wished to show her some of the sights of London. On her return, she called on a Medical man, whom she had never seen before, to engage his attendance in her approaching confinement. She remembered nothing of her visit to the Hospital, nor of her subsequent walk, nor of seeing her Medical attendant, which latter circumstance, as he was a stranger, might be supposed to have made an impression. She was equally unconscious of all that had passed during those six days. The same phenomena have been observed after other accidents in which the brain has suffered. For instance, in vol. iii. of the *Academie Royale de Médecine*, there is a case given by M. Köempfen, of a cavalry officer who fell from his horse and pitched on the right parietal bone. He had vomiting and syncope; and a total want of recollection came over him of everything that had occurred on the day before the accident as well as for some hours after it. He never regained his recollection of those periods. A Medical friend of my own, having visited a patient, also a friend of mine, in the neighbourhood of London, on June 11, 1849, was thrown from his horse while returning at 10 a.m. Although, after being brought home, he ordered appropriate medicine for his patient, when he had quite recovered from the shock he remembered nothing that had happened since seven in the morning, not having the slightest recollection of having visited my friend, or of his accident. Nor did he recollect anything that had occurred for twenty-four hours after his fall, although he was conversing quite rationally during the day, not only with his family, but also with his Medical friend, who was sent for in the emergency. The last thing that dwelt in his memory was the death of a child, who expired in his arms at seven o'clock of the morning when his horse fell with him.

Sir Benjamin Brodie, in his "Psychological Enquiries," gives two cases of this kind. A groom, in the service of the Prince Regent, was cleaning a vicious horse, which kicked him on the head. He did not fall, nor was he stunned or rendered insensible, but he entirely forgot what he was doing at the moment the blow was inflicted. There was an interval of time, as it were, blotted out of his recollection. A young man was thrown from his horse while hunting. He

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was stunned, but only for a few minutes, and rode home, twelve or thirteen miles, in company with his friends, chatting with them as usual. On the following day he had not only forgotten the accident, but all that happened afterwards. Such an effect has been noticed also in other instances of cerebral injury; and persons who have been restored after hanging have been in the same manner deprived of the recollection of events that occurred some hours before suspension. In the *Penance Gazette*, February 14, 1844, there is the account of a servant who hung herself, but was cut down before life was extinct. After her restoration she had no recollection that her illness proceeded from an attempt at self-destruction, but thought it was occasioned by a fall down stairs; she did not remember anything that happened on the previous day. In the *Times* of July 4, 1845, there is the notice of a youth who was charged at the Thames police-office with attempting to commit suicide by hanging himself, about eleven o'clock on the night of Sunday. When taken into custody on Wednesday night, he professed total forgetfulness of having perpetrated the act; and I have no doubt the forgetfulness was not feigned. He had remained insensible from the time he was cut down until nine o'clock on the next morning. In Sir Walter Scott's "Fair Maid of Perth," it is stated (a) that a woman was hung at Oxford for child murder within this century, who was restored, and remembered but little of her trial and sentence, nothing of her confession, nor of the particulars of her execution. Scott says a Professor of the University has published an account of his conversation with the girl after her recovery, but I have not been able to trace this. One woman whom I attended under a very severe attack of puerperal convulsions, and saw a month after her labour, had completely forgotten how to write, though she wrote very well before. She could not make a letter without having a copy before her; and when she tried she looked exactly like a child beginning to learn. Such instances as the foregoing are worth being recorded, not only as physiological and pathological facts, but because they may influence our opinions in some Medico-legal questions.

8, Portman-square.

(To be continued.)

ON THE

PUBLIC HEALTH OF THE COTTON DISTRICTS.

By JOHN BEDDOE, B.A., M.D.

Physician to the Bristol Royal Infirmary.

THE publication of the Registrar-General's report for the last, or autumn, quarter of 1862, may tend to re-assure those who, by undervaluing the efforts made to relieve the Lancashire distress, had led themselves to expect a frightful increase of mortality among the unemployed cotton-workers. So accurate an observer as Dr. Buchanan was probably in the right, when he remarked the prevalence of an anæmic and depressed aspect in the people of the distressed districts; but the sallow and unhealthy aspect of many of the operatives in the cotton towns had often been a subject of comment in more prosperous times. It would appear, that the unemployed in Lancashire—thanks to the admirable mode of administering the relief funds—are at present supplied with means of subsistence equal to those of the labouring classes in some less favoured districts of our country. Accordingly, the mortality returns continue to exhibit no overt sign of the presence of famine. The quarter has been an unhealthy one, owing, doubtless, to its meteorological character; and the mortality in England generally, when compared with that of the corresponding quarter last year, shows a large increase; but Lancashire contributes in but a small proportion to this increase. In a recent paper, quoted in the *Medical Times and Gazette*, I showed that a considerable decline which had occurred in the mortality of Lancashire in the summer quarter had been confined to the suffering cotton districts, and that, roughly speaking, where the distress was deepest, there had the improvement in the death-rate been greatest; or, in other words, the mortality had been in inverse ratio to the distress. This somewhat paradoxical aspect of affairs still continues to exhibit itself in the returns. There is, indeed, a certain increase in the death-rate of Lancashire; but if we divide the county into two groups of districts, of which the eastern one contains all those (a) in which a large per-centage of the population finds employment in the cotton trade, we shall find that the whole of the increase is to be found in the other or no-cotton region, and almost the whole of it in the town and suburbs of Liverpool, which are so far from suffering any great amount of distress, that they have contributed with open hands to the relief of their unfortunate neighbours.

There are, moreover, six registration districts beyond the bounds of Lancashire (viz., Stockport, Hayfield, Bakewell, Todmorden, Saddleworth, and Carlisle), in which the cotton trade is extensively carried on; and these, grouped together, exhibit the same rate of mortality, to a fraction, which they did twelve months ago, whereas the counties to which they respectively belong, taken similarly *en masse*, yield a considerable increase.

These figures appear to me to testify, with trumpet tongue, in favour of the modes of administering relief which have been adopted, and of the energy and thoroughness with which they have been carried out. Perhaps we may, in part, ascribe the fact (which one of the subjoined tables exhibits) of the excess in the death-rate of the autumn of 1861, when the cotton-dearth was beginning to tell, in a slight degree, over that of 1860, when all was prosperous, to the early exhaustion of the means of the more improvident workmen, while the system of relief had not yet been organised. In reference to the question of amount of relief, I may remark that an increase of the money dole, except in special cases, might, probably, tell rather unfavourably than otherwise on the returns. It is a melancholy consideration that the amount of strong drink consumed in the districts in question is reported to be almost as large as ever.

The "prudential check" had not, at least up to September, where the returns leave us, operated so strongly on the number of marriages in the cotton districts, as might have been expected, and, indeed, desired. Though the ratio of unions to population had declined to a certain extent, it still amounted to 8·02 in 1000, whereas in the remainder of England it was but 7·63.

Table 1.—Death-rates in the Autumn Quarters.

	1861.	1862.	Incr.	Decr.
England and Wales . .	2·092	2·284	·192	—
Lancashire:—				
Liverpool and West Derby	2·938	3·512	·574	—
Prescot, etc.	2·215	2·228	·013	—
Whole of no-cotton region	2·694	3·056	·362	—
Cotton districts . .	2·726	2·686	—	·040
Six cotton districts out of Lancashire . . .	2·259	2·259	—	—

Table 2.—Proportional Death-rates of Three Autumns, taking those of 1860 *as the standard.*

	1860.	1861.	1862.
Cotton districts	1000	1111	1102
No-cotton ditto (Lancashire) .	1000	1173	1330
Ditto, ditto (England and Wales)	1000	1007	1114

(a) Vol. ii., chap. 7 (original edition).

(a) Viz.: Manchester, Chorlton, Salford, Ashton, Oldham, Rochdale, Bury, Burnley, Blackburn, Haslingden, Clitheroe, Preston, Chorley, Bolton, Wigan, Barton, and Leigh. I have taken as my principal guide the occupation returns of the census of 1851, those of 1862 not being accessible.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

EXTENSIVE TUMOUR OF THE ANTRUM, INVOLVING THE FLOOR OF THE ORBIT AND THE SOFT PALATE—EXCISION OF SUPERIOR MAXILLA—RECOVERY.

(Under the care of Mr. FERGUSSON.)

[Reported by Mr. SMITH, House-Surgeon.]

DAVID P., aged 48, a pale, weak-looking Welshman, was admitted into Albert ward on December 3, for a malignant tumour of the left upper jaw.

History.—He is married, but has had no children. He is

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a tradesman of temperate habits, and has always had good health. His relations on both sides seem to have been very healthy, his father being still alive, in his 80th year. He has been subject to great mental and physical exertion.

About two years ago he had a set of false teeth made, which were kept steady in the mouth by a piece of silver wire fastened round one of the sound teeth on the left side. There was also a thin piece of silver added afterwards to the gold plate. This, he says, caused great irritation, but he still continued to wear it, when, about twelve months ago, he noticed a red and thickened state of the gum of the upper jaw on the left side, particularly in front. At the same time he noticed, on the inside of the gum, a distinct tumour about the size of a bean. A fungous growth gradually sprung up from the thickened gum on the front of the jaw, and involved part of the hard palate. Three teeth about this growth were removed last August by his Medical attendant, and were found to be perfectly sound. The cavities left were soon filled up with the fungous growth, and the tumour rapidly increased in size. Some caustic was then applied to the gum, which caused a large slough to come away, and the tumour diminished a little, but soon afterwards grew and increased with great rapidity, involving the skin of the cheek, and extending up to the left temple. The lower eyelid also began to swell, and he had a severe pain, which, he says, was of a sharp, shooting character. At the beginning of October, he was admitted into a London Hospital, and the Surgeon in charge of the case proposed an operation. When the patient was put under chloroform, an incision was made from a little below the external canthus of left eye to the corner of the mouth, and the flaps turned back. Then the skin was thought to be so extensively involved, and the disease spreading so far in all directions, that no further steps in the operation were taken, and none of the tumour was removed. Three weeks after the operation, the patient returned to Wales, where he suffered from a severe attack of erysipelas in the face, after which he noticed both eyelids on the left side to be very much swollen, and the left nostril to be closed up.

State on Admission.—Very much exhausted and out of health. There was a considerable enlargement on left side of face. The eye was very much protruded; both lids much swollen; the lower one everted, and the mucous membrane thickened and granular; the sight of the eye was gone. The left nostril was swollen, and there was a thick discharge constantly coming from it. Running across the cheek was the cicatrix of the exploratory incision made in October. The skin was thickened and unhealthy-looking, and there could be felt under the buccinator a large, well-defined, hard tumour. Upon examining the inside of the mouth, there could be seen a large fungous mass involving the left side of the hard palate, nearly all the soft palate, and the uvula. The disease seemed to have involved the base of the orbit, and extended up under the zygoma. The glands in the neck were not enlarged. The patient suffered most excruciating pain, which was intermittent, and of a neuralgic character.

Operation, December 20, 1862.—The patient having been put under the influence of chloroform, Mr. Fergusson first made an incision through the mesial line of the upper lip, then along the left ala of the nose, and another incision at right angles to this, under the lower margin of orbit, as far as the middle of the zygomatic process. After dissecting back the flap of skin, he divided the maxillary bone a little to the right of the mesial line with a small stiff-backed saw; he then, with a strong pair of bone-pliers, cut away the tumour from the floor of the orbit, and cut through the pterygoid as high up as possible. After the remaining bony attachments had been cut by the bone-pliers, the tumour was forcibly dragged away from the base of the cranium by a pair of very strong clawed forceps. Most of the soft palate was then cut away with the knife, and several pieces of suspicious-looking tissue at the bottom of the wound were dissected out. One ligature was applied, the edges of the skin brought together, and fastened in the upper lip by harelip needles, and in the cheek by ordinary sutures. The whole operation did not last more than fifteen minutes, and not more than three ounces of blood were lost.

January 17, 1863.—The patient since the operation has got well with scarcely a single bad symptom. He has had a little swelling of the eyelids of both sides, which, in the right, has extended to ulceration, but from this he has now quite recovered. The whole of the wound united by the first intention. Has had no difficulty in swallowing liquids, and can now eat meat. There was, for a fortnight after the operation, a copious, fetid discharge from the inside of the mouth, but this has now ceased, and the mucous membrane and surrounding tissues look perfectly healthy. His appetite is very good, and he takes a fair amount of exercise in the day. The left eye has not receded at all into the orbit since the operation. Discharged well.

ST. BARTHOLOMEW'S HOSPITAL.

CASE OF GLANDERS—DEATH ON TWENTY-SEVENTH DAY—AUTOPSY.

(Under the care of Mr. SKEY.)

[Reported by Mr. HOWARD MARSH.]

J. H., aged 24, after being out of work for three months, engaged himself to a horse-slaughterer on June 14. On the following day he thrust a rusty nail into the tip of the left forefinger, and, thinking the accident of no consequence, continued his employment. By the next day the finger had become inflamed and very painful, and he observed red streaks running up the forearm. At the end of a fortnight, having in the interval suffered a very severe attack of inflammation of the finger, accompanied by much general fever, he was advised by the Surgeon under whose care he had placed himself to come to the Hospital. He was at once admitted on June 29. On examination, it was found that his health was in a very bad state, and his expression indicated severe suffering and distress. Almost all the soft tissues of the finger had sloughed, and the whole hand was much inflamed and swollen. The lymphatics on the radial side of the forearm had suppurated, but the axillary glands were scarcely at all enlarged. He stated that he was a butcher, but did not mention anything which pointed to his real condition till several days later. Incisions were made for the escape of matter, and he was ordered good diet and quinine, and a charcoal poultice to the fingers. From this date he appeared steadily to improve, both as to the local mischief and the general health, till July 4, when symptoms of severe constitutional disturbance occurred, and a patch of dusky-looking erysipelatous inflammation appeared on the forehead, involving the right eyelid.

On the 5th, the forehead was sprinkled with small bullæ, containing a dirty-looking, dark-coloured fluid, and the scalp and face were œdematous. He had slept little during the night, on account of severe pain in the head; the skin was clammy and relaxed; the pulse 120, and very feeble. He was ordered three grains of quinine every three hours, and ten ounces of brandy daily, with sufficient opium to procure sleep.

On the 6th, he was decidedly worse. The erysipelas had extended over the greater part of the scalp, and the face and throat were much swollen. A free incision was made into the integuments of the forehead, and a small quantity of ill-formed, fetid pus drained out from the subcutaneous tissue in which it was infiltrated.

On the 7th, the whole of the integuments over the frontal bone were beginning to slough, and he was very weak and exhausted.

On the 8th, the anterior half of the scalp was sloughing rapidly. Several pustules, about as big as those met with in small-pox, had appeared on the chest and right arm. They were seated on a dusky, inflamed base, and contained an opaque, brownish-coloured fluid.

On the 9th, the anterior half of the scalp was converted into one large slough. The chest and extremities were covered with a crop of pustules similar to those described above, and there was an inflamed, cord-like condition of the lymphatics of the left foot and leg. From this date he grew rapidly worse, and died in a comatose condition on the 12th—that is, on the twenty-seventh day after the reception of the poison into the system; the erysipelas having commenced on the twentieth day, and the pustular eruption three days later. There was no discharge from the nose during his illness.

Examination of the Body Fifteen Hours after Death, from the Notes of Dr. Andrew.—Post-mortem rigidity slight. Over the left tibia inferiorly a small, firm, subcutaneous swelling, over which the integument was ulcerated. Numerous shot-like pustules, none of them presenting any central depression, scattered over the neck, trunk, and extremities; most abundant on the upper arms. Integuments of forehead and anterior half of scalp sloughing; bones not exposed; great œdema of eyelids; conjunctivæ seemingly natural. No

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change detected in any of the salivary glands. Lymphatic glands in neck slightly enlarged. Submucous glands at base of tongue slightly enlarged, but not unusually so. Pharynx and œsophagus natural. Larynx: two small pustules, the size of peas, one at the level of the cricoid cartilage, the other immediately below the right vocal cord. Pericardium contained about an ounce of serous fluid; no ecchymoses on any part of the membrane. Heart: right cavities contained two small fibrinous clots; one or two smaller ones on the left side. Blood in large veins fluid; valves normal; muscular substance pale and soft; no petechiæ on the endocardium, but it was slightly blood-stained. Lungs: on the surface were one or two small petechial spots. In the substance of the lung were numerous small, firm, dark red masses, seemingly consisting of coagulated blood, with yellow points in their centres. One or two small purulent deposits were also detected generally near the surface. Lungs emphysematous throughout; contained no tubercle. Supra-renal capsules seemingly natural. Liver: 5 lbs. avoirdupois; on section, pale and very soft, its consistence being scarcely greater than that of a lung in a state of grey hepatisation. Gall-bladder contained a very little yellow bile. Kidneys large and congested. Lumbar, axillary, and inguinal glands seemingly unaffected. The nasal fossæ were not laid open, but no evidence of any discharge having taken place, or of any change in the mucous membrane, could be detected by an external examination; and the upper surface of the soft palate, which was removed together with the tonsils, uvula, etc., was perfectly natural.

CASE OF FARCY—TREATMENT BY LARGE DOSES OF THE IODIDE OF POTASSIUM—RECOVERY.

(Under the care of Mr. SAVORY.)

[Reported by Mr. HOWARD MARSH.]

C. H., aged 52, came to the Surgeon's consulting-room on August 28, 1862, giving the following history of himself:—He had been in easy circumstances, as a gentleman's servant, till January, when, being out of employment, he took to the care of a stable and to driving a cab. The stable was known to have been infected with glanders poison for a twelvemonth previously, and six or seven horses had suffered from the disease. He remained well till the end of May, at which time, after feeling very languid and depressed for some few days, he noticed that the left side of his nose was red, swollen, and painful; and on the mucous membrane of the nostril he found six or seven small, red, and very sensitive pimples. A copious, thick, yellow, and very fetid discharge began to flow from the nose, and a quantity was spat from the back and upper part of the pharynx. The glands under the jaw were enlarged, and he had "kernels along his jugular"; the throat was sore, and deglutition was painful. About a fortnight later, seven or eight "buds" as big as a fourpenny-bit, and about twelve smaller ones, appeared on the left side of the neck and the left arm. These suppurated, and, after a time, healed, being succeeded by others which, in their turn, also healed, and gave place to fresh eruptions of similar pustules. The glands in the axilla were enlarged, but the lymphatic trunks seemed unaffected. He now became much emaciated, and so feeble that he could scarcely walk, and, not being able to obtain proper food and good lodgings, fell into the deepest distress.

When he came to the Hospital, the "buds" had ceased to break out; the discharge from both the eye and nose was very abundant, thick, yellow, and fetid. The eye was considerably protruded, and the conjunctiva slightly chemosed. The glands under the jaw and along the side of the neck were still enlarged. He was much emaciated and exceedingly weak. He was ordered to be kept in a room by himself; to take two grains of quinine three times a-day, and two pints of porter, with good meat diet.

August 30.—Seemed more feeble than when admitted. To take a teaspoonful of bark with the quinine, and four ounces of brandy.

31st.—To take two teaspoonfuls of bark, instead of one, with the quinine.

September 8.—Appeared getting worse: the discharge was very copious, and the eye was more prominent than when he was taken in. Ordered two teaspoonfuls of bark with seven grains of iodide of potassium three times a-day.

26th.—Was certainly improving under the iodide. Had gained strength and was more cheerful, and could take his food better. Discharge about as before. To take ten grains of the iodide instead of seven.

October 12.—Was very much better. The eye was less prominent, and the discharge both from it and the nose was decreasing. He was gaining flesh, and was able to sit up. To take twelve grains of the iodide three times a-day.

20th.—Was now able to walk about, and expressed himself as nearly well again; general condition good; the discharge though much decreased had not ceased, and the eye was still more prominent than natural. To take fifteen grains of the iodide three times a-day.

He was discharged on November 17, at which date, although the secretion from the nose was excessive, it had ceased to be fetid, and the eye had receded into its natural position.

When seen on February 7 he was in good health, and considered that he had entirely got rid of the disease.

DISLOCATION OF THE TIBIA AND FIBULA, BACKWARDS AND INWARDS, WITH DISPLACEMENT OF THE PATELLA BY ROTATION ON ITS AXIS.

(Under the care of Mr. CALLENDER.)

[Reported by Mr. EDLIN.]

Henry F., aged 30, admitted April 24, 1862, a carman, strong, healthy, and of temperate habits. Whilst walking across a yard, shortly before his admission, a heavy packing case fell against him, so that he was thrown violently to the ground on his face and hands, and beneath the case; at the same time his left foot was wedged between two large stones, and the left leg was further fixed by the right being crossed in front of it. When freed from the packing case he found that he could not rise from the ground, owing to his being unable to use the left knee, which was the seat of intense pain.

On examination of the injured limb, it was at once evident that the tibia and fibula were dislocated backwards and inwards from the femur. The head of the tibia projected on the inner side, whilst on the outer the external condyle of the femur was sharply prominent, owing chiefly to the backward displacement of the bones of the leg, so that fully one inch and a-half of the inferior surface of the femur as well as the depression between the two condyles could be distinctly felt with the finger, being covered only by superficial structures. In front the ligamentum patellæ was lax; behind, the tendons inserted into the tibia and fibula were tense, and the muscles connected with them were rigid and contracted. The inner edge of the patella was prominent, projecting sharply beneath the skin. The leg was semiflexed on the thigh, and the foot was slightly everted, the space between the two inner toes corresponding with the outer edge of the patella, which, however, could be but indistinctly traced.

The patient having been placed under the influence of chloroform, the tibia and fibula were readily brought into their natural situation by means of simple extension; and it then became more evident that the patella (over the inner margin of which the skin was now tightly stretched) was so displaced that its outer edge rested upon the space between the condyles, whilst its inner projected forward, the articular surface of the bone being also turned slightly forward towards the integument. The ligamentum patellæ still remained lax until, on making sudden and forcible flexion of the leg upon the thigh, it tightened, and at the same moment the patella twisted round and regained its natural position. The limb, slightly flexed, was placed on a back splint, bandaged, and swung, tincture of arnica being applied to the knee. Beyond slight effusion into the joint, which occasioned neither pain nor inconvenience, the patient progressed without an unfavourable symptom.

On November 12, 1862, the movements of the knee-joint were completely regained.

THE LONDON HOSPITAL.

CASE ILLUSTRATING THE EFFECTS OF NERVE-SECTION UPON NUTRITION AND ANIMAL HEAT.

(Under the care of Mr. HUTCHINSON.)

The following case is of interest as a contribution to our knowledge of the remote effects of division of nerves. It very closely resembles, in most points, one which I published a few months ago. In both, a great loss of temperature was the most marked feature. In both, the influence of the nervous force in preserving a normal state of nutrition was illustrated by the occurrence of whitlows at the ends of the fingers from which it had been cut off. In the former case, three fingers were so affected; in the latter, only one. In all, the posi-

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of the inflamed part was precisely the same—*the very end of the finger.* It is an interesting fact, in the present case, that there was very decided loss of temperature in the integument, even above the position of the wound. The details given will, however, tell their own story.

Analysis.—Section of the Ulnar Nerve, with probably Wound of the Median also—State of the Hand Three Months afterwards—Loss of Temperature in the whole Hand, and also in the Fore-arm above the Scar—Dilated and Atonic Condition of Capillaries—Whitlow at the end of the Ring Finger—Atrophy of the Muscles supplied by the Ulnar Nerve—Recovery of a Slight Degree of Sensation in the Parts.

Emma R., aged 15, on October 19, thrust her right hand through a pane of glass, and received a deep cut on the inner part of her fore-arm, about an inch above the wrist joint. The radial end of the incision passed as far as the middle line of the fore-arm, but possibly it passed deeply still further. It crossed the ulnar vessels and nerve. There was very free bleeding, which was stopped by compress and tight bandage. She was taken to the London Hospital an hour afterwards. No further bleeding occurred. The wound healed slowly and with suppuration. She was discharged five weeks after her admission.

Examination.—February 1, 1863, rather more than three months after the accident. She is in good health, but has not been able to make any use of her hand. The hand is chilly and bluish red, like that of a person suffering from chilblains; the capillaries fill slowly when emptied by pressure; all the finger nails are somewhat clubbed, and decidedly more curved than those of the other hand. The scar has been quite sound for six weeks, and is free from tenderness. It moves when the fingers are straightened, the tendons being adherent to it. Sensation good above the scar, and exceedingly imperfect below it, over the ulnar side of the hand, the little and ring fingers. No discoverable difference between the two sides of the ring finger. The middle and forefinger have only imperfect sensation; in the thumb it is tolerably good. It appears to improve gradually as we go from the little finger to the thumb. Even over the little finger she has a slight degree of sensation, and can tell sometimes when lightly pricked. All the fingers are bent forward to the palm, but do not touch it. To straighten them causes pain at the scar.

The muscles clothing the metacarpal bone of the thumb are much wasted. The carpo-metacarpal joint is too visible, and the outline of the metacarpal bone is exposed. On the back there is a remarkable hollow between the thumb and forefinger, and the metacarpal bone of the latter is immediately under the skin, the abductor indicis being quite wasted.

When told to draw her thumb across the palm to make it and the little finger meet, she bends the thumb by the long flexor, and is quite unable to adduct it whilst extended. She cannot bring the thumb and little finger together by any effort, partly because she cannot move the little finger at all. The structures in the palm are a little thickened, and she has slight tenderness on pressure there. She says that she has not had much annoyance from sensation of cold or aching in the hand, but she is quite aware that it is colder than the other; she has also noticed that when the hand is put into hot water she does not feel the heat well.

At the very end of her ring finger (injured hand) is a small whitlow; it looks as if a few drops of pus had been effused beneath the skin, and were now nearly absorbed. The skin over it is dry and horny; there is a little red areola around it. She has had no pain in it, and it is not tender. It began to form nine days ago.

The following is a statement of the temperature as determined by the thermometer, applied to different parts. The experiments were made after the girl had sat in a warm room for half-an-hour, with the two hands equally exposed:—

	Left. Degrees.	Right. Degrees.	Difference. Degrees.
Ulnar borders of the two hands	66	61	5
Between little and ring fingers (in the cleft)	65	59	6
Between thumb and fore-finger (in the cleft)	66½	62	4½
Between fore and middle fingers (in cleft)	65	60	5
Pulp of thumb end	62½	60½	2
Ball of thumb (palmar aspect)	65	61	4
Front of fore-arm four inches above wrist (three above the scar)	78	74	4

CARCINOMA OF TONGUE AND SUBMAXILLARY GLANDS—RAPID PROGRESS.

(Under the care of Mr. HUTCHINSON.)

The following case affords a good instance of the rapid course which epithelial cancer occasionally runs. Often it is difficult to assign a correct date to the commencement of the disease, but, in this instance, it is tolerably certain that it followed the extraction of a tooth only two months before the man's admission. Nor is this wild-fire rapidity of progress by any means unprecedented in the history of this form of cancer. Epithelial carcinoma, when once fairly developed, is one of the most rapidly fatal forms of malignant disease with which the Surgeon has to deal. It is impossible to exaggerate the importance of a correct diagnosis very early, and of very early measures for its extirpation.

The following are the notes taken at the time of the man's admission:—

"Joseph H., a carpenter, aged 46, always healthy. He does not know that any of his relatives have ever had cancer. He has smoked largely. Two months ago he applied at the London Hospital, and had a broken lower molar of the left side extracted. At that time there was no sore on the tongue; the tooth ached, and that was his motive for wishing it out. Shortly afterwards a sore formed on the tongue, just where the tooth had scratched; the sore spread rapidly. It now extends from near the tip to the very posterior edge, and also involves somewhat the structures in the floor of the mouth; it has a sloughy base, an overhanging border, and very hard edges. Last night it bled freely. Under the jaw are numerous very hard glands. He has not as yet had much pain, but has lost flesh greatly, and has felt very weak. He still does not display any appreciable degree of cancerous cachexia. He has never before seen a Surgeon about it. Although of only eight weeks' duration, the case is clearly hopeless as regards operation."

The case ended in death between two and three months after the above notes were taken. The glands had ulcerated, and opened through into the mouth.

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Medical Times and Gazette.

SATURDAY, FEBRUARY 14.

RUSSELL v. ADAMS.

WHY should we not have a grand jury in civil as well as in criminal cases? If a man's character is as dear to him as his life, why should he not have it protected from public contempt and ignominy whenever the verdict of a grand jury could throw out of court a cause based on evidence that is worthless, or worse than worthless? We ask this question, as bearing with peculiar force at the present moment, in relation to the trial of Russell v. Adams. It is as clear as crystal, that if the rule we have suggested had been in force, this scandal would never have seen the light of day. Mr. Adams would have stood, as he stands now, acquitted of the charge brought against him; while all the annoyances and all the expenses to which he has been so unjustly subjected, would have been wisely and entirely prevented.

It is hardly necessary for us to say a word of explanation in

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respect to the trial of the past week, in which one of our Surgical celebrities has been so prominent a figure. That which is proclaimed on the omnibus tops, if not on the house-tops, and on which our daily contemporaries have written so fully, requires, necessarily, but little exposition here.

Still, as matter of current Medical history, the facts of the trial may be briefly stated. They are to the effect that a woman named Russell, and her daughter, persons claiming family connection with Earl Russell, the Bedfords in general, a dean or two, several rectors, and at least one admiral, accused Mr. Adams of a breach of promise of marriage with Miss Russell, the daughter. The circumstances under which the promise said to have been made was effected are peculiar. The promise was certainly not made in writing, no document containing such promise having been ever produced; and, if it were made verbally, the terms of it, together with the date and situation, were also forgotten.

Of what was really shown in evidence the main facts were, that Mrs. Russell took a child, named Cromp, having a deformed foot, to the Orthopædic Hospital, in 1860. There the fascinating old lady, like Mr. Simon Tappertit, presumed on her powers of persuasion so far as to talk Mr. Adams out of himself, and into her confidence. It is not suggested that between Mr. Adams and the old lady any kind or tender feeling arose, nor that any offer was ever made to her; but it appears that Mr. Adams, under the impression that she was the widow of a Medical man, invited her to go to his house with the child for morning consultation. After a time, Miss Russell took her mother's place, and, being a highly susceptible young woman, though not quite so lovely as her counsel depicted her, she informed her mamma—so said her mamma—in October, 1860, that Mr. Adams had made her an offer of marriage. On the receipt of this startling intelligence, Mrs. Russell, according to her own statement, wrote a letter to Mr. Adams, the terms of which she repeated *verbatim et literatim* to the Court, the copy having been lost. Unfortunately for her, she again had no correct idea of dates. After a time the two left Hornsey, the place where they had been living, and in March, 1861, moved to Osnaburgh-street, Regent's-park. Here they lived in the house of a Mrs. Lama, establishing themselves on Mr. Adams' name. They now sent constantly for Mr. Adams to visit them, on pretexts of illness; he did visit them, and on one occasion called in the evening, stayed some two hours, heard Miss Russell play, heard Miss Russell sing, stood at the back of Miss Russell's chair, and even sang a song himself. Atrocious man! For months, under the impression that the engagement was a fact, Mrs. Lama lodged, boarded, and, to use an American phase, not very elegant but true, *liquored* these two ladies. They had their gin, their brandy, their soda-water; they feasted well. Though one of them complained that in the morning she had thirst, dryness of the mouth, and pain in the head, otherwise all was propitious. Mrs. Russell was quiet, Miss Russell was quiet, both were quiet, except when they were asked for money—then there was a sharp breeze in Osnaburgh-street, which did not come from over Primrose-hill.

The Russells remained with the Lamas until a bill of extraordinary length became an accomplished addition to the manuscript literature of this country. By various little pieces of by-play they kept the idea of the marriage always on the *tapis*; they were skilled at the work; and, it would seem, had previously learned many practical lessons. But there came at last a time when Mrs. Lama's patience would bear no more: she pounced on Mr. Adams as he was entering her house, and had it out with him. She asked him point-blank whether he was not going to marry Miss Russell; and when she received an indignant negative, coupled with the information from himself that he was a married man with a family, she was not less astounded than he. She had kept them on the faith of this engagement, and now her expectations were suddenly and definitely thrown aside. Imagine the scene!

There remains, in the general statement, but little more to add: Mr. Adams, accompanied by Mr. Blaise, visited the Russells, and received from them a flat contradiction of the statement made by Mrs. Lama. Ultimately they retracted this contradiction, and, after making many ineffectual attempts, at last brought forward the action which has ended in a verdict to their exposure and grief.

We have looked at every line of the evidence supplied on both sides; we have read it critically, heard it discussed critically, and for the life of us we can discover nothing in it that were beyond actual comedy, if the results that depended on it had not been so serious. The evidence brought by Mrs. Bardell against her deceiver, in the celebrated cause which some years ago occupied the public mind, was conclusive and irrefragable compared with that of Miss Russell. It was admitted by the prosecution that not one affectionate sign or token had ever passed between the assumed lovers: to the young lady, not so much as one poor three-cornered note had even been sent. Letters written by herself to her betrothed were read; they were couched in terms so hard and business-like that one could have traced them, without any stretch of imagination, had the authorship been unknown, to the immortal Sarah Brass, or at least to a pupil of that illustrious lady. To be brief, look into whatever part of the evidence we may, not a tittle of fact can be detected bearing even an approach to the indication of a real or false attachment. If it were for a moment admitted that, on such half-cunning, half-maniacal statements and protestations as those of Mrs. Russell, Medical men could be prosecuted successfully for breach of promise, the Colleges of Physicians and Surgeons might close their doors in a twelvemonth, and leave Professor Holloway and the British College of Health masters of the Medical field, to take alike all risks and all rewards.

Happily, the verdict, although couched in most absurd terms, demonstrates that English juries, stupid as they may be, are not quite prepared to back any unsupported assertions affecting a man of unblemished character that may be offered them; and we congratulate the Profession on the fact, that, after a severe and rigorous trial, its honour has been sustained in the complete and demonstrative vindication of one of its representatives.

THE WEEK.

DR. BROWN-SEQUARD'S LECTURES.

A course of six lectures on "Diseases of the Nervous System" was begun on Thursday, the 5th inst., by Dr. Brown-Séquard, at the National Hospital for the Paralysed and Epileptic. The Board-room, in which the lectures are given, was nearly filled by an audience consisting almost wholly, we imagine, of Medical men engaged in practice. The first lecture was upon "Wasting Palsy," and was prefaced by some remarks on the difficulty of the subject, and by a modest reference to a special difficulty which the lecturer has to contend with—viz., that, we presume, of expressing himself in the English language. But, indeed, this allusion was scarcely needed: since we last had the pleasure of hearing Dr. Brown-Séquard address an audience, his progress in the language has been so rapid, that, though no one would suppose him, when lecturing, to be speaking his mother-tongue, each of his hearers must be struck by the copious and idiomatic knowledge of English which he displays, as well as by the facility and effectiveness with which he uses it. In fact, the piercing insight and rigorous scientific method which characterise this distinguished physiological discoverer and original thinker impress their own qualities on his language, thus rendering it at once clear, compact, and logical. Wasting palsy, the lecturer said, was first described

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as a distinct disease by Sir Charles Bell, his description being completed by Cloquet. This form of paralysis is often restricted to certain muscles, and does not necessarily involve all the muscles of a limb: generally, those acting in concert, though supplied by different arteries, and controlled by different nerves, are affected at the same time. During the process of atrophy the muscles implicated usually present a wavy or corrugated aspect, and, though powerless, their reflex sensibility is such as to cause them to quiver more or less when touched. A considerable part of the lecture was occupied in stating and discussing the post-mortem phenomena, and the hypotheses founded thereon, which have been from time to time adduced in explanation of the cause of the disease. Morbid alterations of the spinal cord have often been found in persons who have died afflicted with wasting palsy; but these alterations, instead of being constantly of the same nature, have differed from each other so essentially in the different cases as to preclude the possibility of establishing a causal relation between any one of them and the disease in question. On the other hand, cases of wasting palsy occur in which post-mortem examinations reveal no structural change in any part of the cerebro-spinal axis. In presence of these facts, the lecturer confessed his inability to divine the source of the malady. He showed a remarkable illustrative case, that of a labouring man, who had evidently been very healthy and strong, and who, a few months ago, got wet, and afterwards lost the use of his arms. The whole of the muscles of both upper extremities are wasted; those of the back, and especially those of the back of the neck, are also involved to such a degree that the man cannot maintain himself erect; his head falls forward; the spine of the seventh cervical vertebra projects greatly; and in order to balance himself he counteracts the hanging of the head forward by throwing the shoulders backward. There is a sub-inflammatory condition of the muscles of the shoulders and back of the neck, as evinced by the general tenderness on pressure of those parts; but concerning the relation of this affection to the disease in question, Dr. Brown-Séquard did not hazard an opinion. Treatment has been of no avail in this case; and as the cause of wasting palsy remains a mystery, of course no rational method of cure was indicated. Unfortunately, in this instance, empiricism offers, we believe, no help to supplement the defect of science.

SIR CHARLES LYELL ON THE ANTIQUITY OF MAN.

The work of the accomplished geologist, which has just appeared, has two aspects—one of fact, the other of theory. The first is most valuable, embracing as it does the whole evidence, direct and collateral, as to pre-historic man; the other affords a curious example of mutability of opinion. Sir Charles, who, in the earlier editions of his "Principles of Geology," dedicates a chapter to the refutation of Lamarck, has now become the open supporter of transmutation, and is looking forward to the "missing links," which an examination of the pliocene and post-pliocene beds of Western Equatorial Africa, and the islands of the East Indian Archipelago, may bring to light. One of the most acceptable features of his book is the very careful and full account of the geological evidence as to the antiquity of the principal discoveries both of bones and instruments. The diagrams of sections of the post-pliocene alluvium in the valley of the Somme, together with the accompanying description, carry conviction as certainly as if the reader had visited the excavations. The evidence of the disputed antiquity of the Engis cranium is, as Sir Charles states it, most forcible. Here is his description of the difficulties under which Schmerling's discovery was made:—"To have undertaken, in 1832, with a view of testing its truth, to follow the Belgian philosopher through every stage of his observations and proofs, would have been no easy task even for one well-skilled in geology and osteology. To be let down, as Schmerling was, day after day, by a rope tied to a tree, so as to slide to the foot of the first opening of the Engis cave, where the best-preserved human skulls were found, and, after thus gaining access to the first subterranean gallery, to creep on all fours through a contracted passage leading to larger chambers, there to superintend by torch-light, week after week, and year after year, the workmen who were breaking through the stalagmitic crust as hard as marble, in order to remove, piece by piece, the underlying bone-breccia nearly as hard; to stand for hours with one's feet in the mud, and with water dripping from the roof on one's head, in order to mark the position and guard against the loss of each single bone of a skeleton; and at length, after finding leisure, strength, and courage for all these operations, to look forward, as the fruits of one's labour, to the publication of unwelcome intelligence, opposed to the prepossessions of the scientific as well as of the unscientific public;—when these circumstances are taken into account, we need scarcely wonder, not only that a passing traveller failed to stop and scrutinise the evidence, but that a quarter of a century should have elapsed before even the neighbouring professors of the University of Liege came forward to vindicate the truthfulness of their indefatigable and clear-sighted countryman." The anatomical characteristics of the Engis and Neanderthal crania have been furnished for Sir Charles by Professor Huxley, and the same authority is constantly quoted on the questions of the position of man and his relations to, and differences from, the other *Primates*. Sir Charles Lyell considers the remote antiquity of the Neanderthal cranium doubtful; but he is evidently disposed to allow it considerable weight as evidence of transmutation, whether it be very ancient or comparatively recent. "The direct bearing of the ape-like character of the Neanderthal skull on Lamarck's doctrine of progressive development and transmutation, or on that modification of it which has been of late so ably advocated by Mr. Darwin, consists in this, that the newly-observed deviation from a normal standard of human structure is not in a casual or random direction, but just what might have been anticipated if the laws of variation were such as the transmutationists require. For if we conceive the cranium to be very ancient, it exemplifies a less advanced stage of progressive development and improvement. If it be a comparatively modern race, owing its peculiarities of conformation to degeneracy, it is an illustration of what the botanists have called 'atavism,' or the tendency of varieties to revert to an ancestral type, which type, in proportion to its antiquity, would be of lower grade." We hope on a future occasion to furnish our readers with an extended review of this the most important, because the most comprehensive, work which has yet appeared on the "mysterious past" of humanity.

HEALTH OF THE ARMY AT NEW ORLEANS.

When the history of the great American Civil War shall be written, sentences such as these from Surgeon Browne's Quarterly Report of the Army at New Orleans, will be quoted in explanation of the results of the war. They are found in the *American Medical Times:*

"The troops are uniformly destitute of all notion of cleanliness of body or clothing, and have never observed any condition of health in their habits. They were utterly unmindful of all care for the hygiene of the body, and *without animal spirit in anything but one notion, that of being discharged from the service.* Their subordinate officers, some of them quite illiterate and ignorant, were wholly unqualified in education or character to enforce any observance of the rules of health. Their Medical Officers were, as a rule, alike incompetent to deal with the diseases or the men—being equally defective in scientific insight and professional force of character and discretion, or wisdom. The Hospital was sought by the men as

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a refuge from camp duty, even when the want of energy or a shifting pain was the only infirmity of the body."

Gangrene of the throat—not an acute inflammatory affection, but a low, insidious rotting of the tissues—has been observed:—

"It has been found in cases not under treatment, which have presented themselves complaining of sore mouth or gums. In two cases of the guard it was found to invade the line of the mucous membrane of the cheek, pressing against the teeth. Here it was accompanied with slight tumefaction of the lower part of the cheek, and soreness. The left tonsil was invaded also; surrounding the base of the teeth of this side was presented an abundant collection of epithelial and mucous matter, closely resembling the light-coloured *débris* of masticated and pulverised food. The irregularities of the grinding surface of the teeth were also covered as with plaster. The left tonsillar space was invaded, and the gland nearly destroyed. Again, it was found in the mucous membrane of the lower lip, where it adjoined the lower teeth; it was curious that the continuity of the membrane affected seemed entire until the probang saturated with nitrate of silver swept it, in doing which it all came away. The denuded surface now presented the same appearance as the others. It had previously presented a mottled bluish look. It is an example of the *fatuous* moral condition of the invalids here, that in this instance the patient would not clean his teeth and gums, though he was most imperiously enjoined to do so. For three succeeding days he presented himself, without this having been perceptibly done, but said he had done it. I was obliged myself (as it was my duty) to force him to be cleaned by my own hands. He shrank from it, and closed his mouth—a puling babe."

Speaking of the causes of disease in the soldiers, he traces them to—

"The unutterable foulness of their persons and apparel, and in the places, camp, field, or Hospitals they had previously occupied. A *nimbus* of foul, organic matter, from the skin and breathing surface of the lungs, as a focus, the exhalations of effete and desquamated organic particles from their bodies, their clothes, bedding, and personal utensils, were the conditions supposed to account for this process. I have seen known as clean invalid, in the ordinary civil sense, to enter this Hospital, nor one in whom evidences of uncleanliness were not perceptible to more than one sense. I do not here allude to 'clean dirt,' such as earth, or mud, or earth-dust, but to skins cadaverically foul with effete substance, to fetid mouths and nauseating breath, to reeking feet, to hairs and beards matted with sebaceous and sweaty excretions, and to gums whence arose a stench no putrescence could exceed, evident through the nares even when the jaws were closed."

REVIEWS.

A Treatise on the Continued Fevers of Great Britain. By Charles Murchison, M.D., Fellow of the Royal College of Physicians; Senior Physician to the London Fever Hospital; Assistant-Physician and Lecturer on Pathology, Middlesex Hospital, etc., etc. London: Parker. 1862. Pp. 638. Demy 8vo, price 18s. Illustrated with Coloured Plates, Diagrams, and Wood Engravings.

Lectures on the Distinctive Characters, Pathology, and Treatment of Continued Fevers, delivered at the Royal College of Physicians, London. By Alexander Tweedie, M.D., F.R.S., Fellow of the Royal College of Physicians, London; Consulting Physician to the London Fever Hospital; Physician to the Foundling Hospital, etc., etc. London: Churchill and Sons. 1862. Pp. 301. Demy 8vo, price 12s. Illustrated with Coloured Plates.

As Hospitals afford unusual opportunities and facilities for studying diseases, their Medical Officers incur a two-fold responsibility. While they owe the patients much of their time and all their skill, they likewise owe their professional brethren a share of whatever superior knowledge such exceptional advantages may have enabled them to acquire. This two-fold responsibility has ever been duly appreciated by the Medical Officers of the London Fever Hospital. In behalf of its inmates, they have lavishly expended both time and skill; they have risked, sometimes even sacrificed, their lives. In behalf of their Profession they have not failed to record from time to time the precious results of their observation and experience of continued fevers. Our periodical literature, for the last fifteen years or so, has abounded with their contributions; but, until the present winter session, we have had no systematic account of continued fevers, such as is presented in the two volumes which head this review.

We have not space for anything like a summary of their contents. It must suffice if we lay before our readers a few of the more difficult points which they elucidate in the subject of continued fevers. The authors, strongly advocating the non-identity of their different forms, adopt the same classification. Besides febricula (*i. e.*, simple fever depending on a non-specific cause, such as nervous exhaustion, exposure to heat, errors in diet, etc.) they recognise and describe three different kinds, viz., typhus, typhoid or enteric, and relapsing or famine fever. These three fevers they hold to be, not mere modifications of one disease, but three distinct species, in all respects as distinct from each other as are measles, scarlatina, and small pox. In support of this view they urge the differences observable in their respective modes of origin and propagation, in their respective courses, symptoms, complications and sequelæ, and in the treatment they respectively require. The non-identity of two of them (typhus and enteric fever) is still further confirmed by well-defined differences in their respective eruptions. We are aware that many members of our Profession still hesitate to recognise the plurality of these two commonest forms of fever. To such we would strongly recommend a perusal of either of the volumes before us, or at least of so much of them as bears upon this question. If they are still open to conviction, we think they will find, especially in Dr. Murchison's work, evidence amply sufficient to satisfy their doubts. Again, both authors, taking into consideration the obvious differences in the mode of origin of the different forms of fever, hold them to be generated by different poisons. But while Dr. Murchison's researches satisfy him of the exact source of the poison in each case, Dr. Tweedie admits that for himself he is not yet in possession of sufficient data to determine this point with exactness.

Dr. Tweedie's book is a re-publication of his Lumleian lectures, delivered in 1860. He confines himself therein as much as possible to practical details, dwelling but little on obscure unsettled points in the etiology or pathology of fever. It would be unfair to disparage his work on this account; such points would not have admitted of satisfactory handling within the limits of his course. Dr. Murchison's book, on the other hand, is a professed "Treatise" on fever; and well it deserves so comprehensive a title. While eminently practical, it deals fully with all those vexed questions concerning fevers, which yearn for more exact adjustment. For instance, the causes of fevers, *i.e.*, their respective modes of origin and propagation; the extent to which these causes are under human control; the reasons of the varying prevalence of the different kinds of fever; the possibility of their co-existence with other acute, specific diseases: all these and many other kindred questions are investigated by Dr. Murchison with exhaustive, but never tedious, minuteness. We are also bound to add that there are few upon which he has failed to throw more or less light. Evidence for and against is, in all cases, impartially weighed, and, where the balance is even, he is generally ready with facts and arguments of his own sufficient to turn the scale. We would draw special attention to his views about the preventibility of fevers, and the grounds upon which these views are based. He believes the spread, and, in most cases, the origin of fevers to be due to disregard of various sanitary precautions which he fully details. He is strongly in favour of isolating the contagious fevers, and not distributing them in the wards of a General Hospital.

A point so important, and so much cleared up, as the distinctive pathology of the different forms of fever is, of course, dwelt upon at length by both writers. Dr. Murchison enters, also, into the obscurer questions of the fundamental pathology of fevers in general—*i.e.*, the causes of symptoms as well as symptoms themselves; in other words, the *modus operandi* of fever poisons. This is a question of the deepest interest: for, in proportion to the fullness and correctness of our knowledge regarding it, shall we attain to a more rational and, probably, successful treatment of fevers. It receives full attention from Dr. Murchison, and we must do him the justice to observe, that his observations and researches have advanced a deal of more or less probable conjecture, if not legitimate conclusion, on a point hitherto involved in greatest uncertainty. His explanation of the *cerebr ptoms* (convulsions, delirium, stupor, coma, etc.), so ofte

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vening in the course of fevers, especially of typhus, seems to us to have strong clinical evidence in its favour. He argues, that these symptoms depend, not on any lesions of the brain or its membranes, nor yet primarily, or to any considerable extent, on the immediate action of the fever poison, but mainly on its secondary effects. These are:—Increased waste of tissue, non-elimination by the kidneys of the products of such waste (urea, etc.), their accumulation in the blood, circulation in the brain, and consequent perverted nutrition of the brain itself. "Hence it is," he thinks, "that the symptoms in the advanced stages of many fevers are closely assimilated, although the primary poisons have been perfectly distinct." Thus, too, he accounts for the striking resemblance between the cerebral symptoms in fevers (especially typhus) and those in uræmia from Bright's disease; the probability being, that the symptoms in both sets of cases "are due to the circulation of the same morbid materials in the blood." *Why* the urea is excreted in some cases and more or less retained in others, it is hard to say; but his own observation inclines him to believe that its elimination is generally prevented "by some morbid condition of the secreting tissue of the kidney, either of old standing, or consequent upon the febrile attack." He also gives some reasons for supposing that "a sudden check to the excretion of urea and of other products of tissue metamorphosis, is one cause of the development of *local inflammations* in the course of fever."—P. 13.

In connexion with the treatment of fevers comes the great chan ge-of-type question. Many members of our Profession adv cate the notion that, within the last thirty years or so, fevers—and, indeed, acute diseases of all kinds—have assumed a less sthenic character; that at present they neither tolerate nor require those depleting, lowering measures which were formerly employed in their treatment. Both our authors, after closely examining the grounds upon which this opinion is supposed to rest, are convinced that it has no solid foundation. The change, they urge, has taken place not in the diseases, but in our views of their nature and our estimate of the powers of remedies. In respect of fevers, the notion of a change of type has mainly arisen from non-recognition of their different forms.

The portions of the volumes before us which concern the treatment of fevers will not disappoint the expectations of the Medical Practitioner. Keeping in view the non-identity of the different forms, they consider, not merely their general therapeutics, but likewise those minor, though still essential differences which regulate the treatment of each form. Disbelievers in the plurality of continued fevers will be inclined to think that these volumes contain more refining in the matter of treatment than holds good in actual practice. Many cases of fever will, no doubt, get well with any treatment, or even with none at all; but in critical cases, when life trembles in the balance, it is often just the recognition of these points of nicety which turns the scale in the patient's favour.

Both writers, fully acknowledging the beneficial effects of alcohol, advocate a most guarded use of it in fevers, and lay down, as far as possible, rules for its administration. They insist much on a point which was urged years ago by Dr. Stokes, of Dublin, viz., that the cardiac sounds, not the radial pulse, furnish the true criterion for the administration of stimulants. Dr. Murchison, further, considers the much-controverted question, *how* alcohol acts—whether as a mere medicinal stimulant, or as food, contributing (as Todd held) to the nutrition of nerve-tissue and maintenance of animal heat. "After a careful study of all that has been written on the subject, and observations of many hundreds of cases," he is led, briefly, to the following conclusions:—That alcohol may help to support combustion and animal heat, and perhaps check destructive waste of tissue; that beyond this its action is purely that of a medicine, its effect being to stimulate the nervous and vascular systems; that as such it is invaluable, but it can never prevent emaciation and failure of strength. Plastic food alone will do this.—Pp. 257-259.

Dr. Murchison's view of the causes of certain symptoms in fevers suggests a modification of the old routine, according to which these symptoms are usually treated. We allude to the cerebral symptoms (stupor, delirium, etc.) which so commonly arise in the progress of fevers, especially of typhus, and are usually treated by stimulants, sedatives, and derivatives. If, as seems highly probable, these symptoms are generally due to uræmic poison, then our main object should be, while supporting the patient's strength, to neutralise the effects of this poison, and promote its elimination by the kidneys, skin, and (where there is no intestinal complication) by the bowels also. The best means of accomplishing each of these objects will be found under the head of "Treatment" (p. 265 and 570). He dwells much on the importance of maintaining the action of the kidneys. The supervention of head symptoms should at once lead to examination of the urine; and if it give evidence of obstructed renal excretion—such as diminution of urea, presence of blood, albumen, etc.—prompt measures (p. 279) should be adopted to remedy the cause of the obstruction, which will, probably, be either congestion of the kidneys, or old standing organic disease. In typhus he has found renal mischief, either antecedent to or consequent on the fever, to be one of its commonest and, likewise, most fatal complications.

Dr. Murchison's is a work which will stand, and stand high on its own merits. It is independent of the critic's praise. We venture to predict that for very many years to come it will be the standard authority on every question connected with fevers, and the fountain-head from which succeeding writers on that subject will draw largely for their materials. In clearness of arrangement, in the multiplied conveniences it affords for reference, his book is a model. It has a complete index. It teems with references to the present and past fever literature of all countries. In order not to encumber the text, these references are thrown into foot notes, and, to save repetition, are restricted to the author's name, with the date and page of his work. The full title of each work is given in a b bliography, which brings together in chronological order all the more important contributions to fever literature from A.D. 1500 down to the present time.

Dr. Tweedie's work has much solid merit to recommend it, embodying, as it does, the results of a life's observation and experience of fevers. But its usefulness is most seriously crippled by the literary trim in which it comes before the Profession. Its author should have remembered that Medical books are used infinitely more for casual reference than for continuous reading. The busy Practitioner who wants to get at Dr. Tweedie's views on any given point will rarely have patience to ruminage them out from the chaos of matter in which they lie buried. His book has no index, no table of contents, no running titles at the page-heads, and nothing worthy of the name of preface. The only sign-posts to direct the inquirer where to find what he wants are certain epitomes at the commencement of the different lectures; but these, again, are too vague and incomplete to be of much service. For instance, the epitome at p. 97 wholly ignores two very important sections of the lecture it is supposed to summarise, viz., the sections treating of the lesions of the organs of respiration and circulation. These defects simply do injustice to himself; they do not give a good book a fair chance. There are, however, further defects, and these do injustice to others. To wit, he rarely gives references to the works of those whom he has occasion to cite. Here and there he transcribes whole sentences from an author without acknowledging the same in inverted commas, and so leaves the reader in uncertainty as to whose the words are. A comparison of pp. 107-110 of Dr. Tweedie's work with Rokitansky's "Pathological Anatomy," vol. ii., pp. 68-73 (Old Syd. Soc. Transl.), will afford an instance in point. It is the same absence of full, free, and precise acknowledgment of borrowed language which has lately involved him in a misunderstanding with Dr. Murchison. That such absence of acknowledgment is to be regretted, we readily admit; that it was intentional, we will never believe. The explanation of the whole thing lies in the palpably careless manner in which Dr. Tweedie has allowed his lectures to appear in print. No charge more serious can fairly be brought against him than inadvertent omission, or than a misapprehension of the extent to which he was at liberty to avail himself of Dr. Murchison's labours. The fact, that a portion of Dr. Murchison's work, quoted by Dr. Tweedie, was ascribed by a Cork Physician to Dr. Tweedie himself, is a significant proof that a careless reader might not see to whom the passage really belonged, though a careful reader would not have made the mistake. We only wonder that Dr. Murchison did not feel himself too strong to mind such a trifle.

W. Coulson, Esq., has been appointed Sheriff of Cornwall for the ensuing year. We are always glad to hear of Medical men taking a high social position. It helps to raise the general estimation of our body.

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PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

CASE OF EMBOLISM.

An interesting case of embolia of the infundibulum of the right ventricle and pulmonary artery communicated to the Société Anatomique, of Paris, by M. Gouraud, has been made the subject of a report by M. Lancereaux. The following is M. Gouraud's *résumé* :—"A healthy woman, aged 46 years, entered La Charité, for a fracture of the right leg, accompanied by considerable extravasation of blood. Scutter's apparatus was applied, and all went on well, the size of the limb lessening. After three weeks the apparatus was replaced by a starch bandage. On the following morning the patient was quite well, but, some hours later, violent palpitations of the heart occurred, the patient cried out, became livid, and was dead in a few minutes. On post-mortem examination, the right tibia presented two solutions of continuity, the fibula being fractured in only one place; there was an extravasation of blood infiltrating the whole thickness of the soft parts in this region. The veins of the right leg presented small coagula, which became more distinct and large in the femoral vein, the external and common iliac, and even in the lower part of the vena cava. The fibrinous coagulum was firm, elastic, of a deep red or rose colour, and was adherent at several points to the internal surface of the vessel. On the left side the limb and veins were healthy. From the lower part of the vena cava to the heart the blood was liquid. There existed in the infundibulum of the right ventricle and in the pulmonary artery a clot drawn out into the form of a leech, thirty-six centimetres in length, of a diameter much less than the vessel where it was found, of a rose or deep red colour, and not homogeneous. The lungs were engorged, but crepitant." M. Gourand explains the obliteration of the passage by the arrest of the long clot, on arriving at a branch of the pulmonary artery, such as would not allow it to proceed further, and then by the ventricular contractions causing the other extremity to be folded back in the infundibulum, so as to lie opposite the sigmoid valves. It is necessary that we should abridge considerably M. Lancereaux's observations. The first question to which he applies himself is the cause of the coagulation which took place in the veins. He explains it thus :—The blood coagulated at the seat of the fracture necessarily compressed the mouths of the ruptured vessels; but, at the same time, coagula would form at the extremities of these vessels, and mount up, as is the rule for them to do, as high as the nearest valves. From the withdrawal of the *vis a tergo*, there would be stasis of the blood proceeding from the collateral veins, a new coagulum, commencing this time at the valves, and these latter coagula would lengthen gradually, and become, in their turn, the cause of new coagula, until the principal venous trunk becomes completely obstructed. In this view the cause is a local one, namely, the diminution of the current of blood, and the influence exercised by the fibrinous clot upon the blood which surrounds it. Admitting the sufficiency of this cause to produce venous coagulation, other causes may be added, such as diminution or loss of contractile power in the veins, tumours compressing them, and whatever retards the venous circulation. General causes would also operate, on the one hand, by lowering the force of the heart and the contractility of the vessels, and, on the other, by causing modifications in the blood itself such as are even now little understood. It is important to point out that, under the influence even of general causes, it is always where the circulation tends to be slow that coagulation commences.

The clot, which begins to be formed at the situation of a valve, presents a form and characters which must first be treated of. At one extremity it presents the mould of one or two of the valves; its other end is rounded or conical, and upon its length may be perceived the smooth and clean impressions of valves. One of its surfaces, that in contact with the wall, is slightly striated, yellowish or marbled; the other surface, free and bathed in the blood, is brownish and granular. The length varies from some millimètres to several centimètres; its bulk may become considerable, since it generally forms in the largest vessels, and is thus the most frequent cause of sudden deaths. Besides, by reason of its characters, it constitutes the most positive evidence of embolia of the pulmonary artery when it is met within this entirely valveless vessel. Observation teaches us that, where there is but one clot, and the death has been sudden, it is always the trunk of the pulmonary artery or the infundibulum which is found obstructed. The blood in the heart is ordinarily black and fluid, as in death by asphyxia. I do not, for my own part, think that a single embolus, arrested in one of the divisions of the artery, can bring about this fatal accident. For the most part the embolic clots are multiple, and always, I say again, if death has been rapid, they are found either in the trunk of the pulmonary artery or in its principal branches. As respects the smallest clots, they are rarely found in divisions of the fifth order, but mostly in those of the third or fourth. In some special cases known as capillary emboli, very small clots have been found in the smallest branches. The form of the migratory clots is generally cylindrical, their extremities at one time regular, smooth, and conical; at another, rough and torn; at another, only one end is torn, while the other is polished and conical. It is in cases where both extremities are smooth and untorn that valvular impressions are found upon the body of the clot, and one or two moulds of valves at one extremity. The clots which are torn at their extremities are generally devoid of impression and moulds, but they are now and then channelled. When one extremity only is torn, the other is generally conical. The same difference which we have established in the characters of venous clots is, consequently, found in the clots of the pulmonary artery; and there exists between the venous coagula and those of the pulmonary artery such a resemblance, that we are compelled to admit that the clots have been transported from the veins into this artery.

Besides these characters, embolic clots differ from coagula formed just prior to or immediately after death in their elasticity, brownish or marbled colour, and the condition of the fibrin which is always in progress of retrogression. The clots formed at death are soft, œdematous, flattened, branched, and only close incompletely the containing vessel. The clots which, during life, form primarily in the branches of the pulmonary artery (autochthones), differ from emboli in their form and seat, and in the absence of the characters which have been described. In certain circumstances, however, they are readily confounded with embolic clots, namely, where fibrinous coagula have become added to the latter, but it is always easy, by means of a section and examination with the microscope, to recognise the central embolus. If the bulk of embolic clots is very variable, their length especially presents great variety: thus, whilst some may only measure a few millimètres, others are several centimetres in length; such as I have seen produce sudden death, have been five centimètres long; that which M. Gouraud has described in his observation presented the extraordinary length of thirty-six centimètres. I am disposed to believe that some error has slipped into this measurement, especially seeing that the femoral and part of the iliac veins were filled with a fibrinous coagulum. Under these circumstances it is necessary to suppose that the embolic clot occupied primarily the greater extent of the vena cava, a hypothesis of little probability, since no symptom of such an obstruction was apparent during life. I am, consequently, driven to believe that some secondary coagulations have been comprised in the measurement. But be this as it may, it is certain that very long clots may be carried by the torrent of the circulation, and an important and peculiar character of them is, that they are curved and wound round, at one time in the trunk of the pulmonary artery, and in the infundibulum, as in M. Gouraud's case—at another, in one of the principal divisions of the pulmonary artery. But after a certain lapse of time these distinctive characters become wanting, and it is then very difficult to tell whether a coagulum, met with in the pulmonary artery, has been formed there, or has arrived there by migration. The only circumstance which we may thus be able to call up in favour of embolus, is the existence of a venous thrombus. The phenomena which renders the embolus unrecognisable is important and really remarkable. The continued contact of the clot with the arterial wall determines a slight irritation, in virtue of which a blastema, exuded between the wall of the vessel, and the clot, soon becomes organised; by degrees, this substance extends on the circumference of the plug, and soon forms a sort of cupule, in which the latter is contained. At last it envelopes it completely, and encysts it, so that, after a time, often not very long, the fibrinous

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coagulum of the pulmonary artery is found to be everywhere surrounded by a perfectly organised membrane. Within this membrane, microscopic examination discovers an amorphous substance, more or less granular, embryo-plastic nuclei, elongated cells, and, above all, fibres of connective tissue. In the midst of these elements we sometimes find capillaries, free granules, the *débris* of red globules, and amorphous and crystalline hæmatin. After describing further changes in the condition of these encysted clots, M. Lancereaux proceeds to the subject of the condition of the lungs in cases of pulmonary embolia. It is evident (he continues) that an embolus which closes up the trunk of the pulmonary artery, and gives rise to sudden death, cannot cause any important disorder in the pulmonary parenchyma. Supposing such alteration possible, time would be wanting. But it is different when a coagulum comes to be situated in an important division of the artery, closing its canal completely. In this respect, M. Lancereaux expresses his agreement with Virchow, who states that, however complete the obstruction, it produces no alteration in the parenchyma, and, above all, no gangrene of the lungs. At the most, Lancereaux has observed slight diminution of volume, anæmia, or some œdema; and he explains this, physiologically, by the fact, that the pulmonary artery is an organ engaged in hæmatosis, and that the nutrition of the lung is effected, not by this, but by the bronchial arteries. Still (he proceeds to say) pulmonary coagula are sometimes accompanied by a lesion of the parenchyma of the lungs, whether they be the cause of it or not. Pulmonary apoplexy is frequently conjoined with obstruction of the branches of the artery; but it is to be remembered, that this generally occurs in the course of affections of the heart, especially in fatty degeneration; and it is also to be observed, that, under these circumstances, the clot is always situated behind the apopleptic spot, has none of the characters of an embolic clot, and is evidently autochthonic—not the cause, but an effect, of the apoplexy. The same thing may happen in certain cases of tubercular disease, of pneumonia, or even of gangrene. It is, however, important to notice, that there are certain special conditions of the embolic clot which are capable of giving rise to two of the alterations just alluded to—namely, pneumonia and gangrene. These conditions pertain to a special state of alteration of the tissues, in the midst of which the thrombus has been formed: if the coagulation has taken place in the midst of a purulent or gangrenous focus, the coagulum, formed in part of fibrin, and in part of other elements, possesses qualities in virtue of which it may alter the tissues with which it subsequently comes in contact; thus it is that metastatic abscesses often appear in the lungs of individuals, with suppurative thrombus of the cerebral sinuses, and in women suffering from metritis or suppurative phlebitis. Thus, too, gangrenous spots in the brain are found in persons who have primarily a gangrene of the lung; and gangrene of the lungs is met with frequently in paralytic individuals, in whom a sphacelus has formed over the region of the sacrum. Particles of fibrin or fragments of tissue, impregnated with pus or septic matters, become the points of origin of secondary foci, purulent or gangrenous, as the case may be.

Certain practical conclusions flowing from this fact related by M. Gouraud deserve attention. We find here a condition which has already been mentioned in other cases, one of which is related by Klinger. In three different cases sudden death has followed shortly upon compression exercised by a bandage upon the limb, which is the subject of the thrombus. It was, as we know, formerly customary to apply a compressing bandage upon a limb affected with œdema, or even with phlebitis, as soon as the acute stage of the inflammation had ceased. The practice is far from being free from danger, and it must necessarily be proscribed. But, besides, when, consecutively to a traumatic condition, fracture, amputation, etc., we have reason to suspect the existence of a venous thrombus, it will surely be prudent in the Surgeon to abstain as much as possible from strong compression, if he would not expose his patient to more or less serious accidents. It is especially some time after the commencement of the coagulation, when the fibrin begins to disintegrate, that we must avoid this practice. And, for the same reason, every kind of handling of the injured limb should be avoided, and the most complete state of rest maintained. Indeed, in a certain number of cases, a slightly exaggerated effort, as I have seen on two different occasions, may suffice to bring about the separation of the clot, and sudden death. Occasional causes of this kind are marked, in the greater number of cases of sudden death, by embolia, and it is thus pointed out how necessary it is to be cautious when we have to do with patients suffering from venous thrombus.

FOREIGN CORRESPONDENCE.

FRANCE.

Paris, January 13.

ON THE DISEASES PRODUCED BY UNWHOLESOME DRINKING-WATER.

M. Bouchardat's communications to the Academy on the above subject have now come to a close, and I shall give you to-day the more salient facts and conclusions at which this distinguished and persevering observer has arrived. Endemic cretinism is principally due to two causes acting simultaneously, viz., the connexion of cretinism with endemic bronchocele and consanguinity of marriages. In all localities where endemic cretinism has been observed, endemic bronchocele is, likewise, met with; thus, in the Himalaya mountains, in the Andes, the Pyrenees, and the Alps,—in these parts people affected with goître have cretinous children, and the progeny of these latter are cretins. The intermediate degree of "cretinous" may be wanting, but only in exceptional cases. In order that endemic bronchocele may be developed, a few years', nay, even a few months' use of bad drinking-water may suffice, but that cretins may be produced, it is necessary that insalubrious conditions should extend over several generations. Amongst these influences marriages of consanguinity between people who have been subject to the action of bad drinking-water are the most powerful. This hypothesis explains the considerable influence exercised by the configuration of the soil. We observe cretins in closed valleys, which have little communication with the world without: the inhabitants of such localities intermarry; and even if all the marriages should not be decidedly consanguineous, they, nevertheless, take place most frequently amongst people who have been subject to the same influences. For such degenerate races consanguinity is full of danger. M. Bouchardat was formerly of opinion that consanguinity was not noxious to persons otherwise well developed; and believed that, although certain inconveniences might be connected with it, these were compensated by the increase of beauty and purity of race. This opinion was founded on certain facts in zoology, and on the circumstance that, in ancient Greece, the most perfect types of humanity had, under the influence of consanguineous alliances, become rather improved than deteriorated. His convictions, however, have been shaken by M. Boudin's researches on the influence of such marriages in producing deaf-and-dumbness; and he will, probably, give up this idea altogether if he should become acquainted with M. Liebreich's investigations on "retinitis pigmentosa," as caused by the same influence, and which seem to have hitherto escaped M. Bouchardat's attention.

In order to prevent cretinism, public and private hygienic measures should be taken. As regards the individuals affected, they should be removed from the localities where endemic goître and cretinism are found to exist, and transferred to a moral, intelligent, and humane household, where they should be under continued *surveillance*. They ought not to be left to a degrading inaction, but those faculties which are given them should be brought into play. With respect to public hygiene, we must keep in mind the fact, that cretinism has been diminished, or even altogether disappeared, as soon as a broad high road has intersected the places in question, and they have been animated by commerce. They should, therefore, be cut through, not by railways, but by roads, leading a healthy population into the localities, and thereby diminishing the chance of marriages of consanguinity. The church should only give licences for such marriages with the very greatest caution. Gin-shops should be placed under strict *surveillance*; and all should be rigorously punished who would sell alcoholic liquors to children, or to beings devoid of reason.

In France, and on the Continent generally, persons affected with goître, and having a disposition to cretinism, are exempt from military service; but M. Bouchardat is inclined to think that, by recruiting amongst such persons for the army, we

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should render them the most essential services. The change of place, the attention that would be given them by the army Surgeons, etc., would soon free them from their infirmity; while military discipline would raise the level of their intelligence, and, in subjecting them to the "reign of rule," would make useful men of them. Another consideration here would be, the amelioration of race. If bronchocele is the first step leading to cretinism, it is obvious that, if the *élite* of the population is taken away by conscription, persons with bronchocele, who are exempt, will, as it were, monopolise the country, and condense the focus of the evil. Thus conscription, which for these localities might be a condition of progress, if it removed those affected in order to bring them back cured, becomes, on the contrary, one of the most active causes of degeneration. Persons of the kind mentioned might do good duty in military infirmaries and other branches of the army and navy. If transferred to this latter, the mere circumstance of living in a port or on the sea would effect a speedy and definite cure. The last word of advice, however, to the authorities is—give these localities wholesome water. Everywhere you may collect rain-water in sufficient quantity for the wants of man. Distribute, moreover, to the populations of such districts salines, with a small proportion of iodine, so that each person may take a few milligrammes of iodine every day, proper medical attention being at the same time necessary. Drinking-water, the continued use of which causes the formation of endemic goître and cretinism, contains organic substances in solution which come from the decomposition of certain vegetable parts in dolomitic soil. Such water generally comes from ponds, marshes, fens, and swamps, and should never be taken unless previously filtered or boiled.

The "bouton" of Aleppo, and the "bouton" of Biskra, two endemic diseases of the skin which are still enveloped in much obscurity, are in all probability produced by the use of unwholesome drinking-water. All those who drink of the water of Coïck for a certain time become affected with the "bouton" of Aleppo, while those who do not partake of it are spared. The country people who come to the town of Aleppo and drink of the bad water soon begin to suffer; while those peasants who stop at home remain free. The water of Coïck is slightly alkaline, and contains the salines usually found in drinking-water, as well as organic matter, which latter is no doubt the cause of the evil. The "bouton" of Biskra, which very much resembles that of Aleppo, is to be ascribed to the use of the water of a torrent coming from a plain where the remains of more than a hundred thousand palm-trees are accumulated. It is highly probable that the organic substances coming from the decomposition of these remains, under the influence of salines in solution, impart this remarkable property to the water.

The following are the chief hygienic characters of the different species of drinking-water:—

1. *Spring-water* has the advantage of being generally limpid, so that there is no occasion for filtration, and of being fresh and agreeable to drink; springs come, moreover, frequently from a higher elevation than the towns where they are used, so that we do not want mechanical contrivances for raising the water. Spring-water is mostly richer in salines than river-water. If it is pleasant to drink, and if the fixed constituents consist of bicarbonate of lime without organic matters, and with oxygen, the water is extremely salubrious; but if it contains organic substances, if it comes from marshy soil, and is devoid of oxygen, it must be looked upon with distrust, in spite of the good appearance it may present. Water of this kind should only be used, if the experience of several generations has fully proved its innocuity. This is of much more importance than any chemical analysis, however well made.

2. *Water of rivers and rivulets* is generally wholesome, but its composition may slightly vary according to high or low water, and this is not the smallest disadvantage it offers. It requires to be filtered, and in summer to be cooled; and the poor man has no filter for purifying, and no cellar for cooling the water.

3. *Water of canals* usually contains more fixed constituents than river-water, and also organic matter.

4. *Water of wells* in old towns is almost always saturated with sulphate of lime; it contains, moreover, the last products of decomposition of organic substances, amongst which we find nitrates and compounds of ammonia, which arise from putrid fermentation of bodies interred in cemeteries, and other impurities.

5. *Water of cisterns*, accumulated by rain, is generally pure, unless collected from roofs soiled by dust or soot. This water is almost too pure, and the absence of lime is prejudicial in certain conditions, as, for instance, for wet-nurses, young children, etc. This want should, therefore, be filled up. Rain-water combines with lead, and we should, on no account, collect it in cisterns of lead, or raise it by pumps in the construction of which lead has been employed.

6. *Water of marshes, ponds, swamps, fens, etc.*, is generally bad, because it contains a considerable proportion of organic substances in suspension and solution. If one is obliged to drink water of this kind, it is preferable to choose such only as has undergone the influence of the sun, and which contains red or green monads. If possible, it should be filtered through carbon, and only be employed after having been boiled. As boiled water, by itself, is unpleasant to drink, tea or coffee should be added, or, if these substances cannot be procured, roots of the strawberry plant, leaves of holly, oak, soap-wort, sage, mint, thyme, etc.

GENERAL CORRESPONDENCE.

ACUPRESSURE.

LETTER FROM MR. A. M. EDWARDS.

[To the Editor of the Medical Times and Gazette.]

SIR,—As acupressure has been again brought before the notice of the Profession, I may be allowed to contribute some further evidence on the subject. But I would preface my remarks by an expression of my attachment to the ligature. Surely, a practical Surgeon may test the worth of any addition to Surgical appliances without any disparagement of those already established, though this may be thought presumptuous, as opposition to innovations appears to be often mere obedience to an universal law.

Those who first made coffee in London were prosecuted for annoying the neighbours "with evill smells;" it was described as "syrop of soot and essence of old shoes;" and Patin called tea "l'impertinente nouveauté du siécle." Numberless instances of this curious trait in human nature must occur to every one. In the present case it would have been more satisfactory had some of those Surgeons who have discussed acupressure taken some pains to test its value rather than rise self-elected champions of the ligature, which was quite independent of their support. Being curious in the matter I have tried acupressure very frequently; and to secure myself against misunderstanding the published directions, I requested Professor Simpson and Dr. Alexander Simpson to apply it in several cases.

The long pins which were used at first, passed from without, did their work so far that they arrested the bleeding, but they had several drawbacks. They left suppurating tracks on some occasions, perhaps from being left in too long; they were unwieldy; their length and rigidity interfered with the dressings in unaccustomed hands; they seemed also liable to shift, but for all that they stopped the bleeding from arteries, and could be removed at pleasure. In one case, that of an old man, I tried in vain to arrest bleeding from the superficial femoral after amputation, and being unwilling to run any risk I applied a ligature: this was probably rather owing to want of skill on my part, than inefficiency of the instrument.

Soon after this, Professor Simpson substituted sewing needles for the long pins, threading them with wire, and applying them on the raw surface of the wound. He thus arrested the bleeding in a case where I removed a man's arm above its middle third, and after a similar operation on an infant. The adult stump healed by first intention entirely; the other almost entirely. I applied sewing needles in three amputations through the leg, four excisions of mammæ, one case of Pirogoff's amputation at the ankle-joint, and in an excision of the knee where the parts were more vascular than usual. I have used them in several other cases—for instance, on one occasion, when I was removing, unassisted, a glandular tumour from under the lower jaw, and as the patient was tossing his head about, I cut the facial artery, also in several tumours and smaller cases. However, I still very frequently use the ligature, perhaps oftener than the needles. One of the breast cases in which I used the latter, a stout, elderly woman from the Highlands, died of rapid effusion into the chest when apparently convalescent. A very similar

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died the same week, and her arteries had been tied. Since Dr. Simpson has further modified the method of application by adding a wire-loop to the needle, the latter can be adjusted with very great ease and rapidity. I would thus contrast the advantages and disadvantages:

1. Metallic.	1. Rigid.
2. Moderate compression on vessels.	2. Sometimes difficult to apply.
3. Inflict no new injury to arterial tunics, and leave the cut end of the vessel undisturbed to the natural hæmostatic processes.	3. Inapplicable in some situations.
4. Prevent flow of blood efficiently, and may be applied in any number, and to the most insignificant arteries, as they can be removed at the Surgeon's pleasure.	
5. Unless left in for a long time they set up no morbid processes.	

As to the other advantages theoretically claimed for acupressure over ligature, it seems to me we have not yet sufficient evidence: such must come from Hospitals. And one cannot help being struck by the significant fact, that our great Hospital Surgeons, who have for many years been engaged in operating—in weighing the relative value of Surgical proceedings, and have always shown themselves anxious to seize upon any real improvement, have not expressed themselves as yet in favour of acupressure. However, that is no reason why private Practitioners should not, with all due deference, bring forward what evidence their more limited opportunities enable them to obtain. I am, &c.

Edinburgh, February 5. A. M. Edwards.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, January 20.

Mr. Prescott Hewett, President, in the Chair.

The President, in taking the chair, for the first time after his election, expressed his heartfelt thanks to the Society for the honour they had conferred upon him. It was, however (he said) an honour due mainly to the fact that he had been one of the first half-dozen who, some years ago, met to consider how they might best further the cultivation of Pathology. It was to the part he took in laying the foundation of this Society, that he owed his election. At that time, there were (he continued) great difficulties in the way, and they were nearly shipwrecked; but, thanks to the great exertions of the members, they weathered the storm. Year by year the Society had progressed, and had now attained a position second to that of no other society in London. The volumes of *Transactions* were highly considered, not only in England, but abroad. Yet, although they contained so great an amount of information, that information, to working men, was not available for want of an index. He (Mr. Hewett) had felt this want, and hoped soon to see it supplied. It was believed (he said) that a good index could be supplied without trenching on the funds of the Society. He felt confident that it would be undertaken by one well capable of executing it, and that as good an index would be published as any working man could wish for. In concluding his address, Mr. Hewett said that he should endeavour in every way to further the interests of the Society.

Mr. Hulme showed a specimen of

BLACK CATARACT.

It was removed by operation from the eye of an old woman. Its colour was due, probably (Mr. Hulme said) to the pigment of the blood, and it doubtless contained iron.

Mr. Pollock asked if there were any marked symptoms, *i.e.*, if Mr. Hulme had been able to diagnose the exact nature of the cataract, by ordinary examination, before operation? He had seen a case, under the care of Mr. Dalrymple, in which that gentleman was led to operate, without being able to diagnose cataract by ocular examination. He depressed it, as the operation of extraction was inadmissible, because the patient had paralysis agitans. Some years after, he (Mr. Pollock) was sent for to see the patient, and found that the cataract had escaped into the anterior chamber.

Mr. Hulme said that he had not been able to diagnose the nature of the cataract before operation.

Dr. Ogle showed a series of eight preparations of

FIBRINOUS COAGULA IN THE HEART,

illustrating the spontaneous formation of fibrinous coagula, at a long period before death, in the cavities of the heart, most of which had undergone considerable softening, and some of which were quite fluid in their centre. In several of these specimens the *central puriform fluid* was limited by a firm, smoothish surface, reminding one of the wall of an abscess, and it welled out on section of the coagulum being made. The firm character of these coagula, their colour, their adherence to the wall of the heart, and the various changes which had occurred within them, proved, conclusively, that their formation had taken place some time previously to death. Out of the eight cases, this old-standing and degenerating coagulum was found in the *right auricle* in five cases; in the *right ventricle* in three cases; in the *left ventricle* in one case only. In almost all cases, the diseases under which the patients laboured had involved much retardation of the blood's circulation through the lungs, and for the most part death had been lingering, the patients being also chiefly subjects of intemperance and previous ill-health. In addition to the interest connected with the formation of fibrinous coagulum previous to death, within the heart's cavities, Dr. Ogle suggested that these specimens raised the question as to what would be the probable effects of a rupture of them during life, and the escape of the contained puriform fluid, and its admixture with the general stream of the blood. Would they not, most likely, be more or less those which are associated with pyæmia? May it not frequently have happened before now that such anomalous symptoms may have been due to an escape from the middle of coagula of the puriform fluid? Would not experiment in this direction render the question capable of solution?

Dr. Ogle also showed a case of

EMBOLISM OF BOTH MIDDLE CEREBRAL ARTERIES, WITH SOFTENING OF THE BRAIN, IN CONNEXION WITH FIBRINOUS DEPOSITS ON THE SURFACE OF THE LEFT AURICLE, FOLLOWING RHEUMATIC FEVER AND SCARLET FEVER.

The patient was a young woman who died shortly after an attack of hemiplegia had occurred. Some years previously she had had rheumatic fever, which was followed by symptoms which were in all probability those of cardiac mischief; and also, shortly after that, scarlet fever, which was followed by dropsy. After death there was also found slight ulceration of the lining of the left auricle, with bony deposit around, and also masses of fibrinous deposit within the substance of the kidney.

Dr. Ogle also mentioned an interesting case, of which there was a specimen in the museum of St. George's Hospital, showing, without much doubt, the occurrence of embolism in a case which was recorded by Mr. Cæsar Hawkins, in the year 1829. The case was that of a woman, aged 56, who was thought to have been hysterical for some time. Only a few days before death she had complained of great pain at the region of her heart, which was followed by œdema and gangrene of the lower limbs. On post-mortem examination, fibrinous masses, some of which were undergoing softening, were found between the columnæ carneæ of the right ventricle, and a few of the same nature also adherent to the inner surface of the left ventricle. But, in addition, one of the coronary arteries was found plugged up with a coagulum of fibrin, and the carotid artery within the cranium, on the left of the sella turcica, was also found to contain a quantity of fibrin, coagulum, and clotted blood, apparently of long standing. This case was of much interest, as showing the co-existence of fibrinous plugging of the coronary and carotid arteries, with fibrinous deposition on the surface of the endocardium, at a time when the doctrine of embolism did not exist to give any rational explanation of such a coincidence.

Dr. Crisp exhibited the following series of

SPECIMENS FROM THE LOWER ANIMALS.

1. A nodulated bony concretion taken from the stifle joint (knee) of a horse: it weighed 318 grains, measured 2¼ inches in length, and 1½ in breadth. The animal, when six months of age, was injured by slipping down when playing with

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another colt, and was lame from this period; but it continued to plough and do slow agricultural work for six or seven years, when it was killed. The concretion was found in the cavity of the joint. Dr. Crisp thought it probable that a portion of cartilage was partly detached by the injury—that ossific matter was gradually deposited, the substance afterwards becoming free.

2. The crop of a turkey, enormously distended from an accumulation of dry, tough grass, which the bird was unable to get rid of. The contents of the crop weighed twenty ounces, and the cavity held fifty ounces of fluid. The bird was very thin, but in other respects all the organs of the body were in a normal condition. The muscular parietes of the crop were much thickened. Dr. Crisp said that the contents of the crop might have been readily removed by incision during life. Some years since he saw a number of hens that were poisoned by arsenic; one only was alive, but she was unable to stand, in consequence of the distension of the crop from barley. He made a large incision, removed the contents, washed out the crop, and sewed up the wound; the hen ate directly, and quickly recovered.

3. The tuberculated spleens of two pigs. The tubercles varied in size from that of a hazelnut to that of a walnut. The lungs and liver were also diseased, but the animals, notwithstanding, were in a tolerable condition, and were killed for food. The tubercular matter formed the greater part of the bulk of the spleen. The person who slaughtered the pigs, and who had killed many hundred pigs during eighteen years, had only met with three similar instances.

4. Fungoid disease from the orbit of a sheep, which weighed about two ounces, and projected two inches from the orbit. It had much the appearance of the same lesion in the human subject. The disease was of rapid growth, and commenced four months before the animal was killed.

5. A large oblong scrofulous gland of an ox, situated at the bifurcation of the trachea. It weighed about seventeen ounces, and so pressed upon the air tube as to occasion approaching suffocation. This was always relieved by introducing a hollow probang into the stomach and evacuating the gas.

6. A large cyst (*echinococcus*) from the abdomen of Ælian's wart hog (*P. Ælianii*). The cyst held five pints of fluid, and was in a state of chalky degeneration. Also three small *echinococci* from the peritoneal coat of the Java masked hog (*Sus plicicepa*). Dr. Crisp said that he had found these parasites in all the foreign hogs that he had examined, including the other species of wart hog (*P. Æthiopicus*), the Red River hog (*P. penicillatus*), and the African and European wild hogs.

7 and 8. Pericarditis in a young emu, the pericardium being covered with recently formed lymph. The liver of a Stanley crane (*A. paradisea*), in which the hard, semi-cartilaginous tubercles formed nineteen-twentieths of the bulk of the organ. Dr. Crisp believed that one form of tubercle in some quadrupeds and in many birds was of parasitic origin.

Mr. Hilton, in reference to the specimen of bony mass in the knee, said that it would be interesting to ascertain if any part of the articular cartilage were wanting. If so, it would help to sustain the opinion, that "loose cartilages" are pieces struck off.

In reply, Dr. Crisp said that he had had no opportunity of examining the joint.

Mr. Nunn showed a specimen of

TUMOUR OF THE UTERUS.

The specimen was, so far as the Society was concerned, unique. During life the tumour filled the abdomen, and it was supposed to have been ovarian disease, and an operation for its removal was attempted by Mr. Baker Brown. A large cyst was discovered and emptied. The patient did well, but at the end of three weeks the wound re-opened, and a large quantity of fluid escaped. She still went on well for a short time, but soon suffered from vomiting, dyspnœa, etc., and died twenty-six days after the operation. The uterus was much elongated, and at its upper part were several large cysts, one of which was strangulated in the umbilicus, so that it was impossible to remove it without dividing the ring. There were several cysts adherent to the pelvis, but not firmly. The whole of the omentum was adherent to the tumour.

In reply to Dr. Bristowe, Mr. Nunn said that there were no other growths in the body.

Dr. Bristowe said that the specimen was very like malignant disease of the peritoneum in its general appearance.

Mr. Nunn and Mr. Holmes were requested to make a further examination of the specimen, and to report on it to the Society.

The President said that he had seen a similar case when he was curator of St. George's Hospital Museum. Sir Benjamin Brodie sent him a tub, labelled "Extensive disease of the ovary on the left side." It turned out, however, that the ovaries were healthy. The mass, which weighed 54 lb., was a fibro-cellular tumour, and was attached to the uterus by a pediele. In St. George's Hospital Museum there was also a similar specimen. In this case, too, during life the diagnosis was that of ovarian disease. It was tapped, and four pints of fluid were drawn off. It was found at the autopsy to be a fibro-cystic tumour of the uterus.

Mr. Holmes exhibited for Dr. Carter, of Bombay,

PARTS OF THE MEDIAN AND ULNAR NERVES FROM A CASE OF ANÆSTHETIC LEPROSY.

An account of Dr. Carter's examination of the nerves in this case will be found in this Journal, April 19, 1862. Dr. Carter adds now that he finds on some occasions that the fluid is characterised by the presence of numerous delicate corpuscles, not larger than the $\frac{1}{4000}$th to $\frac{1}{5000}$th of an inch in diameter, which takes the place of the granular masses and nuclei described in his previous communication.

Mr. Holmes also exhibited a specimen of

ACUTE NECROSIS OF THE TIBIA.

The patient was a male child under his care in the Children's Hospital. The disease began fourteen days before admission. The whole of the tibia was exposed. As the child was suffering greatly in health, Mr. Holmes removed the limb. He amputated at the knee-joint in order to avoid exposing a cut surface of bone. The patient was rapidly recovering, when, three weeks later, bronchitis, passing into pneumonia, set in, and death followed. Tubercle was found in the lungs. The specimen showed that the amount of periosteum removed corresponded to the new bone. Mr. Holmes also brought the stump in order to show that, in this case, after amputation at the knee-joint, the patella was movable. The stump was quite healed at death.

Mr. Maunder raised the question whether such cases should be called cases of "acute necrosis" or "acute periostitis."

Mr. Holmes said that the whole of the shaft of the bone was dead, and the surface exposed, and was quite white and dead. There was a large cavity at the lower end of the bone, due to death of the nucleus of the epiphysis. He considered that the term "acute necrosis" was preferable to "acute periostitis."

Mr. Maunder showed a specimen of

ACUTE PERIOSTITIS OF THE TIBIA OF A CHILD, INVOLVING THE ANKLE-JOINT.

About two-thirds of the whole surface of the shaft of the tibia had been bared of periosteum, the denudation being also prolonged over the anterior surface of the epiphysis, detaching the anterior ligament, and thus opening the ankle-joint, which contained pus. The disease had run its course very rapidly, occupying only ten days, and the patient was so thoroughly exhausted that amputation was performed with a slender hope of saving life. The child is convalescent. The term "acute periostitis" appeared applicable to this case (in which the inflammatory action had involved the periosteum covering the epiphysis by continuity of its texture with the membrane covering the shaft), in contradistinction to the term "acute necrosis" given to a case where the shaft of a bone dies independently of its epiphyses and adjacent joints, and in which new bone is developed in and about the periosteum to replace the original shaft.

Mr. Ferguson said that, from what he had just heard, he thought the specimens were of great interest, and verging on a subject of great moment. He would hardly venture to give an opinion as to the propriety of amputation in these cases, as it requires personal observation to be certain as to the treatment of any case. He would say, however, that he did not meet with cases of necrosis requiring amputation. He had not gathered from Mr. Holmes that there was any absolute necessity for the operation, although he had not seen the exhausted condition of the patient. He had, however, seen cases reduced to the last degree, but the exhaustion had ultimately passed off, and he had subsequently removed the necrosed bone. In cases in which the whole bone was involved, new bone would be formed. He had not had an opportunity of

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carefully examining Mr. Maunder's specimen, but he saw that the foot and the calf were not emaciated. There was, evidently, great separation of periosteum, and yet there was no proof that there was no development of new bone. He had been taught that, in cases of necrosis of large bones, there was no hope of recovery of the limb, that it would be sure to exhaust the patient, and that amputation would have to be had recourse to. His experience had convinced him that this was erroneous. He thought, too, that in cases of early amputation the suppuration was suddenly checked. He had already expressed his opinion that the process of suppuration was often a salvation to the patient, and hence that, when stopped, it might cause mischief in some other part of the body.

Mr. Holmes said that the child was under observation three weeks, and was gradually getting worse. His surgical colleague agreed with him, that there was no prospect of saving the limb. The ankle-joint was disorganised, and there was an abscess in the calf. He did not believe that it was possible to save the child without amputation; and that, as to checking suppuration, he considered that she would have sunk more quickly with it than without it.

Mr. Maunder said that in his case the disease was acute, having, at the time of amputation, only lasted ten days. The child had lost appetite; the tongue was like a toast. His colleague, Mr. Curling, agreed with him, that amputation should be performed immediately. The rapid progress of the disease was, he considered, an indication that they ought not to wait, especially as the ankle-joint was exposed.

Dr. Gibb exhibited a series of diagrams, illustrating

DEFORMITIES OF THE LARYNX IN FOUR INSTANCES.

Two were congenital and two acquired. 1. *Congenital Deformity of the Larynx in an Adult Deaf-Mute.*—Man, aged 54. The epiglottis was half its usual length; it lay low down in the larynx, concealed or exposed according to the action of the right aryteno-epiglottic fold, which projected across the glottis towards the left side. The left fold was wanting, as also were the vocal cords. The epiglottis was useless for all practical purposes. This man's wife, also deaf and dumb, had no vocal cords. 2. *Congenital Deformity of the Larynx in a Deaf and Dumb Boy, aged* 14.—The epiglottis was shortened, as in the first case, and originated low down, close to the vocal cords, and was, therefore, practically useless in deglutition. The glottis was covered by the two usual folds, but originating from the back of the tongue. The vowels were well articulated. 3. *Deformity of the Larynx with a Double Voice, the result of a Wound of the Left Vocal Cord.*—The subject of this was a young man, who fell upon the point of his pen-knife some three years before, the blade entering the neck, close to the larynx, upwards of an inch. Dysphagia and aphonia followed. He recovered his voice, but it was ever afterwards double, being a mixture of tenor and bass. The structures of the larynx were oblique in direction; the left vocal cord was narrowed and contracted near its attachment to the arytenoid cartilage, and did not meet its fellow at this situation. A very distinct, oblique cicatrix could be seen, showing where the cord had been at one time divided. His sentences were very short. 4. *Deformity of the Larynx and Alteration of Speech from Small-pox.*—Woman, of 42, who had small-pox at 4 years old, with a fit and subsequent aphonia for a short time. Speech was ever after indistinct. Mr. Ure operated upon her for strabismus at 21. Never could sing. The right vocal cord was destroyed, and her language has remained that of a child in pronunciation ever since, *e. g.*, calling good, dood; silly, chilly; and so on.

Dr. Murchison showed a specimen of

PERFORATION OF THE STOMACH BY PRIMARY CANCER.

There were several excrescences at the lesser curvature. One of them had become gangrenous, and hence perforation occurred. Peritonitis followed.

Dr. Murchison also showed specimens from a

CASE OF SEVERE PURPURA.

The patient had been sent to the Fever Hospital for scarlet fever, but when he saw her it was impossible to say what disease she was labouring under. The whole surface of the abdomen was one mass of lividness. She passed blood from the bladder. After death, nearly every tissue was found to be infiltrated by blood. The pelves of the kidneys, the ureters, and the bladder were filled with it.

EPIDEMIOLOGICAL SOCIETY.

Monday, December 1, 1862.

Dr. Murchison in the Chair.

Mr. J. N. Radcliffe read a detailed report on the

STATE OF EPIDEMIC DISEASE IN GREAT BRITAIN IN 1861-62.

The report referred to the twelve months ending September 30, 1862. The following is a recapitulation of some of the principal facts recorded:—The health *status* of the English population, as estimated from the unusually low rate of mortality throughout the year, was generally good, notwithstanding dearness of provisions and an excessive amount of pauperism. The health *status* of the Scottish population was markedly below the average, as shown by the large amount of sickness prevalent in the last quarter of 1861, and the high rate of mortality since the commencement of 1862. The average death-rate of Scotland, it is well to remark, is below that of England. Thus, during the six years 1855-60, the annual proportion of deaths in England was 219 per 10,000 population: during the same period in Scotland the proportion was 209. The high range of temperature in the winter months, and low range during the summer, in England, exercised a favourable influence over the health, notwithstanding much wet and variability of weather. In Scotland similar conditions of temperature and weather existed, but to an exaggerated extent; and the great changes which were experienced, and especially the undue humidity of the atmosphere, were apparently the fostering causes of the influenza and throat affections, which appear to have been more common there than in England. The epidemic diseases most prevalent in England were continued fever, scarlatina, measles, diphtheria, whooping-cough, and small-pox. In Scotland the same diseases, with the exception of small-pox; also, and more particularly, sore-throat, often assuming a diphtheritic character, and accompanied by diphtheria, played the chief part in the epidemiology of the twelve months. In both parts of the kingdom continued fever prevailed most commonly in the autumn quarter of 1861; and in England the affection would appear to have been more general in the northern than in the southern portion of the kingdom. In both countries scarlatina was widely prevalent in the northern districts in the last quarter of 1861; but the disease became more active in the southern district in the third quarter of 1862. Measles prevailed extensively, and in some instances very fatally, in the winter quarter in England. In Scotland the disease appears to have been most prevalent in the spring and summer quarters. Diphtheria was, in England, principally fatal in the autumn quarter, but the disease prevailed, more or less, in every registration district during the year. In Scotland, the disease, together with sore throat, appears to have been epidemic throughout the year. Whooping-cough was widely prevalent in England during the winter quarter; in Scotland, during the winter and spring quarters. Influenza was epidemic in Scotland in the autumn and winter quarters. Finally, small-pox broke out in many districts of England, but more particularly in the eastern, south-western, and northern counties, and in Yorkshire. In no instance did an outbreak of any of the different diseases referred to as occurring in England, assume what may be termed "general proportions." The outbreaks were essentially local; but the dispersion of the various maladies, or of their centres of manifestation, over the kingdom,—the cropping out of exaggeration of these diseases in different localities, and the effects they apparently exercised upon the sickness and mortality of certain districts, without heightening the death-rate of the whole kingdom,—present a study of great interest. From this study it is reasonable to conclude that, in dealing with these local outbreaks of epidemic disease in ordinary periods, the best chance is afforded of warding off the widespread and more deadly outbreaks of extraordinary periods. The detailed mortuary returns for Scotland extend, as yet, only to the year 1857; but the returns for England are brought down to 1860. From the latter, then, may be obtained information as to the *status* of the several epidemic diseases most prevalent in the twelve months discussed, immediately prior to that period. Since 1857 the mortality from continued fever has slowly declined; in that year the deaths from this cause amounted to 19,016; in 1860 they were 13,012. In 1855 the mortality from scarlatina was 17,314; in 1856 and 1857, the number of

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deaths from this disease fell considerably, the mortality in the latter year being 12,646. The year following the mortality increased enormously, becoming well nigh doubled, the number of deaths from the malady being 23,711. In 1859 the number fell to 19,310; and in 1860 it became as low as 9305. Prior to 1855 deaths from scarlatina, cynanche maligna, and diphtheria were not separated in the Registrar-General's report. Whether the detailed reports of the Registrar-General will show an increase of the mortality in the whole of England from scarlatina, during 1861 and 1862, as great as occurred in London cannot be predicted. It is certain, however, that the activity of scarlet fever was great in several parts of the kingdom. The deaths from cynanche maligna in 1855 amounted to 199; in 1858, to 1770; in 1860, the mortality from the disease had decreased to 376. The mortality from measles was largely augmented in 1858, and there was a steady increase in the number of deaths from the disease in the two subsequent years. The deaths registered from diphtheria in 1855 numbered 186; in 1859, 9587; in 1860, the mortality from this disease had decreased to 5212. The mortality from whooping-cough, in 1860, was the lowest since 1852; and the mortality from small-pox had declined from 6460 in 1858, to 2749 in 1860. The reduced rate of mortality throughout England which occurred in 1860, was chiefly due, Dr. Farr states, to the decline of the number of deaths from scarlatina, diphtheria, and diarrhœa. A decrease also in the mortality from small-pox, erysipelas, and cholera contributed to the favourable results. The most noteworthy fact in the epidemiology of the metropolis during the twelve months was the remarkable outbreak of typhus. In 1858, 1859, and 1860, typhus had become so rare a disease in London, that the question of converting the Fever Hospital to other uses was seriously entertained. In 1861 typhus again became epidemic; and since January, 1862, the number of admissions to the Fever Hospital for typhus has exceeded that at any period of the history of the Hospital. Dr. Murchison attributes this epidemic to the artificial scarcity produced by the system of strikes, which had for some time previously disorganised the labour market, and the condensation of population caused by the arrival of labourers in the metropolis from the country in search of work (a). The mortality from continued fever in London, doubtless owing to the outbreaks of typhus, was in excess of that of any like period since 1848. Indeed, the total mortality of the winter, spring, and summer quarters of 1862 (2839) from this disease was alone in excess of that of any year since 1848. The true source of this excess of mortality would not have been rightly understood except by the careful nosological and etiological distinction of the forms of continued fever insisted upon by Dr. Murchison. The mortality from scarlatina was but a little below that from continued fever during the twelve months,—the total mortality from the former malady being 3437; from the latter, 3463. Next in order of mortality was whooping-cough. Continued fever, scarlatina, and whooping-cough were the chief epidemic affections of the period under observation in the metropolis. The mortality from continued fever increased to a maximum in the second quarter of 1862. The mortality from scarlatina was at its maximum in the last quarter of 1861, then decreased throughout the two succeeding quarters, but largely increased again in the summer quarter of 1862. The mortality from whooping-cough was greatest in the first quarter of 1862. Diphtheria was still largely fatal, having occasioned 625 deaths. Mr. Radcliffe detailed the history of the outbreak of typhus at Preston, in Lancashire, to the date of reading the report: he dwelt also at some length on epizootic diseases, brought together the chief accessible information on epiphytics, and terminated his report by a brief analysis of the principal contributions to epidemiological literature in Great Britain during 1861-62. The chief diseases prevalent among domesticated animals were epizootic pleuro-pneumonia, and the vesicular disease of the mouth and feet. Scores of sheep suffered and were lost from *filaria* in the bronchial tubes and abomasum; there were several local but very fatal outbreaks of influenza among horses; and an outbreak of *variola ovina* occurred in Wiltshire. The history of the latter outbreak, which occasioned great alarm at the time, will be imperfect until the official reports are published. There was no special disease among plants during the year.

(a) See Dr. Murchison's recently published treatise on the "Continued Fevers of Great Britain" (page 52), for an account of this epidemic.

Dr. Murchison complimented the author on the valuable report which had been read to the society, and observed that a continuation of such reports would be of great service to future writers on epidemics. With regard to continued fevers, he pointed out the necessity of distinguishing the different forms before drawing conclusions as to their causes. The terms "typhus" and "continued fever" were commonly employed to designate different idiopathic fevers arising from totally different causes, as well as many febrile affections symptomatic of local inflammation, which might put on typhoid symptoms. Consequently, all official returns from which these sources of error were not excluded were of no value for drawing any inferences as to the probable causes of an increased or diminished prevalence of the diseases in question. He proceeded to allude to certain instances where great misunderstanding had arisen from confounding the different forms of continued fever. Twenty years ago, a memorable discussion took place between the late Dr. Alison, of Edinburgh, and the London Poor-Law Commissioners respecting the causes of fever, the latter maintaining that it was often due to putrid emanations from decaying organic matter, and was independent of destitution, whereas Dr. Alison asserted that its main cause was destitution, and that putrid emanations had nothing to do with it. Both observers were right; but they referred to different diseases. Dr. Alison's observations were made upon typhus and relapsing fever; those of the London observers on enteric fever. Again, the year 1858, in which the filthy condition of the Thames attracted so much notice, had often been referred to, as proving that enteric fever was independent of putrid emanations, because fever was less prevalent in London than it had been for many years before. Dr. Murchison did not believe that the condition of the Thames in that year was sufficient to give rise to enteric fever; but he insisted that there was no diminution in the prevalence of enteric fever in London in 1858: the diminished prevalence of fever was due to the almost complete disappearance of typhus, which was acknowledged to be independent of putrid emanations. Dr. Murchison then proceeded to allude to the present condition of Lancashire, in reference to the appearance of fever. Typhus had broken out at Preston early in October, and from the reports, published in the *Times*, as well as from private information, he believed it to be due to overcrowding, consequent on destitution. The unparalleled relief which had been afforded to the distressed operatives, and the great ability with which this relief had been distributed, had alone prevented the outbreak of an epidemic like that which devastated Ireland in 1847, after the failure of the potato crop. It had been repeatedly stated that throughout Lancashire there had not as yet been a single death from starvation. In London, on the other hand, the daily papers reported numerous deaths from starvation, and the poor population had been condensed by the arrival of numerous labourers from the country in search of employment. Consequently, London had been suffering, from the commencement of 1862, from an epidemic of typhus greater than any which had visited it for many years. Since January 1, nearly 2000 cases of true typhus had been admitted into the London Fever Hospital, a far larger number than in any previous year of its existence; and there had also been numerous cases in the other metropolitan Hospitals.

Dr. Lawson, Inspector-General of Army Hospitals, directed attention to the probable existence of a certain epidemic influence which, for want of a better term, he designated *epidemic force*. His own observations, systematically conducted in several parts of the globe, had shown that, the ordinary, local, predisposing causes of epidemics being present, epidemic outbreaks recurred with curious regularity. This periodical recurrence indicated, he thought, a law of epidemic action, independent of, although acting concurrently with, the recognised fostering causes of epidemics, which was deserving of wide and attentive examination. The epidemic force, as he characterised the phenomenon, became, at times, pardemic. He suggested the propriety of keeping this probable epidemic influence in view in examining the mortality records of this kingdom. They would, doubtless, throw much light on the subject.

Dr. Richardson remarked that he had been much struck, whilst listening to Mr. Radcliffe's report, with the tacit assumption by the author of the spontaneous development of certain epidemic contagious affections. He thought that the question of the spontaneous development of contagious maladies of an epidemic character was open to much doubt.

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He believed that it was a question which might, with much advantage, be submitted to discussion by the society. He would, therefore, with the permission of the members, take an early opportunity of asking the society to express an opinion upon the debated point.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, JANUARY 16.

Dr. BAINES, Vice-President, in the Chair.

A PAPER was read by Mr. JONES on

SOME POINTS IN CONNEXION WITH CEREBRAL HÆMORRHAGE.

The author's opinions were based upon 40 fatal cases which had occurred at St. George's Hospital. These were taken indiscriminately; but after a careful scrutiny, selecting only those cases in which a perfect post-mortem examination of all the organs of the body took place, and in which a visible hæmorrhage could be demonstrated from the cerebral arteries, 36 cases were found perfeetly reliable for his remarks. Of the predisposing causes, the influence of age was first discussed, and, contrary to what had been often advanced, he showed that the greater number of cases occurred between the ages of 40 and 50; for in 38 cases he had found 3 had occurred between 30 and 40 years, 13 between 40 and 50, 10 between 50 and 60, 9 between 60 and 70, and 3 between 70 and 80. But a further examination showed that, by comparing the numbers of cases with the respective numbers of population at similar ages, the period of life at which the disease was most prone to occur relatively was between 60 and 70; for between 30 and 40 years, 3 cases occurred in a population of 2500; between 40 and 50, 13 cases in a population of 1800; between 50 and 60, 10 cases in 1300; between 60 and 70, 9 cases in 1000; and between 70 and 80, 3 cases in a population of 500. With regard to sex, males were shown to be more liable to the disease than females; for of 40 cases 11 only were females. Mr. Jones next described the efficient causes of cerebral hæmorrhage, and the intimate connexion between the latter and disease of the kidneys, heart, and arteries. This being one of the principal objects of the paper, he entered minutely into details of the 36 fatal cases in which disease of the kidneys, the heart, or arteries was found conjointly or singly with cerebral hemorrhage. The analysis of these 36 cases was then examined, the result being that disease of the cerebral vessels, other vessels, of the heart, of the kidneys, was found in conjunction 10 times; disease of the cerebral vessels, of the heart, of the kidneys, 22 times; disease of the heart and kidneys, 29 times; of the cerebral vessels and kidneys, 22 times; of the cerebral vessels and heart, 24 times; of the cerebral vessels and heart (hypertrophy), 10 times; of vessels not cerebral and kidneys, 13 times; of vessels not cerebral and heart, 13 times. The further result of the analysis showed that in more than one-half the cases the kidneys, heart, and cerebral vessels were simultaneously affected; and in almost all those cases in which there was absence of disease in one or other of these organs there was the history of an accident to which the attack was attributed. The various morbid appearances found in the kidneys, heart, and arteries, under the foregoing circumstances, were fully and minutely explained, the author being strongly of opinion that the diseased condition of the kidneys first led to that of the arteries, and subsequently to the heart. In support of this opinion, Mr. Jones offered an hypothesis to the effect that the kidneys, from their disorganised state, being unable to depurate the blood on the one hand, but allowing the albumen to unduly pass away on the other, this fluid was rendered unfit to carry on the nutrition of the tissues, and that the arteries suffered early from this defective nutrition. The conclusions the author drew from his elaborate examination of the subject was, first, that cerebral hæmorrhage, when associated with renal disease, is almost always found to be dependant upon rupture of one or more of the cerebral arteries, in consequence of certain morbid changes having taken place in their walls; secondly, that these changes in the walls of the vessels are induced by the altered state of the blood, the effect of advanced disease of the kidneys; and, lastly, that the enlargement of the heart is the immediate effect of the renal disease, conjointly, perhaps, with the alterations in the coats of the vessels. The paper concluded with some remarks upon the treatment of these cases, in which a tonic and stimulating plan, rather than a lowering one, was advocated, and two cases were given which seemed to justify it.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS, FEBRUARY 9.

BIRTHS, ETC., REGISTRATION (IRELAND).

SIR R. PEEL, in moving for leave to introduce a Bill on this subject, said—It is undoubtedly a great deficiency that in a country like Ireland, having a population amounting to nearly six millions, there should be no systematic collection of the statistics of human life. A system of registration would be of immense utility in many respects. It would be very beneficial, for instance, in promoting sanitary reforms. In Ireland there is at present a great want of information as to any increase of sickness or disease, especially in remote country places. If correct data could be obtained as to the health of the people, measures would be more promptly and effectually taken to mitigate disease. (Hear, hear.) This is a subject which has excited considerable interest in Ireland. In December last, a resolution declaring the necessity for, and the probable benefits of, a system of registration was carried on the motion of the President of the Royal College of Physicians of Ireland, at a meeting in Limerick. I have also had the honour of receiving deputations who urged the importance of legislation on the matter. I received deputations from the Royal College of Surgeons, the Royal Medical Council, the Statistical Society, and the Social Science Association. I asked them to put their views in writing, in order that the Government, in framing a Bill, might meet their wishes as far as possible. They complied with my request, and in the document which they forwarded to me they expressed the hope that the registration of births and deaths should be made compulsory. Last year I proposed a plan, which had been originally submitted by the noble lord, the member for Cockermouth. Its object was to make the constabulary the registrars and superintendent-registrars. If that plan had been adopted, the districts would have coincided with the areas in which the constabulary act. I think, however, the noble lord, the member for Cockermouth, will agree with me that, whatever might be the plan adopted, the general feeling in this House was not in favour of using the constabulary for that purpose. (Hear, hear.) I have considered the matter carefully during the recess, and my firm conviction now is, that it would be impossible, with the concurrence of this House or of the country, to work a system of registration by the action of the constabulary. (Hear, hear) The constabulary are fully occupied with the duties which they now perform, and which, I am bound to say, they discharge most efficiently; and I think it would be injudicious to burden them with the work which would devolve upon them as registrars and superintendent-registrars. (Hear, hear.) In the present Bill, therefore, I have adopted a system in conformity with that in operation in England—that is to say, I have adopted what I may call the Poor-law system, so that the areas or districts will be the areas of the unions, the dispensing Medical officers of the unions will be the registrars, and the clerks of the unions will be the superintendent-registrars. I believe that is the scheme which, on the whole, will meet with the greatest amount of support from the Irish members, and I believe it is the scheme which is likely to work best for the social and sanitary improvement of the people of Ireland. (Hear, hear.) The Poor-law districts are well known, whereas, considerable inconvenience would have resulted in that respect from the employment of the constabulary. We have, therefore, followed the Poor-law system, and I think the districts will be found very suitable for the purposes of the registration. The area of Scotland and Ireland is very nearly the same; but in Ireland we propose to have the system much better arranged. The districts will be very much of one size, the average population of each being 7400. Besides 163 unions we have 718 dispensary districts with 777 dispensary Medical officers—thus forming an admirable machinery ready to our hand. These dispensary Medical officers are superior to the village doctors in England; many of them have professional connexions extending over large tracts of country, and I believe they will be able to furnish most valuable returns. We next come to

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the question of expense. The deputations I had the honour to receive at Dublin from the College of Surgeons, the Statistical Society, and the Social Science Association, all recommended that the remuneration of the registrars should be defrayed from the local rates, but that the superintendent-registrars should be paid out of the Consolidated Fund. I gave the best attention I could to these suggestions, and the proposal I have now to make is, that the registrars should be paid, as in England, out of the rates, but that the superintendent-registrars should receive their fees out of the Consolidated Fund. Considering the advantage that will be derived by all classes from this measure, the total burden that will be thrown upon the public will be comparatively very trifling—namely, £16,000 a-year, or just upon five-sixtenths of a penny in the pound on the whole rateable valuation of Ireland. We propose, then, to pay the registrars 1s. for each entry, and the superintendent-registrars 2d. There will be no other outlay attending the scheme except the salary of the Registrar-General, which we propose to increase to £1000 a-year, in consideration of the additional duties to be devolved upon him. The Registrar-General of England formerly received £1000 a-year, and now receives £1200; but it must be recollected that he has charge of three times the population of Ireland, and has three times the amount of registration to attend to. The only other point on which I need trespass on the time of the House is a very important one—namely, the Medical certificates. We wish to make our scheme as complete as possible, in order to obtain, not a mere registration of births and deaths, but a scientific record of vital statistics, and with that view we have introduced into our Bill a provision which we think will meet the approval of the Medical officers. We have not desired, as is done in Scotland, to make it binding on them penally to give the return. From the opportunities I have had of conversing with the President of the Royal College of Surgeons, and judging also from other sources of information, I believe that the Medical officers generally will be prepared to co-operate with the State, and to furnish it with the requisite particulars as to the deaths of persons whom they may have attended Professionally, with greater readiness if it is left to them to do it freely, instead of its being made compulsory on them by the insertion of a penal clause.

Lord NAAS was glad that his right hon. friend had thus early called the attention of the House to this important subject. In his opinion, Doctors, of all others, were the most unsuitable for the performance of these duties in Ireland. It was a great mistake that Boards of Guardians were not to have an uncontrolled discretion. There was an omission in the Bill which he very much regretted. It made no provision for the registration of marriages, on which questions of legitimacy and succession to property still more largely depended than on the registration of births and deaths.

Dr. BRADY regarded a system of registration of births and deaths as most important, not only in a statistical and social, but also in a moral point of view. But to make it effective there must be a proper staff; and, apart from his Professional predilections, he maintained that Medical men were of all classes the best qualified to act as registrars. In this country butchers and bakers were appointed registrars, who, in copying the cause of death from the Medical certificate, were often totally at a loss, being ignorant of the Professional meaning of the terms employed. It was true, no doubt, that Dispensary Doctors in Ireland were in full employment, but there was on that very account no difficulty in handing to them the particulars for registration, as they were almost always engaged in the houses where either deaths or births took place.

After some further discussion, leave was given to introduce the bill.

INFECTION IN CABS.

Dr. BRADY asked the right hon. baronet the Home Secretary if his attention had been directed to the evils resulting from persons labouring under infectious diseases being carried to hospitals in public conveyances; and, if so, if it was his intention to introduce any measure this session with a view to remedy the same?

Sir G. GREY said that no representations had been made to him upon this subject, but he had read in the newspapers letters referring to it. When the last Hackney Carriages Act was before Parliament a clause was proposed having for its object the prevention of the evil to which the hon. gentleman's question referred, but after a good deal of discussion it was withdrawn. There was no difficulty in enabling parochial authorities or hospitals to provide carriages for the transport of persons suffering from infectious diseases; the difficulty was as to empowering the drivers of hackney carriages to refuse fares on the ground that they believed that the persons about to enter their carriages were afflicted with such diseases.

Dr. BRADY asked whether the right hon. baronet would object to his introducing a Bill to deal with the question?

Sir G. GREY said that, on the contrary, he should feel much obliged to the hon. gentleman if he would embody his views upon the subject in the form of a Bill.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen passed the First Part of the Professional Examination for the Licence of the College on February 9, 1863:—

Sidney Hyde, King's College; John Morgan Bryan, St. Mary's Hospital; Edwin Burrell, Guy's Hospital; Alexander James Low, St. Bartholomew's Hospital; Washington Lovegrove, 84, Dowgate hill; George Edward Pyle, Middlesex Hospital; Charles Edward Squarey, University College.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.—The following gentlemen passed their First Professional Examinations for the Double Qualification during the February Sittings of the Examiners:—

William Wright Milligan, Dumfriesshire, and Miles Walker, Hexham.

The following gentlemen passed their Final Examinations, and were admitted L.R.C.P. Edin., and L.R.C.S. Edin.:—

William Bentley Ford, Waterford; Daniel O'Sullivan, Cork; Forbes Dick, Edinburgh; Thomas Cairns, Fife; and Andrew Ross Miller, Edinburgh.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members of the College having undergone the necessary examinations, were admitted Licentiates in Midwifery at a meeting of the Board on the 11th inst.:—

Richard Luscombe Elliot, Kingsbridge, Devon, diploma of membership dated May 7, 1862; John Cook, M.D. St. Andrews, Fitzroy-place, Kentish Town, November 5, 1859; William Taylor Morgan, M.D. Edinburgh, *Dreadnought* Hospital Ship, Deptford, January 14, 1859; Thomas Shedden, Stratford-on-Avon, December 5, 1859; George Granville Bothwell, Rathmullan, County Donegal, July 31, 1861; Edward Charles Anderson, Birmingham, November 18, 1862; Matthew Bizzam, Duke-street, Grosvenor-square, November 20, 1862; Thos. Baker, Birmingham, November 18, 1862; Samuel Lloyd, Smethwick, near Birmingham, November 15, 1860; William Pattinger Hollis, Burton-crescent, March 8, 1861; Henry Charles Wine, Bristol, June 4, 1861; Stephen Winter Fisher, Bristol, August 1, 1861; William Henry Emmett, Bolton-le-Moors, Lancashire, January 30, 1862; John Holt, Bolton, Lancashire, Mar 8, 1862; Samuel Smith Crosland Richards, Bedford-square, July 29, 1862; and Albert McDiarmid, Rochester, June 10, 1862.

APPOINTMENTS.

CONSTABLE, JOHN, M.D. Univ. Glasg., and C.M. Univ. Glasg., has been appointed Parochial Medical Officer for Leuchars, Fifeshire, *vice* Robert T. Scott, M.D., deceased.

FRASER, J., M.D., has been appointed a Director of the Glasgow Lock Hospital.

FREEMAN, R. G., M.D., has been appointed Surgeon for the District of Greenwich, Royal Kent Dispensary.

FULLER, Dr. WILLIAM HENRY, has been elected President and Treasurer of the Harveian Society.

GERNEY, WILLIAM, M.D., has been appointed Vice-President of the Cheltenham General Hospital and Dispensary.

KAVANAGH, P., M.D., has been appointed Surgeon for the District of Deptford, Royal Kent Dispensary.

M'GREEVY, Dr. NEIL, R.Q.C.P.I., has been elected Resident Apothecary to the Workhouse of Lurgan Union, County Armagh.

OLDHAM, JAMES, M.R.C.S. Eng., has been appointed Consulting Surgeon to the Brighton and Hove Lying-in Institution.

RIVINGTON, WALTER, M.R.C.S. Eng., has been appointed Resident Medical Officer to the Tower Hamlets Dispensary.

SAVERY, JOHN, M.D., has become Surgeon-Extraordinary to the East Sussex, Hastings, and St. Leonard's Infirmary.

STONE, THOMAS ARTHUR, F.R.C.S. Eng., has been elected President of the Society for the Relief of Widows and Orphans of Medical Men.

WILSON, J. GILMORE, M.D., has been appointed a Director of the Glasgow Lock Hospital.

WOLLASTON, ROBERT, M.R.C.P. Lond., has been elected Physician to the Stafford County Infirmary, also Visiting Physician to the Coton-hill Lunatic Institution, Stafford.

DEATHS.

BARTLETT, THOS., Assistant-Surgeon 44th Regiment, on half-pay, recently.

BENTLEY, J. M., of Turton, recently.

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Blackman, Matthew, at Whitstable, Kent, on February 4.

Brooks, Richard Birkett, M.R.C.S. Eng., at Madeira, on January 12, formerly of Chelmsford, Essex, aged 27.

Clark, Earl, M.D. Edin., at Twyford, Buckinghamshire, on January 20, aged 56.

Doak, William, in practice prior to 1815, at St. Giles-street, Oxford, on February 5, aged 68.

Fraser, Wynne Peyton, M.R.C.S. Eng., Staff Assistant-Surgeon, late of 2nd West India Regiment, at Toronto, Canada, on January 1.

Grierson, D., M.D., Deputy-Inspector-General of Hospitals, Poona Division, Bombay Army, at Poona, on January 6.

Holmes, Arthur Newstead, M.D. St. And., at Bradford, Yorkshire, on January 22, aged 38.

Jones, William, M.D., Army Surgeon on half-pay, at Burton-on-Trent, recently.

Kinahan, John Robert, M.D. Dub., at Dawson-street, Dublin, on February 2, Professor of Zoology in the Department of Science and Art Museum of Industry, Dublin.

Marlas, William, at the "Scar," Woolhope, Ledbury, Herefordshire, recently, aged 65.

Paukman, Frederick William Smith, M.D. Edin., at Alexandria, on January 24, of Tupton-hall, Derbyshire, and Clarges-street, London, aged 46.

Prentick, J., at North Walsham, Norfolk, on January 26, aged 74.

Smith, Josiah, at the Royal Medical Benevolent College, on February 3, aged 74.

Winston, David, M.R.C.S. Eng., late of Carlton Lodge, Haverstock-hill, on February 1, aged 30.

White, Peter, at 42, Grove-place, Brompton, London, on February 5, late Surgeon of the 72nd Regiment, aged 82.

Noble Act of Charity.—Mr. A. Ryland announced at the weekly meeting of the Governors of the Birmingham General Hospital, the following extraordinary act of munificence on the part of a lady, viz., to provide a large house for a convalescent institution in connexion with the Hospital, and to defray all the expenses of an efficient staff to the amount not exceeding £230 per annum. It is to be regretted that the name of this gentlewoman is withheld, as she prefers to do good by stealth.

Scholarships in Natural Science at Sidney-Sussex College, Cambridge.—This college has just issued a notice that two scholarships, of the value of £40 per annum each, will be given this year for Natural Science; the examination to commence October 13; the subjects being electricity, chemistry, geology, and anatomy (human osteology and general anatomy). The scholarships are perfectly open. The successful candidates will be required to enter at the college. Further information may be obtained by application to the Rev. J. C. W. Ellis, tutor of the college. Other scholarships, ranging in value from £32 to £80 per annum, for Classics and Mathematics, are to be competed for at the same time.

On Saturday last, Mr. Glaisher, F.R.S., delivered a lecture at the Army Medical School, at Chatham, on the "Accidents and Derangements to which Meteorological Instruments are most Subject, and the Best Means of Correcting those when the Skilled Labour of an Instrument-maker cannot be procured." The lecturer showed practically the steps to be taken when the thread of mercury or of spirit in a thermometer becomes broken, and when air has gained admission into the tube of a barometer. He then took to pieces a barometer, and explained the mode of cleaning mercury, refilling the tube, and putting the instrument in good working order. The lecture was very clear and practical, and was listened to with the greatest attention by the gentlemen who have just concluded the course of special instruction there, preparatory to joining the army as Medical officers. At its close, Dr. Anderson, the Inspector-General, returned thanks to Mr. Glaisher, on behalf of himself and the other gentlemen present, for the very interesting and practical lecture which he had so kindly delivered to them.

Population of Berlin.—From the census taken December, 1861, it results that this amounted to 624,945 civilians (261,385 males, 263,560 females), and 22,345 military—total, 647,290. The *ages* were—under 16, 323 per 1000; from 16 to 60, 628 per 1000; and above 60, 48 per 1000. The unmarried amounted to 179,767 males, and 160,541 females (together 648 per 1090); the married to 78,698 males, 79,577 females (301 per 1000); the widowed to 2906 males and 22,521 females (48 per 1000); the divorced to 14 males and 921 females (1 per 1000). The number of families amounted to 107,916. The Protestants numbered 480,407; the Catholics 25,121; and the Jews 18,847. There were 283 (172 males, 111 females) deaf and dumb, and 191 (110 males and 81 females) blind. The entire population of Prussia amounted to 18,491,220; the military constituting 268,372 of this.

Enumeration of Medical Professors and Students in Germany in 1862:—Vienna, 28 professors and 579 students; Prague, 22 professors, number of students not returned; Berlin, 21 professors, 323 students; Leipzig, 20 professors, 230 students; Munich, 18 professors, 244 students; Tübingen, 14 professors, 105 students; Göttingen, 13 professors, 166 students; Bonn, 12 professors, 119 students; Heidelberg, 11 professors, 96 students; Königsberg, 10 professors, 104 students; Jena, 10 professors, 51 students; Greiswold, 10 professors, 167 students; Freiburg, 10 professors, 44 students; Giessen, 9 professors, 152 students; Würzburg, 14 professors, 289 students; Erlangen, 8 professors, 83 students; Halle, 7 professors, 45 students; Marburg, 8 professors, 61 students; Rostock, 7 professors, 32 students; Breslau, 6 professors, 119 students; Kiel, 6 professors, 38 students. Total, 21 universities, having 264 Medical professors (181 of these being ordinary professors, and 83 extraordinary professors), and 3047 Medical students; those of Prague not being enumerated.

Harveian Society of London.—Anniversary Meeting, January 15.—Mr. Weeden Cooke, President, in the Chair. The Honorary Secretary read the report of the Council. It was proposed by Mr. Henry Thompson, and seconded by Dr. Ballard, that the report be received and adopted, and that the thanks of the Society be given to the Council. The Treasurer laid before the meeting a statement of the expenditure and income of the Society for the past year, showing a balance in hand of £79 8s. At the close of the ballot, the following gentlemen were declared elected officers for the ensuing year:—*President*—Henry W. Fuller, M.D. *Vice-Presidents*—William Adams, Esq., J. Burdon Sanderson, M.D., W. Sedgwick, Esq., Wm. Wadham, M.D. *Treasurer*—Henry Wm. Fuller, M.D. *Honorary Secretaries*—J. Brendon Curgenven, Esq., Charles R. Drysdale, M.D. *Council*—Patrick Burke, Esq., Frederick Cock, M.D., J. K. Hornidge, M.B., Ernest Hart, Esq., T. H. Hill, Esq., J. C. Langmore, M.B., W. Boyd Mushet, M.B., W. O. Priestly, M.D., O. A. Field, Esq., Edwin Sercombe, Esq., H. G. Times, Esq., J. B. Walker, Esq.

Odontological Society.—At the monthly meeting, on Monday, February 2, a paper was read by W. A. N. Catlin, F.R.C.S. Eng., Licentiate in Dental Surgery, etc.; Samuel Cartwright, jun., F.R.C.S., President, in the chair. The author of this paper commenced by a comparison of morbid conditions of the teeth which have, in his experience, given rise to neuralgia, with analogous pathological conditions in other organs, as well as with conditions not strictly analogous, but in which local disease had been shown to have had an etiological relation with neuralgia. He discussed briefly the probable causes of the variety which every one knows to occur in the degree of pain suffered by different individuals under circumstances of local disease apparently very similar, referring it to variety in temperament, size of nerves, &c., and then passed on to the main topic, namely, an inquiry as to how far neuralgia, due to a morbid condition of the teeth, may be distinguished in practice from that dependant upon constitutional causes or local mischief elsewhere. The conclusion arrived at is, that, as in all other questions of difficult diagnosis, the Surgeon must carefully examine not only the local conditions of those organs and parts of the body most likely to originate the neuralgia, but into the general constitutional condition of his patient, and, weighing carefully the facts he ascertains, exercise his judgment in determining the proper conclusions to be arrived at. Before condemning a tooth as the cause of a local neuralgia, it is thus often proper to strive after the removal of other causes of reflex irritation and the improvement of the general health. At the same time, the author strongly deprecates the prevalent practice of retaining diseased teeth in the mouth, to the sacrifice of health and comfort, after they have become useless for mastication or appearance. The paper was illustrated by a large number of interesting cases which have occurred in the practice of the author, some of them being cited to show that the symptoms of intermittent or regular paroxysms mainly relied upon by some authors in their diagnosis of constitutional neuralgia, frequently attend local neuralgia in patients of shattered health. He recommends stimulants in full doses as an antidote to nervous shock, and as the best remedy for the neuralgia which sometimes succeeds dental

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operations. An interesting case is recorded in which deafness was cured one hour after the extraction of a tooth.

JUNIOR MEDICAL SOCIETY.—The last meeting of this Society was held at the Whittington Club, Arundel-street, on Tuesday, January 20; Dr. Edward Harvey, of St. George's Hospital, Vice-President, in the chair. The following pathological specimens were then exhibited:—Dr. Deck, President, showed an interesting specimen of cancer of the omentum; the patient from whom it was taken had been under the care of Dr. Bristowe, in St. Thomas's Hospital, for ovarian disease. Mr. Foxon, of St. George's Hospital, showed a nutshell which had been impacted in a bronchial tube for some time. Mr. Kempthorne, of King's College Hospital, showed a phosphatic concretion removed from a tonsil. Mr. H. Cooper, of St. George's Hospital, then proceeded to read a paper on the "Treatment of Typhus and Typhoid." Mr. Cooper remarked that the great distinction, drawn by Jenner, between these two diseases has been well marked at St. George's during the last three years, and more especially within the last twelve months—the rose-spots co-existent with restlessness, but no delirium, as indicative of typhoid; and the mulberry-rash, with delirium or stupor, as seen in typhus. No specific has yet been found to cut short the ordinary duration of this disease, and thus contradict the saying of Pitcairn, that you may guide a fever, but cannot cure it. Emetics have been very useful in Dr. Chalmers' hands. Out of 60 cases of fever which have occurred at St. George's within the last three years, 40 have been treated by stimulants and 20 by cinchonising doses of quinine. The quinine was exhibited in ℈j. doses every hour for three successive hours, preceded by an emetic, or, if the patient were greatly prostrated, by a good dose of wine. This large dose of quinine was followed by gr. ij., every four hours, until the patient was convalescent. If the pulse was not reduced by the first dose, another ℈j. would be given on the second or third following day. In some, the cinchonism produced was of a much severer nature than in others, and, in 2 cases, the extreme depression that followed proved fatal. The pulse was generally reduced, on an average, 19 beats, and, in some cases, even from 120 to 80. In 4 out of 7 cases in which ℈j. was given on the day after the larger dose of quinine, the effect produced on the pulse was that of increasing rather than decreasing it. In the cases of typhoid treated by cinchonism, the diarrhœa seemed to be kept in check by it. In concluding, Mr. Cooper expressed his belief that alcohol is the only remedy upon which we can rely, and that we have in it one which will restore to the nervous system its power over the animal functions; but, as there are many difficulties connected with its administration, it ought to be carefully handled,—experience alone teaching us when to give it and when it had betterbe omitted. In nearly all the cases treated at St. George's, wine was given on the first day, the amount being from ʒvj. to ʒxij., according to the state of the patient. An interesting discussion then ensued, in which Messrs. Dickson, Freeman, Hatherly, Gedge, Sheers, Gervis, Deck, and Stephens took part. The author of the paper having replied, the meeting adjourned.

ETHNOLOGICAL SOCIETY, FEBRUARY 3.—J. Crawfurd, Esq., President, in the chair. On the "Psychological Differences which Exist amongst the Typical Races of Man," by Robert Dunn, Esq., F.R.C.S. Eng. As papers of a psychological character have so rarely been read at the meetings of the Society, the author offered no apology for asking the attention of the meeting to this subject, being satisfied that if there were any branch of the sciences more interesting than another, it was that which related to the psychological differences which characterise the different varieties of the human species. Thus, the genus *Homo* was one, the author believed and maintained, on the ground that in man's moral and religious attributes the inferior animals do not participate, and it was this, he considered, that constituted the difference between him and them. The barrier was thus, he considered, impassable between man and the chimpanzee and gorilla; and that wherever two-handed and two-footed man, in his erect attitude, and with his articulate voice, is found, his claims to our common humanity must be immediately acknowledged, however debased the type may be, or mean the garb in which that humanity is clothed. His conviction was, that there was proof of a general unity exhibited in all the races of the great family of man, inasmuch as they were all endowed with the same instinctive, sensational, perceptive, and intellectual faculties—the same mental activities, however much they may vary in degree. It had, he thought, been fairly argued that all the races of the human family form but one species, from the physiological fact, that they are all capable of fruitful union, which would not be the case with the hybrids of two species of even the same genus. Believing the brain to be the material organ of the mind, where the ultimate molecular changes take place, and whence the mandates of the will issue, the author considered the study of the cerebral organisation and development in the various typical races, as one of the most effectual means of better understanding and elucidating the psychological differences which characterise them. This subject, however, was one that yet required to be worked out; and ethnic psychology was still a desideratum. The difficulties which formerly beset it no longer exist; and it was, he thought, to our shame that, notwithstanding our extensive and daily spreading intercourse with all the nations and races on the face of the earth, so little had been done. The author then reviewed at length what had been done by anatomists and ethnologists, including Spurzheim, Tiedemann, Gratiolet, Herbert Spencer, Huxley, Owen, and others. In conclusion, he pointed out that the lower savage races, such as the Sandwich Islanders, made progress in the early part of their education, and were so far as apt and quick as the children of civilised Europeans; but at this point they stopped, and seemed incapable of acquiring the higher branches. The Sandwich Islanders have excellent memories, and learn by rote with wonderful rapidity, but will not exercise the thinking faculties; they receive simple ideas but not complex ones. In like manner it was found practically that negro children could not be educated with white children. In all these cases, as well as in the minor cases continually occurring amongst ourselves of inability to understand subjects and reasonings of a certain order of abstruseness, the true explanation is, that the cognate faculties have not reached a complexity equal to the complexity of the relations to be perceived; and, moreover, it is not only so with purely intellectual cognitions, but it is the same with moral cognitions. In the Arabian language there are no words answering to justice, sin, guilt. Amongst many of the lower races of man, acts of generosity or mercy are utterly incomprehensible—that is to say, the more complex relations of human action in its social bearings are not cognisable. This, the author thought, was in accordance with what *à priori* might have been expected to have resulted from organic differences in the instruments of the higher psychical activities, or, in other words, in the nervous apparatus of perceptive and intellectual consciousness. The leading characters of the various races of mankind were simply representatives of particular stages in the development of the highest Caucasian type. The negro exhibits permanently the imperfect brow, projecting lower jaw, and slender bent limbs of a Caucasian child, some considerable time before the period of its birth. The aboriginal American represents the same child nearer birth. The Mongolian the same child newly born. In the discussion, the President, Dr. Copland, Mr. Luke Burke, and Dr. Donnelly took part.

BOOKS RECEIVED.

PAMPHLETS.

L'Engadin, ses Sources d'Eaux Minérales, sa Nature, et ses Habitats: Discours Public Prononcé à Breslau, le 6 Janvier, 1861; suivi d'un Appendice Médical sur les Eaux de Tarasp et de St. Moritz. Par Hermann Lebert. Breslau. 1861. Pp. 52.

The Pacific Medical and Surgical Journal. Edited by V. J. Fourgeaud, M.D. San Francisco. 1862. Vol. V., No. 57.

Report of Guildford and West Surrey Dispensary. Guildford. 1862. Pp. 24.

Note sur l'Œil de la Baleine presentée au Congrès Ophthalmologique de Bruxelles. Par Dr. Le Gros. Paris. 1858. Pp 8.

On the Situation, Form, and Capacity of the Gall-bladder in the Vertebrata; on its Absence in certain Animals; and on the Colour of the Bile. By Edwards Crisp, M.D., F.Z.S. 1862. Pp. 8.

Fourteenth Annual Catalogue and Report of the New England Medical Female College. Boston. 1862. Pp. 29.

Joseph Travers and Sons' Weekly Circular. December 13, 1862. Pp. 4.

Transactions of County and City of Cork Medical and Surgical Society. Dublin. 1862. Pp. 63.

Excessive Infant Mortality: How can it be Stayed? A Paper contributed to the National Social Science Association (London Meeting). By M. A. Baines. 8vo. Pp. 20. London: Churchill and Sons.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Caution to Authors.—Mr. Churchill finds it a duty again to publish the fact, that certain swindlers make it a practice to address authors for a copy of their work, to be sent per book-post, stating the cost shall be remitted by post-office order. The books so sent are sold at some book-stall, and, of course, no payment is contemplated. An old offender is repeating his applications, dating his letters from Manchester.

A series of Clinical Reports of Difficult, Preternatural, and Complicated Cases of Labour, which occurred from 1857 to 1863, by Dr. Robert Lee, will shortly be commenced.

X. O.—Consult your own family attendant, or the Physician of best reputation in your neighbourhood.

Death in a Brothel.—An unhappy woman, married too, entered a low house in the New Kent-road, with a companion, one evening last week, and had scarcely entered a room when she complained of illness, begged to be taken out of the house, then soon became unconscious and died. An inquest was held, and a verdict returned that she had died a natural death from excitement. Instances of death under these appalling circumstances are not uncommon, though far more frequent in men, especially if advanced in life, than in the other sex. The struggle between passion and conscience seems too great for a full heart to bear.

Dr. Macloughlin and the College of Physicians.—The venerable Dr. Macloughlin has published a correspondence between himself and the authorities of the Royal College of Physicians, in which he urges upon the College the necessity of throwing open that Institution for discussions on scientific and Medical subjects. Spite of the existence of the College documents on the cholera, the worthy Doctor asserts that the English Medical Profession knows nothing of that disease scientifically. We consider that the acuteness and energy of the venerable Doctor, and the practical import of the question, whether cholera be ever, be usually, or be invariably preceded by diarrhœa, will give him and his opinions a marked place in the history and literature of that remarkable disease.

Remedies for Burns.—Writers in the *Times* are busily descanting on the treatment of burns. As is usual, amateur discoverers find that all that is valuable in their discoveries has been known long before. The *sine quâ non* in all remedies is, that they keep out air and cold. Common paint (used by Sir C. Bell), chalk ointment, copaiba, treacle, lime-water and milk, lime-water and linseed-oil, scraped potato, cotton-wool, flour, and basilicon ointment, all have these properties. Many remedies, too, of great vogue, have something of turpentine in their composition, *e.g.*, Kentish's liniment of resin ointment and turpentine. Whiting, with water, or with oil, may certainly be included amongst promising remedies.

Removal of St. Thomas's Hospital.—A clash of interests may prevent the removal of St. Thomas's, but it was felt that the whole question was settled by Mr. Paget, when he delivered the following emphatic remarks (or something like them) in his address at the College of Physicians before the British Medical Association last summer:—"Of all the remedies for pyæmia," he said, "the best I know of is *fresh air.* I have seen patients who were hopelessly ill recover by being kept in the freshest air night and day." When Mr. Paget uttered these words, a friend near us said, "That settles St. Thomas's." It is of no use to go on boring our readers, for there is no more to be said. Country air is better than town air: so it is, say the obstructionists, but the air of our wards is so much better than that of the vile courts and alleys that it is good enough. Dr. James Turle has written warmly and ably on this subject; but if men who sleep out of town for their own health will make their poor patients sleep in town on the plea that it is good enough for them, of what use is argument?

A Request.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you kindly notice the fact, that Dr. Yearsley's work, entitled "Deafness Practically Illustrated," a new edition of which has just appeared, was translated into German, a few years ago, by Dr. Claudius Ulmann, of Weimar. I am, &c.

15, Savile-row, W., February 4. Jas. Yearsley.

Advice Gratis.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I was sent for to a patient this evening, and was told candidly enough that she had been ill for some days, but that she had been tempted to go to an M.D. who gave advice gratis. The M.D. gave her a prescription, with the remark, "You had better let my man make it up;" for this ornament of a university keeps a chemist's shop with red bottles round the corner of his house. On looking at the prescription I saw that nobody but "his man" could have made it up, for it ran thus—"℞ An. G. c., ʒvi.; am c., ʒiii.; aq. ad., ℥vi; capt. cochl., ij., t. d; 2s. 6d." The only intelligible part of it were the figures wherewith the M.D. had assessed the value of his man's drugs. After seeing him at home twice, my patient was told by the M.D. that he had better call on her, as her case "wanted watching." Whereupon she sent for me and told me this artless tale. I mused to myself, "Gammon! thy name is *advice gratis.*"

I am, &c. A General Practitioner,
(who does not keep a shop, nor give advice gratis, but loves to live like a gentleman, and let live).

Common Resin in Whooping-Cough.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your Journal of January 31 is a paragraph stating that the common resin is recommended, and has been used by a Practitioner in Australia, as a specific in whooping-cough. In some parts of Devonshire, amongst the labouring classes, it is administered as a specific for this complaint, but in larger doses—for instance, five or six grains, three times a-day, for a child. I tried it in one case for about a week, but I did not observe any marked improvement in that time; the only effect that I noticed was its purgative action, and I had to reduce the dose to twice a-day. I, nevertheless, think that the remedy deserves a fair trial.

I am, &c. J. Brendon Curgenven.

11, Craven-hill-gardens, Hyde-park, W., February 9.

The Late Graduation at St. Andrews.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—An article having appeared in your Journal of January 31, on the Graduation Week of St. Andrews, by a "Second who was There," it gives me no pleasure to state that I can bear your correspondent out in his assertion, that students of only two years' standing were admitted to examination for the M.D. degree in December last. Surely, the Senatus Academicus will at once take measures to prevent the further onslaught on the British public of men so dangerously armed, and so imperfectly drilled, by cancelling their degrees, and recommending them to return to their Medical studies;—in which case I would kindly advise those premature Doctors to keep company with the midnight lamp, and to pass through that course of study which most Medical students consider it necessary to go through before presuming to offer themselves for any diploma. I am, &c. A Mature Graduate.

[Our correspondent's letter is duly authenticated, and, we think, should receive the explanation it seems to demand.—Ed.]

The Recent Action at Leeds.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Your Leeds correspondent would wish to impress upon the Medical public that the parties alluded to were called to disparage and cut down the charges of their Medical brethren. Far otherwise; they were both subpœnaed on the occasion. On the other hand, they could not acquiesce in the charges of three guineas for three visits, exclusive of medicines charged 2s. 6d. for each mixture, two of which visits were paid, not only on the same day, but within two hours of each other, at a distance at least within three-quarters of a mile. As regards the statement of Medical men being in court to confirm the plaintiff's charges, it is incorrect, as there only was one on his side of the question. The charge could not be considered reasonable when such a high authority as Mr. Teale reduces a bill from £9 7s. 6d. to £5 10s.

In conclusion, I think most Medical men will agree with me, that it was bad policy to take a case into the County Court, the defendant at the very time being a club patient of the plaintiff's. The defendant, at the time of the accident, no doubt considered his life in danger. Under such impression, he made a promise of reward as a means of insuring extra attention; and, as a working man of only 22s. per week, he did not show himself altogether devoid of gratitude for any extra services, for he voluntarily made an offer of £5—such a gift as few Medical men ever have the opportunity of refusing. Only wishing that such occurrences might frequently befall some of our ill-paid Poor-law Medical Officers,

I am, &c. Amicus Justitiæ.

The Treatment of Psoriasis Inveterata.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The details which accompany the relation of a valuable case of psoriasis inveterata, by Dr. Moriarty, in a late Number of the Journal, render its perusal both interesting and instructive. There is no doubt that, in the treatment of that particular case, quinine was highly useful. It has occurred to me, however, to have found psoriasis accompanying more than one kind of defective constitutional condition. It occurs, I think, very frequently in families of a gouty or asthmatic tendency; generally, it seems connected with diminished performance of the normal functions of the skin; sometimes it occurs in youth; often in extreme age. I believe it will be found that arsenic will fail to make any impression on many cases of psoriasis inveterata until a considerable loss of liquor sanguinis has taken place, which may be thoroughly effected through purging. I am by no means disposed to lower Dr. Moriarty's estimation of quinine as an adjuvant, however I may fear that it will not prove uniformly or constantly useful, or that the famous Fowler's drops will supersede other forms of arsenical preparations. While venturing to intrude these remarks upon your space, I may say that I felt surprised to see that, in a recent communication, the introduction of the liquor arsenici chloridi should have been attributed to any modern hand. When I was a young pupil, its valuable properties were pointed out to me by my predecessors, who had it from their predecessors, and so on. It had suffered much, no doubt, from fashionable neglect, but the best of remedies are subject to that. Like most of the chlorides, especially of the metals, it is a powerful agent; it used to be considered, too, an efficient remedy in the treatment of neurosis, especially chorea, and even sciatica.

I am, &c.

3, Westbourne-park, February 7. Geo. Gaskoin.

Case of Hernia of the Omentum.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—A case of "Hernia of the Omentum, with 'Unusually Acute Symptoms of Strangulation,'" was inserted in the last Number of your Journal. It was written by me, as the case in question was under my care. I sent it to a gentleman for inspection, and requested him to forward it for publication. The case afterwards took an unfavourable turn, and the patient died. As there were some peculiarities displayed on post-mortem examination, somewhat at variance with the account given, I requested my friend to get the paper cancelled at once. He forgot to do this, and the case has been published.

It clearly remains for me to explain the case, otherwise a false impression would remain, which I should be sorry for. The patient was attacked with vomiting and other symptoms of peritonitis, and died exactly a fortnight after the first commencement of symptoms of strangulation, and rather more than eight days after the operation. It was found, on examination, that a portion of small intestine, which appeared to have been strictured at some period or other, had formed an adhesion to the peritoneum above the bladder, and that another portion of small intestine adhered firmly to this, and to this, also, a piece of the colon was adherent: at this latter point of adhesion, which was easily separable, ulceration into

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the peritoneal cavity was beginning, and this led to fatal peritonitis. There was nothing in the sac.

The case is interesting, but there is considerable doubt upon my mind whether the intestine had not become the seat of disease, as the result of stricture at some period prior to the recent symptoms.

I am sorry to trouble you, but I must request, for the sake of truth, an early insertion of this letter. I am, &c.

4, St. Helen's-place, February 9. JOHN ADAMS.

THE SOUTH HANTS MEDICO-CHIRURGICAL SOCIETY.

The largest provincial Medical society in the kingdom—now numbering ninety-one members—held its annual meeting, for the election of office-bearers for the current year, at the house of Dr. Wiblin, on Saturday last, the 7th inst.

The following gentlemen were elected:—President—Dr. J. S. Bushnan, of Laverstock House, Salisbury; Vice-President—Dr. Wiblin, Southampton; Secretary—Dr. Palk, Southampton; Council—Dr. Orsborn, Bitterne; Dr. Dyer, Ringwood; Dr. Welch and Mr Bencroft, Southampton. On assuming the chair, Dr. Bushnan delivered the following humorous "speech from the throne:"—

"My Lords and Gentlemen,

"In commencing the speech from the throne to which your voices have elected me, I feel compelled to use the customary beginning of other potentates, although, unfortunately, there is small chance of any of our Profession ever being raised to the dignity of a *peerage*. A stray baronetcy here and there is the utmost of which we can boast. One or two knighthoods, perhaps, are occasionally bestowed upon us; although as a learned body we are not generally a be-*knighted* race; while as for any higher title our glorious profession is not only an unequalled, but, in the strictest sense of the word, a *peer-less* one.

"I regret to announce that our relations with foreign powers continue in a most unsatisfactory condition. I have in vain endeavoured to effect a reconciliation with a neighbouring society. They still persist in their heretical condemnation of good cheer, and their devotion to the cup and saucer—forgetful of the words of Horace:—

'Nulla placere diu nec vivere carmina possunt,
Quæ scribuntur aquæ potoribus.'

which I would freely translate—

No paper worth writing or reading can be
Produced by the man who drinks nothing but tea.

"My Chancellor of the Exchequer will call upon you for the taxes—or subscriptions—for the current year's expenditure; and he has announced his intention of being very strict indeed in making you pay up.

"A project of an increase in the taxation will be submitted for your discussion, the object of such increase being the purchase of a library and scientific instruments.

"My government has been for some time in correspondence with that of the Hartley Institute, with a view to obtaining a room for the purposes of this Society in the Institution building, which room, if granted, will be eminently serviceable as a library and reading room, and a receptacle for scientific instruments and museum; but will, I trust, never be the means of putting an end to our present agreeable mode of social meeting at each other's houses—than which I can conceive nothing better calculated to foster *friendly* feelings among the members.

"Gentlemen of the Finance Committee,

"The account for the year will be laid before you in due course. The estimates have, I have no doubt, been framed with a due regard to economy, as usual.

"My Lords (that is, you who ought to be Lords) and Gentlemen,

"During the past year our society has been blessed with a most plenteous harvest of excellently-written papers, agreeable meetings, and interchange of kindly courtesies. These, doubtless, will be continued during the present year. My views in relation to the advantages of this society, to the effects of good papers on the audience, and of good audiences on the papers, and to other matters, will be now laid before you.

"In bringing my introductory remarks to a close, I beg most sincerely to thank you for the honour you have conferred upon me, and to assure you that I feel highly flattered by the position in which you have placed me.

"It is no little honour to be chosen to fill the part of President of a large and influential Medical society; to preside over and direct the councils and debates of men, among whom are those who have attained a high position in the world's esteem; to sanction their acts; and to set a seal upon their proceedings. I will not—as is frequently done upon occasions like the present—speak of myself as utterly unworthy of, and unfitted for, the post to which you have appointed me; for, in the first place, I do not believe any man sincere when he thus decries himself; and secondly, if I did suppose you had so terribly stultified yourselves as to elect a totally incompetent President, it would be the height of rudeness in me to tell you so. Still I cannot help saying that you might have found to fill the office one who was not like myself a specialist; one who, residing upon the spot, could more frequently attend your meetings and contribute more largely to your transactions than can I. But since you would, I cannot say you nay; nor will I further occupy your time by preliminary remarks, but will at once proceed to the ordinary business of the evening; again thanking you for the honour you have conferred upon me, and assuring you, in all sincerity, that I will, to the utmost of my power, strive to carry out the objects of the society, which I conceive to be—to assist the progress of science, to support the honour and dignity of the Profession, and to promote good and kindly feelings among ourselves."

The paper of the evening, an elaborate and highly scientific discourse on the "Advantages of Medical Associations for the Discussion of Professional Topics," was also read by Dr. Bushnan; and this the Doctor prefaced by stating that, descending from his high estate, casting aside his regal mask, doffing his mimic crown, and laying down his player-king's sceptre, he addressed his numerous audience in his proper person, and as one of themselves placed by their kindness and good-will in the enviable and honourable position of their President.

COMMUNICATIONS have been received from—

Mr A. M. EDWARDS; THE SECRETARY OF THE ANGLO-IONIAN STEAM NAVIGATION COMPANY; THE SECRETARY OF THE HARVEIAN SOCIETY; PARIS; Dr. NEEDHAM; Prof. SIMPSON; LIVERPOOL; Dr. G. JOHNSON; Dr. CORFE; Dr. WHITELAW; Dr. MORELL MACKENZIE; Dr. BEDDOE; Dr. BUSHNAN; Mr. J. B. CURGENVEN; THE SECRETARY OF THE GREAT NORTHERN HOSPITAL; Dr. HUMPHREYS; X. O.; THE SECRETARY OF THE ODONTOLOGICAL SOCIETY; Dr. JOHN CONSTABLE; A MATURE GRADUATE; Dr. G. GASKOIN; Dr. McCALL ANDERSON; Dr. HENRY McCORMACK; Dr. J. W. BLACK, Edinburgh; and Mr. JOHN DIX.

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 7, 1863.

BIRTHS.

Births of Boys, 1055; Girls, 1038; Total, 2093.
Average of 10 corresponding weeks, 1853-62, 1879·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	629	681	1310
Average of the ten years 1853-62	656·8	656·0	1312·8
Average corrected to increased population..	..	..	1444
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	1	7	9	8	7	9	2
North ..	618,210	13	2	23	6	13	13	3
Central ..	378,058	3	1	5	..	7	8	1
East	571,158	5	3	11	..	14	21	5
South ..	773,175	6	12	13	4	25	12	4
Total.. ..	2,803,989	28	25	61	18	66	63	15

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·807 in.
Mean temperature	45·3
Highest point of thermometer	55·1
Lowest point of thermometer	32·6
Mean dew-point temperature	42·3
General direction of wind	S.W.
Whole amount of rain in the week	0·11 in.

APPOINTMENTS FOR THE WEEK.

February 14. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m, W. S. Savory, Esq., F.R.S., "On Life and Death."

16. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Lettsomian Lectures on Surgery—Lecture II.—Thomas Bryant, F.R.C.S., "On the Differences Between the Diseases of the Nervous, Respiratory, Circulatory, Digestive, and Urino-genital Systems of the Child and Adult."

17. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ETHNOLOGICAL SOCIETY, 8 p.m. Mr. Crawfurd, "On the History of the Gipsies." Dr. Shortt, "A Brief Account of the Yenadies of the Chingleput District."

PATHOLOGICAL SOCIETY, 7½ p.m. Meeting of Council.

ROYAL INSTITUTION, 3 p.m. Professor Marshall, "On Animal Mechanics."

18. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

19. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

HARVEIAN SOCIETY, 8 p.m. Mr. H. W. Lobb, "On the Uses and Value of Electricity in General Practice, Practically Illustrated."

ROYAL INSTITUTION, 3 p.m. Dr. E. Frankland, "On Chemical Affinity."

20. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 p.m. Gulstonian Lectures—Dr. Pavy, "On the Amyloid (so-called) and Fatty Degenerations."

ROYAL INSTITUTION, 8 p.m. Rev. G. Williams, "On Recent Discoveries at Jerusalem."

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON, 8 p.m. Dr. Anstie, "On the Therapeutical Value of Cod-liver Oil in Convulsive Diseases."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday (to-day) at 2 p.m.:—

By Mr. Fergusson—Tapping an Ovarian Cyst; Removal of Tumour from the Back.

By Mr. Henry Smith—Removal of Warty Growths from the Perinæ

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I have pleasure in bearing testimony to the decided advantages possessed by Messrs. Ferris and Company's preparation of Opium called "Nepenthe" over other preparations of that important drug. I have used it for several years in Cancer of the Uterus, continuing it, with scarcely abated advantage, as a sedative, in one such case, for the long period of eighteen months, in doses of, at the utmost, half a drachm, which served the purpose to the end. I have used it in "Subcutaneous Injection" for Neuralgia, without producing any local irritation, such as abscess, &c. In the cases of unusually severe "after-pains" in connexion with labour, I can strongly recommend and endorse its successful and satisfactory employment. I have never met with any unpleasant symptoms, such as sometimes occur in some constitutions after the administration of morphia, &c., during an extensive use of this valuable addition to that "Practical Pharmacopœia" which waits for no "imprimatur" from College or Council.

F. PORTER SMITH, M.B. Lond.,
Evercreech, March, 1862. Associate of King's College, London, &c.

*** Fresh Reports will be published in the Medical Journals from time to time.—Bristol, 1862.

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These conveniences are made for those who require them only occasionally, during a long journey, as well as for those invalids who use them always. MR. WALTERS has much improved them by making them of *Ætherised India-Rubber*, which adds very greatly to the strength of the India-Rubber, at the same time that it prevents its sticking together; by this means he is enabled to make them less stiff and harsh than hitherto, and yet to retain all the advantages of that stiffness. There is a patent valve which prevents the return of the fluid; and they may be worn either sitting, walking, or lying, without the slightest inconvenience, and without being perceived by any one.

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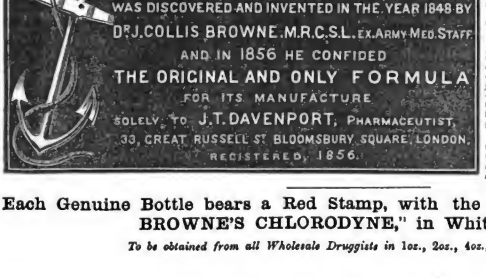

NOTIFICATION.

THE attention of Medical Men is directed to the Piratical application, by some parties in the Trade, of the term "Chlorodyne" to various mixtures compounded of Chloric Æther, Opium, Indian Hemp, and Peppermint, in Imitation of the ONLY Genuine preparation of this name.

The dangerous expedient of encouraging or advocating the assumption of a name specifically indicating a particular property or remedy—such as *Chlorodyne* is to spurious imitations and substitutions—ON THE GROUND OF CHEAPNESS, is a subject of surprise and grave reproach, supremely so, when the adulteration, sophistication, and tampering with Drugs, becomes so serious and important a consideration in the successful practice of Medicine.

The fact of these Piracies must fully convince the Profession of the extraordinary efficacy of the Genuine Chlorodyne; whereas the sad results and disappointment arising from the use of spurious compounds cannot be expressed.

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ORIGINAL LECTURES.

LECTURES ON DISEASES OF THE EYE.

DELIVERED AT

The Middlesex Hospital,

BY

SOELBERG WELLS, M.R.C.S. Eng., M.D. Edin.
Ophthalmic Surgeon to, and Lecturer on Ophthalmic Surgery at, the Hospital.

STRABISMUS.

LECTURE IV.

GENTLEMEN,—In my last lecture I described the manner in which the operation for strabismus is to be performed, and how its extent is to be regulated by the amount of the squint. I must now call your attention to various other forms of strabismus and affections of the muscles of the eye which may demand operative treatment. They present numerous and important peculiarities, but my time will not permit me to enter fully into these, and I shall, therefore, only point out to you the leading principles by which you should be guided in their treatment. We may arrange these affections under the following heads:—I. Periodic squint. II. Insufficiency of the internal recti muscles. III. Diplopia. IV. Secondary strabismus, following paralysis of the opponent muscle. V. Secondary strabismus, following tenotomy of the opponent.

I. *Periodic Squint.*—The most frequent causes of this are:—1. Hypermetropia. 2. Myopia. 3. Difference in the refraction of the two eyes.

1. *Hypermetropia.*—I have already mentioned that this is by far the most frequent cause of convergent strabismus, and that these hypermetropic patients squint, in order to increase their power of accommodation, for an increased convergence of the optic axes is accompanied by an increased power of accommodation. At first this squint is only periodic, not appearing, except when the patient is looking intently at some object, so that on a casual examination we may fail to detect it; but as soon as the patient's attention is directed to some near object, as in reading, the one eye moves inwards, this squint, however, disappearing again when the object is removed, or, perhaps, also when suitable convex glasses are placed before the eyes. In some cases the squint only shows itself when the person is looking at near objects; in others it appears whenever any object, near or distant, is regarded. If it is not operated, or the hypermetropia neutralised by the constant use of the proper convex glasses, it generally soon becomes permanent. Even after an operation the squint may recur if convex glasses are not worn.

The question now arises whether this form of periodic squint should be operated or not. I think the answer should be in the affirmative; for by dividing the internal rectus we diminish its power, and a greater exertion of this muscle will, consequently, be demanded, in order to bring the optic axis to bear again upon the object.

This extra exertion will be accompanied by an increased power of accommodation, as was the case before when the eye squinted. We shall, therefore, have combined an increased power of accommodation with a normal position of the optic axes. On examining such cases of periodic squint with prisms, we generally find that the internal recti muscles are abnormally strong, this preponderance in strength extending throughout the whole field of vision, so that the correct position of the optic axes, which may occur when convex glasses are interposed, is frequently forced. A carefully performed tenotomy of the internal rectus muscle is, consequently, productive of very favourable results. By advising an operation for this form of periodic squint, I do not propose to set aside the use of convex glasses for the treatment of the hypermetropia; I only think it beneficial to balance the strength of the muscles of the eyeball, and to restore their normal equilibrium, for this will be accompanied by increased facility and comfort in the use of the eyes, particularly for prolonged work at near objects. Whether or not both eyes will require to be operated on, will depend upon the amount of the squint, and the relative strength of the internal recti muscles.

I believe that the best treatment for this form of periodic squint consists in a careful tenotomy of the internal rectus, with subsequent neutralization of the hypermetropia by means of convex glasses. In some cases the question may, however, arise whether, by operating upon the periodic squint, we may not only free the patient from the deformity, but also obviate the necessity for spectacles; for, after the operation, the increased exertion of the accommodation in reading, etc., will be unaccompanied by a squint. This question arises chiefly with ladies, who desire not only to be freed from the squint, but also from the perhaps even worse evil, the necessity of wearing spectacles.

2. The periodic squint which occurs in the short-sighted generally only shows itself when the object is removed beyond the range of accommodation. As this squint disappears as soon as the myopia is neutralised by the proper concave glasses, it might appear unnecessary to have recourse to an operation, but yet we find that this greatly facilitates the continued use of the eyes for near objects. On excluding the affected eye from the act of vision by shading it with our hand, we find that it then moves inwards, even although the object is held within its range of accommodation; its fixation was, therefore, forced. On testing such cases with prismatic glasses, the internal rectus muscle is generally found to be abnormally strong. It is, therefore, necessary to weaken it, and thus restore the equilibrium, so that the strength of the different muscles of the eyeball may be evenly balanced.

3. Periodic squint may also be caused by a difference in the refraction of the two eyes: in such cases there is a constant endeavour to diminish the annoyance produced by the difference in the retinal images, by increasing the distance between the latter by a voluntary squint. Our purpose in operating is to render the deviation more difficult, and thus to urge the act of vision,—rather to endeavour to unite the images than to separate them still further. The strength of the muscles should, however, be previously tested with prisms, so that we may ascertain to what extent the tendon may be divided.

II. *Insufficiency of the Internal Recti Muscles.*—As this affection is far from uncommon, and is frequently most troublesome and harassing to the patient, perhaps even quite incapacitating him from following his avocation, it is of consequence that you should pay particular attention to its symptoms and treatment. Although I have already explained the former to you, I would just recapitulate the leading features of the affection. Such patients complain that, after they have been working or reading for a certain length of time, the eyes become hot and uncomfortable, the print grows dim, the letters become confused, and run into each other. This is generally preceded by a feeling of tension in the eyes, and some patients distinctly feel how the one eye becomes unsteady and wavering, and then gradually moves outwards. They, consequently, often anticipate these symptoms by closing one eye. You will observe that these symptoms of asthenopia are somewhat similar in character to those produced by hypermetropia; and it is an interesting fact, that these two causes of asthenopia (hypermetropia and insufficiency of the internal recti) occasionally co-exist. In such cases, it is found that, although the use of convex glasses certainly diminishes the asthenopia, it does not cure it, and that, in order to perfect the cure, we must have recourse to a tenotomy of the external rectus. In the treatment of insufficiency of the internal recti, it is of the greatest consequence accurately to ascertain the relative strength of the external and internal recti muscles. In order to test the strength of the abductor, we must proceed in the following manner:—The patient being directed to look at a candle placed at a distance of from six to eight feet, prisms of various strengths are to be placed, with their base inwards, before one eye, until we find the strongest with which he can still see the object single—*i. e.*, which he is able to overcome by a voluntary divergent squint,—a voluntary exertion of the external rectus muscle. When a prism is placed with its base inwards before one eye, the rays from the object will be deflected towards the base of the prism; they will, consequently, not fall, as in the other eye, on the yellow spot, but on a portion of the retina internal to the latter. Homonymous diplopia will, therefore, be produced; and, in order to escape from this, the eye will be moved outwards by the action of the abductor, so that the macula lutea is brought to the spot to which the rays are deflected by the prism. In this way the diplopia will disappear, but there will now be a divergent squint. We may easily ascertain the strength of the external

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rectus by increasing the strength of the prism until the diplopia can no longer be overcome by a voluntary squint. To ascertain the strength of the internal rectus, the prism should be turned with its base outwards, for the rays will then be refracted towards the outer side of the yellow spot, and crossed diplopia will be produced. In order to remedy this, the internal rectus muscle will contract and move the eye inwards, giving rise, of course, to a convergent squint. In healthy eyes the internal recti muscles are far stronger than the abductors, and can overcome much stronger prisms by a voluntary squint. The internal recti can overcome prisms varying in strength from 14° to 30°, whereas the abductors cannot generally overcome stronger prisms than of 5° or 6°. In insufficiency of the internal recti this is completely reversed, for then the abductors may greatly exceed the adductors in strength.

This affection may be alleviated by the use of concave spectacles for reading, or by the use of prisms with the base turned inwards. But we can only cure it permanently by strengthening the internal recti muscles, either by constant exercises with prisms, or by a division of the external recti. The prismatic exercises only answer in very slight cases, and even then their use is generally so wearisome to the patient, that it is far better to have recourse to an operation. By dividing the abductor, indirectly strengthening the internal rectus, for the latter will now have only a diminished resistance to overcome. Our chief aim must be to enable the patient to maintain, without difficulty and exertion, the convergence of the optic axes during reading, etc.

The distance at which he will require to maintain this convergence will, of course, depend upon the state of refraction of the eyes; if he is so short-sighted as to hold the book at six inches from the eyes, he should be able to maintain a steady convergence at five inches. To attain this must be our primary object, even although there may be after the operation a slight convergent squint for distance; for this will be remedied by the patient by a voluntary exertion of the abductor, in order to escape from the diplopia. The amount of convergent squint which may be left with impunity after the operation, must depend upon the relative strength of the internal and external recti muscles. The extent of the operation must vary with the strength of the internal rect; if they are exceedingly weak, and if the covered eye moves outwards to the extent of from 1 to 2 line, we may have to operate upon both eyes. But both should never be operated upon at one sitting: it is wiser first to operate upon the worst eye, and then, after a few days have elapsed, thoroughly to examine the position of the eyes during convergence, and to ascertain the strength of the muscles, and then, should it be necessary, to repeat the operation upon the other eye. Should the effect be too considerable you can then always limit it by a conjunctival suture.

III. *Operation for Diplopia.*—We are sometimes called upon to operate for the cure of diplopia, the deviation of the optic axis being, at the same time, perhaps, hardly perceptible. These form the most difficult and intricate cases, for here less depends upon mere manual dexterity than upon a complete mastery of the theoretical portion of the subject, and a thorough knowledge of the actions of the muscles of the eyeball and their effect upon the position of the vertical meridian. My space will not allow me to do more than mention the chief points to be considered in the treatment. We must, in the first place, ascertain in what directions prisms have to be turned in order to fuse the double images, and whether any active tendency exists to unite the images if they are closely approximated. We find that certain kinds of double images are far more difficult to unite than others. It is quite impossible to fuse images which are of a different height, except, indeed, this difference be of the very slightest, equalling a prism of 1°. Crossed double images again are far more difficult to unite than homonymous. If the double images show a difference in height, we must first endeavour to remedy this by an operation, and then, when this is cured, the patient may be able to fuse them if they are sufficiently close to each other. Should they be crossed, we must change them into homonymous, and approximate them closely to each other, so that they may be easily united.

IV. *Secondary Strabismus after Paralysis of the Opponent Muscle.*—Our treatment must vary with the amount of immobility in the direction of the paralysed muscle. Let us assume that, after a paralysis of the abductor, the immobility outwards amounts to from 1 to 1½ line, but that there is no deviation inwards, so that the diplopia only extends up to the middle line, or but slightly into the opposite half of the field of vision. In such cases, a simple tenotomy of the internal rectus will generally suffice. If the immobility exceeds 1 to 1½ line, ranging between this and 2 to 2½ lines, a simple tenotomy will not suffice, and we must then bring forward the insertion of the paralysed muscle, and combine with this a partial tenotomy of the opponent. If the want of mobility in the direction of the paralysed muscle exceeds 2½ lines, we must bring forward the paralysed muscle, and, at the same time, divide its opponent completely. Our object in bringing forward the insertion of the paralysed muscle is to afford it an increased amount of power over the eyeball; for, the more anterior its insertion, the greater its power (a).

I will now shortly describe the manner in which Von Graefe's double operation of bringing forward the insertion of the paralysed muscle and of dividing its opponent, is to be performed. Let us assume that the internal rectus of the left eye is paralysed, and that we purpose bringing its insertion forward, and dividing the external rectus. As the operation is painful and tedious, the patient should always be placed under the influence of chloroform. The lids being kept well apart by the wire speculum, the insertion of the paralysed muscle is to be divided just as in the operation for squint, but its connexion with the sclerotic is to be more freely severed, and the connective tissue on each side of the muscle more freely incised. The conjunctival wound, though larger than in an ordinary tenotomy, should not be too considerable. We must carefully sever the conjunctiva from the superficial portion of the muscle. Although the latter will still adhere to the lateral expansions of the capsule of Tenon, it will be freely movable upon the sclerotic, so that the free end of the tendon can be brought up to, or even beyond, the edge of the cornea. In order to retain it in this position, the eye must be turned inwards as far as possible, and be immovably kept in this position until the tendon has reunited with the sclerotic at the desired point. We need not fear any ill-effect to the cornea, for its epithelial layer prevents any union between it and the tendon. We must next pass on to the tenotomy of the abductor. A large squint hook having been passed beneath the tendon, we take a silk thread, carrying a curved needle at each end, and thrust one needle from without inwards through the lower third of the tendon, so as to bring it out below the lower edge; the other needle is then to be passed in the same way through the upper third of the tendon. The free ends of the thread are then to be tied, so that the suture, which is situated between the insertion of the muscle and the hook, will include the two external thirds of the tendon. The tendon is then to be completely divided behind the suture, so that the latter is left firmly attached to the stump. The eye is then to be rolled inwards as far as possible, and is to be maintained in this position by the threads, which should be fastened firmly to the bridge of the nose by strips of plaister. In order to maintain perfect immobility of the eyes I generally bandage up the healthy eye. Cold water dressings are to be constantly applied so as to subdue any inflammatory symptoms. The threads should be left in for from twenty to thirty hours.

V. *Secondary Strabismus following Tenotomy of the Opponent.*—In bringing the insertion of the formerly divided muscle forward, we must dissect the conjunctiva somewhat more freely off from the surface of the muscle, and also divide the adhesion between the latter and the sclerotic more freely; in other respects the different steps of the operation are the same as in the last. The prognosis is, however, more favourable.

I have seen also some very successful results from Mr. Critchett's operation. This consists in dissecting off from the sclerotic all the parts covering the inner side of the globe (in cases in which a former operation for convergent squint has been followed by secondary divergent strabismus), including conjunctiva, subconjunctival fascia, old cicatrix and muscle, with condensed tissue around it. He next divides the external rectus, and finally passes sutures through the flap which has been raised at the inner side of the eye, and stitches this to the small portion of conjunctiva left standing at the inner edge of the cornea. In this way the whole muscular layer of the internal rectus is brought forward. My space will not, unfortunately, permit me to describe Mr.

(a) I must refer the reader for further information upon these points to Von Graefe's article on "Strabismus."—*Archiv.*, vol. iii.

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Critchett's operation at length, and I would, therefore, refer you to his papers on "Strabismus," published in the *Lancet*, vol. I., 1855.

Von Graefe has lately performed a somewhat similar operation with great success. He dissects the conjunctiva carefully off the upper surface of the muscle, and then freely divides the latter from its sclerotic attachments, so as to make it quite movable upon the sclerotic. A suture is then passed through the free end of the tendon, which is brought forward and fastened to the slip of conjunctiva which has been left standing at the edge of the cornea. The opponent muscle may then be divided. I think that this mode of operating would prove particularly advantageous in cases in which we wish to bring forward the tendon of the external rectus; for, if the suture is passed through the tendon of the internal rectus, the latter would have to be divided rather far back, the conjunctiva and subconjunctival tissue would be too freely incised, and considerable sinking of the caruncle might ensue.

ORIGINAL COMMUNICATIONS.

CASE OF POISONING BY SULPHURIC ACID.

By EDMUND HEGINBOTHOM, M.D.

On Wednesday, November 19, at 5.30 p.m., I was called to attend Geo. B., an itinerant draper or packman, lodging within fifty yards of my house, who was said to have taken vitriol for the purpose of committing suicide. On my arrival I found a druggist present, who recognised the man as having bought three ounces of spirit of vitriol at half-past three o'clock that afternoon.

The patient was dressed, with the exception of his coat and boots, was laying on his right side, with the knees drawn up and body bent forward, breathing slowly, and moaning as from pain; there was dark-brown froth issuing from the nostrils, and a discharge of stringy, copper-coloured mucus and froth was issuing from the dependant corner of the mouth and there were patches of the same about the bed-clothes; the mucous membrane of the mouth was white and ragged, and the tongue presented a dead white appearance; there were no stains of acid on the face, lips, or body clothes; there was neither vomiting nor purging. Tested with litmus the discharge from the mouth proved intensely acid, that from the nose almost neutral.

The surface of the body was cold and clammy; pulse small and quick; he was roused with difficulty, and when roused, resisted fiercely, saying, in a hoarse, muffled voice, "Let me alone—let me die."

Owing to his violence, it was extremely difficult to gag him, but we succeeded at last, and then, by holding his nose and using a funnel, he was drenched with a fair quantity of magnesia and water; he was then put to bed, covered with blankets, and heat applied to the extremities; but reaction never took place; he had two or three rigors, and died collapsed at half-past six, just two hours and a-half after taking the dose.

Post-mortem Examination Fourteen Hours after Death.—Rigor mortis present; the body that of a well-developed, exceedingly muscular man of about fifty; cadaveric lividity of the dependant parts of body. On opening the abdomen, the stomach was visible, of a bluish black colour, distended with gas, and the vessels on the surface black and prominent. No stains on any of the adjoining viscera; no fluid in the peritoneal cavity. The tongue, larynx, œsophagus, stomach, and duodenum were removed entire, and presented the following appearance:—The apex of the tongue had almost escaped injury, but the sides and body were white and leathery; papillæ prominent; fauces white; mucous membrane easily detached; epiglottis swollen. Œsophagus: mucous membrane brown, thrown into folds, and having a tesselated or worm-eaten appearance; no breach of surface or perforation. The stomach contained about a pint of thick, black, tenacious acid-fluid, and was lined throughout with a firmly-adherent black gelatinous coat, which could be scraped off with the finger-nail, but was not detached by washing or rubbing. This was darkest at the cardiac extremity, and gradually shaded off towards the pylorus, where it became brownish-black, and continued getting lighter though the duodenum and commencement of the jejunum, where it terminated in apparently healthy intestine. The action of the acid was most perceptible at the cardiac end, where the coats were extremely thin, but there was no perforation. The glands at the pyloric extremity shone through the adventitious coat, and had the appearance and feel of small tubercle; no perceptible contraction of the pylorus. Lungs, heart, liver, and kidneys healthy. Brain not examined.

The quantity of acid taken in this case was six drachms, of specific gravity 1·848, diluted with eighteen drachms of water, and there was positive proof that it was taken at four o'clock or a few minutes after, and the unusually rapid termination of the case may, I think, be attributed to two causes—1. The acid being taken on an empty stomach; 2. The deceased having been constantly drunk for the last week or more, the system was in a depressed condition, and not able to rally from the shock necessarily caused by such extensive injuries as the post-mortem revealed.

Bruton, Somerset.

TWO CASES OF ENLARGEMENT OF OVARY.

Reported by Mr. E. L. HUSSEY.

OVARIAN DROPSY—ABSORPTION OF THE FLUID —RETURN OF THE DISEASE.

A woman, aged 35 years, was admitted on December 14, 1846, into St. Bartholomew's Hospital, under the care of the late Dr. Hue, with encysted dropsy of the abdomen, which, from the account she gave, had existed for about five years. She had been in the Hospital in December, 1845, under the care of the late Dr. Roupell, with the same complaint; she had been tapped at that time, and Dr. Roupell's opinion was that she was the subject of ovarian disease.

She was in a low and very weak state, with aphthæ on the inside of the lips and cheeks; she complained of severe pain in the abdomen,—and, indeed, she seemed to be sinking from exhaustion.

Nutritious diet was ordered, with wine; and opium was prescribed freely, to allay the pain.

Under this treatment, with rest in bed, the swelling of the abdomen disappeared completely; no tumour of any kind could be detected in the abdomen or pelvis, by external examination. She left the Hospital, in comparatively good health, on February 1, 1847.

She was re-admitted on April 22 following, with a return of the dropsy, and discharged on July 12. She was again admitted on August 14 (under the care of Dr. Burrows, I think). After being tapped, she died, with symptoms of peritonitis, on November 28, 1847.

The abdomen was examined by Dr. Ormerod (now of Brighton) and myself. The usual appearances of acute peritonitis were present. A single ovarian cyst, with thick walls, contained several ounces of purulent matter, with the mark of recent puncture through the walls of the abdomen.

ENLARGEMENT OF OVARY: THE CONTENTS DISCHARGED THROUGH THE RECTUM.

A woman, 40 years of age, mother of several children, the wife of the President's gardener in Kent, was admitted into St. Bartholomew's Hospital on December 31, 1845, under the care of the late Dr. Hue, complaining of occasional attacks of obstruction of the bowels, with great pain in passing solid fæces. Before admission she had been under the care of Mr. Gould, of Wateringbury, who considered that she was suffering from disease of the uterus or ovary. The left ovary, much enlarged, and very tender on pressure, could be felt in the iliac region as she lay in bed. Pills of calomel and colocynth, and afterwards calomel and jalap, were prescribed. These caused great pain in action, as did also an enema of warm water administered by the sister of the ward.

On January 26 she was seen by the late Dr. Rigby, in consultation with Dr. Hue. Upon examination per rectum and per vaginam, the left ovary was felt, enlarged and inflamed, pressing on the rectum, and pushing the fundus uteri into the right iliac fossa. Small doses of sulphate of magnesia, with dilute sulphuric acid, were prescribed, to be taken twice a-day, and some leeches were applied to the groin. Dr. Rigby wished the leeches to be applied within the rectum, by means of a tube; but from the difficulty in keeping the tube steadily pressed against the tumour this could not be done effec-

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tually. The motions, being liquid, now passed without pain. A common enema was also occasionally given without causing any pain. She improved much in health, the pain ceased, and she thought herself well enough to return to her home in the country on February 14. The tumour of the ovary, though no longer tender on pressure, was little, if anything, less in size.

She continued in good health till the end of April, when Mr. Gould was summoned to attend her under a fresh and more severe attack of pain and constipation, attended with acute fever. This continued without relief for about a fortnight, when, after passing, per anum, what she described as some "thick and stringy stuff," she suddenly felt complete relief.

As soon as she was able to bear the journey, she was brought to London, and re-admitted into the Hospital, under Dr. Hue's care, on May 26, 1846.

The next day she was seen by Dr. Rigby, in consultation with Dr. Hue. Upon examination per vaginam and per rectum, the uterus was found to be slightly displaced, but free from disease. The left ovary could be felt, but neither so large nor so painful as formerly; it could also be felt, through the abdominal parietes, smaller in size, knotty, and rather tender on pressure. Small doses of sulphate of magnesia, with dilute sulphuric acid, were ordered to be taken freely, and five grains of extract of conium night and morning. An enema of warm water brought away much thick mucus and purulent matter. Six leeches were applied to the groin. Meat diet, with wine, was ordered. A slight attack of menorrhagia followed the examination.

She recovered her health rapidly. The pain in the rectum was seldom felt, unless when in the erect position, and after taking much exercise; and she became able to pass a solid motion without pain. She was discharged from the Hospital on June 21. The remains of the enlarged ovary could scarcely be felt by external examination.

She continued for some years in good health, without making any complaint, and without any return of the disease. Having removed to a distant part of the county, she passed from Mr. Gould's observation, and she died at Gravesend in the last winter. Dr. Sanders, under whose care she was in her last illness, tells me that she died under an attack of fever, with congestion of the brain. She never complained of any pain upon making pressure over the abdomen or pelvis, and he did not find any appearance of a tumour.

Remarks.—These short notes of the cases were taken at the time the patients were under treatment. In one case, the disappearance of the fluid for a time threw some doubt around the diagnosis; the return of the disease and the examination of the body showed the real nature of it. In the other case, in the absence of the proof which might, perhaps, have been obtained by a careful examination of the contents of the pelvis, the correctness of the diagnosis must rest mainly on the opinion held by Dr. Hue and Dr. Rigby, both of whom considered, throughout their attendance on the patient, that it was the ovary which was the subject of morbid enlargement.

Oxford.

ON

FUNCTIONAL APHONIA.

By MORELL MACKENZIE, M.D. Lond.

Physician to the Metropolitan Free Dispensary for Diseases of the Throat and Loss of Voice.

THIS disease, which is generally supposed to be of an hysterical character, and, indeed, often goes by the name of "hysterical aphonia," is not usually attended with any considerable alteration in the character of the laryngeal mucous membrane. In some cases, the membrane, as seen in the laryngeal mirror, appears perfectly healthy and of normal colour, whilst in others there is slight general congestion or limited follicular disease. The same degree of congestion is often met with, however, where there is no impairment of function, and where there are no subjective symptoms of disease. The hyperæmia, therefore, which is sometimes present, is regarded merely as an occasional accessory, due, perhaps, to the same cause which produced the aphonia, or, perhaps, the slight local congestion may be secondary to the loss of function in the part. The vocal cords are seen to approach one another, and, in many cases, become approximated in apparently the same way as when sounds are emitted.

There is another class of cases in which aphonia is present, namely, where there is profound anæmia, with great muscular debility. In these cases the mucous membrane is extremely pale, and the immediate physical cause of the aphonia is imperfect approximation and insufficient tension of the vocal cords. This form of aphonia differs from that under consideration, both as regards its nature and the treatment it requires, and it is only mentioned here for the sake of discriminative diagnosis.

Pure functional aphonia, for the most part, affects girls or young women under thirty. The general health is almost always good, the patients are well nourished, and the muscles firm; there is usually no irregularity in the menstrual function. The local condition of the larynx has already been described.

Though this disease is often considered to be a form or symptom of hysteria, none of the patients who have come under my observation have been of the hysterical temperament. In none of them have there been any of the common and acknowledged phenomena of that disease. On the other hand, during eight years' daily attendance on Hospital practice, of the numerous cases of hysteria that have been seen, none have been affected with aphonia. If all those diseases in which there is functional derangement, without any palpable organic disease, are to be called hysterical, with an equal regard to scientific truth, the term might be applied to many cases of dyspepsia, tetanus, and other diseases where the etiology is at fault.

The disease probably depends on an irregular or perverted distribution of the "nerve force," but it is better to be guided by the principles of positive philosophy, and merely recognise phenomena, than, carried away by an ambitious desire to penetrate the essence of things, to assume the operation of causes which cannot be shown to have had any actual existence (a). The want of success often met with in treating these cases must have annoyed every Practitioner who has had to deal with them; and in recommending the application of galvanism to the vocal cords, in cases of simple functional aphonia, as a remedy at once rational, safe, and certain, it is believed that another item has been added to the category of positive therapeutics.

The two cases reported below have been selected from among others, where the treatment was not less successful, because the patients were both for a long time in the London Hospital, and are well known to several of the Physicians and Medical pupils. In neither case was there a single symptom of hysteria. It is to be observed, though no particular importance is attached to the fact, that magneto-electricity has always been used in applying galvanism to the vocal cords.

In employing galvanism, one sponge was placed externally over the thyroid cartilage, and the other introduced into the larynx with the aid of the laryngoscope, and applied to the vocal cords (first to one and then to the other); this sponge was also carefully placed in the posterior surface of the arytenoid cartilages, where, in consequence of the connexion between the superior and inferior laryngeal nerves, it is easy to stimulate both branches.

Case 1.—Sarah S., a healthy, fresh-coloured young woman, aged 25, living at High Wycombe. She first lost her voice in March, 1861, "after inflammation in the throat," as she states. In September, 1861, she became an in-patient in the London Hospital, and, though a laryngoscopic examination did not detect any local disease, every kind of treatment—topical and general—was industriously tried. Blisters were applied to the throat, and galvanism was used externally—the current being passed right through the neck. The anti-hysterical *regime* was strictly enforced, cold shower baths were used daily, and a generous diet allowed. After persevering for three months in this plan, no benefit having resulted, the patient was discharged.

In January, 1862, she was again admitted into the London Hospital, and, though the same severe system was not pursued, the larynx was swabbed every other day with strong solutions (ʒj. ad ʒj.) of nitrate of silver, the laryngoscope being

(a) In one of the cases related by Rühle, in his comprehensive work on "Kehlkopfkrankheiten," the so-called hysterical aphonia, which had resisted every kind of treatment, disappeared after an epileptic seizure. Does not this termination of the disease point to a different etiology than its nomenclature indicates?

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used to ensure its proper application. Though, perhaps, not strictly in accordance with the rational requirements of the case, this method of treatment seems to have proved useful (in the so-called hysterical aphonia) in the hands of M. Trousseau. In this case, however, it was abandoned after a month's unsuccessful trial, and the patient left the Hospital unrelieved.

At the end of September, 1862, my connexion with the London Hospital having ceased, the patient again came under my care, and this time I resolved to try the diffusive method of cauterising the larynx. My friend, Mr. Thompson, the inventor of the hydro-pneumatic injecting apparatus, was kind enough to use his highly ingenious instrument on my patient. I was induced to try this plan of treatment from the apparent success which has attended its use by Mr. Thompson in similar cases. It must be stated, though, that in the cases in which that gentleman was successful, the exact diagnosis was not verified with the laryngoscope. This method of injection was employed every other day for some weeks, and, whilst the patient was under treatment, her friends thought that she once spoke a word out loud. She, however, was not aware of it. The injections were industriously continued, but, as the patient did not regain her voice, she returned to the country.

In the beginning of January, 1863, she again came under treatment, and this time I determined to apply galvanism to the vocal cords. After internal galvanism (which was used daily) had been repeated twice, the patient spoke for half-an-hour. After galvanism was applied on the fourth day, she recovered her vocal powers for some hours, though the voice became feeble in the evening.

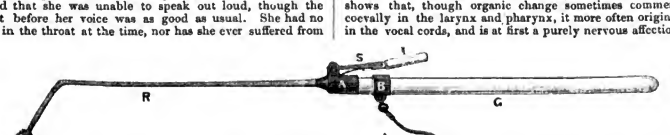
At the end of a week she completely regained her voice, and since that time it has remained as perfect as it was before she lost it two years previously.

Case 2.—Emily M., aged 18, a tolerably robust, healthy-looking girl, living in Shoreditch. She lost her voice suddenly in September, 1861. On getting up one morning she found that she was unable to speak out loud, though the night before her voice was as good as usual. She had no pain in the throat at the time, nor has she ever suffered from any irritation of the larynx since she was first affected. This young woman was in the London Hospital for some months, and every kind of treatment (including external galvanism and local cauterisation) was tried in vain.

On January 6, after this patient had suffered from complete loss of voice for sixteen months, galvanism was applied to the vocal cords. Whilst galvanism was being applied for the second time, the voice returned during the operation; within an hour, however, the voice was again lost. After the third application of electricity, the voice was recovered altogether. The galvanism has been applied once or twice since, but the patient is now completely cured.

In the application of galvanism to the vocal cords, considerable difficulties had to be contended with. The irritability of the larynx is such, that it does not allow sufficient time to set the current going after the sponge has been passed below the epiglottis. Again, if the current is passing along to the sponge, before the latter is introduced into the larynx, however carefully the rod is covered with a non-conducting substance, in introducing the instrument, it is very difficult to avoid touching some spot above the larynx. This causes the patient to start and withdraw, and afterwards it is almost impossible to reach the larynx. The woodcut shows the instrument (b) which will be found to obviate these difficulties. The instrument is twice the size of the cut. The current is set going, but does not pass beyond a certain distance (the metal ring B), until the operator has introduced the point (P) into the larynx, when he touches the ivory handle (I), and the spring (S) connects A and B, so that the current then passes on to the vocal cords.

As a corollary to this communication, it is suggested that galvanism might be advantageously applied to the vocal cords in the early stages of clergyman's sore throat. There is no doubt that, in this disease, the nerves are affected primarily before any deposit takes place in the follicles; and though the disease has been hitherto supposed to commence in the fauces and proceed downwards into the larynx, the laryngoscope shows that, though organic change sometimes commences coevally in the larynx and pharynx, it more often originates in the vocal cords, and is at first a purely nervous affection.



A and B, two rings of metal, separated by an intervening portion of glass rod. There is a permanent metallic connexion between A and P. S, the metal spring which connects A and B, when I, the ivory handle, is pressed upon. R, conducting rod, covered with gutta-percha. G, glass handle. P, point covered with sponge. W, wire, which connects the instrument with galvanic machine.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

CASE OF FRACTURE OF BASE OF THE SKULL—DEATH—AUTOPSY.

(Under the care of Mr. PAGET.)

For the notes of this case we are indebted to Mr. Best:—

W. R., aged 35, a powerfully-built man, a carpenter, and of intemperate habits, was admitted into St. Bartholomew's Hospital, on Monday, November 3.

About two hours previous to his admission, and while at work, he is said to have fallen from the height of about ten feet upon some timber. He was not actually seen to fall, so it is uncertain upon what part of his body he was struck; he was found, however, lying on his stomach, in an unconscious state. He gradually recovered consciousness, and, as he was bleeding from the left ear and complaining of pain in the back, was brought to the Hospital.

At the time of his admission he was able to answer questions rationally, though slowly and somewhat confusedly; was very restless, and complained of great pain in the dorsal and lumbar regions. There were no external marks of violence on the head, with the exception of a slight bruise over the occipital and right parietal bones; there was, however, a continuous and tolerably free discharge of blood from the left ear. There was no loss of motion or sensation in any of his limbs. Pills of calomel and jalap were given, and a black draught next morning.

November 3, 10 o'clock p.m.—He was very sick after the pills, and about 6 o'clock p.m. became delirious and very restless, complaining of more pain in his back. Shortly afterwards, he was seized with a convulsion of a distinctly epileptiform character, preceded by a scream, and this was followed by three others of a similar character, at intervals of ten to fifteen minutes. His head was shaved about 7 p.m.

At the present time he is very violent, and endeavours to get out of bed, so that it is necessary to confine his limbs with straps. He lies scarcely sensible; both pupils are dilated and inactive; and the bleeding from the ear still continues. Breathing natural. Pulse small and quick. Skin hot and perspiring. It was found on inquiry that he had never before suffered from epileptic fits.

4th.—Passed a restless night, and this morning he still lies in a drowsy, barely sensible, state. Lips, teeth, and tongue dry; eyes closed; breathing heavily and rather noisily, but not stertorously. He can be roused by speaking to him, touching his conjunctivæ, etc.; and when roused he stares anxiously about him, but almost immediately closes his eyes again, moaning. The hæmorrhage from the ear is now suc-

(b) This instrument has been made in a very neat manner by Mr. Krohne, of the Whitechapel-road.

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ceeded by the continuous flow of a clear, pinkish fluid, not coagulable by heat. There is no loss of power in the limbs, but the sensation seems somewhat impaired, but very slightly. Skin natural; pulse 60, of good volume, and steady. He has taken a moderate amount of food. No more sickness has occurred. Bowels not open.

7th.—Since the date of the last note there has been a gradual but very slight improvement. Though lying for the most part in a semi-conscious state, yet he can be roused more readily, and takes more notice of those about him. He has passed tolerably quiet nights, with the exception of last night, when his bowels were opened three times (after five grains of calomel), and each of these times he got out of bed of his own accord. The discharge from the ear still continues, but less freely. Skin, pulse, and breathing almost or quite natural. Tongue clean and moist. Takes his food (beef-tea, milk, etc.) better, and seems to express a desire for it by making signs. He has not spoken since the evening after the accident. He has made signs, also, of feeling pain between the shoulders.

10th.—During the last three days there has been a change for the worse. The discharge from the ear had quite ceased on the 8th, and in the latter part of that day he again began to suffer from convulsions, differing only from the first in not being preceded by a scream, and in being, on one or two occasions, confined to the right side of the body. These have continued up to the present time, occurring frequently, but at irregular intervals. Yesterday, in the intervals of the fits, he seemed rather more sensible, looking as if he understood what was said to him, but either could not or would not speak. He would put out his tongue and move any limb when told to do so. This morning, however, he looks pale, anxious, and unsteady, rolling his eyes about, and seeming but half conscious when spoken to: he is constantly working his fingers and turning over uneasily in his bed. Sensation is not so good. Skin natural; pulse 96 and jerking. Bowels open last night; urine passed involuntarily, as it has been almost since the accident, though he has occasionally got out of bed to pass it. He has taken but a moderate quantity of beef-tea and milk. ℞ Hydrarg. chlor., gr. ¼; ext. belladonnæ, gr. ⅛, to be taken every two hours.

12th.—His bowels were freely opened by the pills, which were discontinued after he had taken them twelve times. The fits were much less frequent and severe yesterday. To-day he has had but one. He spoke a few words on the evening of the 10th, which was the first time since the day after the accident, and this morning he speaks well and rationally, but hurriedly, when addressed. He seems much better, not, however, looking composed, but lying with a flushed and unquiet aspect and unsteady eye. Slept well last night, and says that he is "all right;" has taken beef-tea and arrowroot in fair quantity, and one egg. Bowels opened again freely yesterday, and urine passed naturally.

14th.—He has had no more convulsions, but yesterday afternoon he again changed for the worse. He has been very restless, getting out of bed and walking about the ward, so that it was necessary again to confine his arms. He is now lying with his head thrown back on the pillow; his face paler and duller, and is incessantly muttering, talking, or singing. He comprehends less, apparently, of what is said to him—putting out his tongue, however, if asked to do so, and occasionally answering questions. He did not sleep at all last night. Pulse of fair volume and strength, but variable, being 112 in the morning and 90 in the afternoon. Skin cool and relaxed, temperature being 100 in the axilla. Tongue drier, but not much furred. Has taken some beef-tea and arrowroot. Bowels freely opened after repeating the pill of calomel and belladonna six times. Fæces and urine passed involuntarily. Six ounces of wine were ordered.

16th.—He has not slept now for three days, and, in other respects, has steadily become worse, being less conscious, more restless, and constantly delirious. He has had no fit since the last note. His face is flushed, dull, and sweating; eyes restless and wandering; lips dry and sore from herpes; sordes on the teeth; is constantly moving his fingers about in a fidgety manner; speaking occasionally, but thickly and indistinctly. A clear, colourless fluid again began to flow from the left ear yesterday (this fluid, on analysis, was found to contain albumen in large quantities, alkaline phosphates, and a little chloride of sodium; no fibrin, gelatine, urea, or sugar were detected). There is no paralysis of the face, arms, or legs. Pulse 120, feeble and small; breathing 36; temperature in the axilla 101; tongue brown and dry; bowels opened freely last night; urine and fæces passed unconsciously. Has taken beef-tea and milk, with wine ℥x., in the twenty-four hours. Ordered to take fifteen drops of tincture of opium every two hours until he sleeps.

18th.—The only change observable yesterday seemed due to the opium, the influence of which became very marked after the third dose; and after he had received the fourth dose its exhibition was discontinued. He lay dozing and sleeping during the greater part of the day, with a flushed but quiet face, and no restlessness. Pulse 126, and soft. Temperature in axilla 101¼. This morning the effect of the opium has gone off, and he has had three fits, preceded by gaping, but not by a scream. He lies now quite quietly, and without any of the restless movements either of the head, eyes, or limbs, which had been so evident up to yesterday. His face is flushed, slightly sweating, and very heavy and dull; eyes closed; the only sign of intelligence being an attempt to put out his tongue when told to do so in a loud voice, and an occasional semi-conscious look. Discharge from the ear continues. He has dozed or slept during the night. Skin relaxed and perspiring. Temperature 101¼. Pulse 132, feeble. Breathing 36, and very shallow. Tongue dry. Takes nourishment with some difficulty and in small quantities. Bowels opened freely. Urine passed unconsciously.

19th.—This morning he lies quietly with his head on its side and thrown back; face flushed; eyes half open, and giving no indication of consciousness, his only movements being those of respiration, which are quick, regular, and shallow, over 50 in the minute. Pulse 144, small, soft, weak, and tremulous. He has taken a small quantity of wine and beef-tea in the night, but has now been unable to swallow for several hours. Bowels quiet. Urine passed unconsciously. Skin hot and sweating. Temperature in axilla 105. The discharge continues to flow slightly from the ear, and he has had several fits since yesterday—the last occurred at twelve o'clock to-day. Died at 6.30 p.m.

Post-mortem Examination Seventeen Hours after Death.—In cutting through the skull cap in the usual manner nothing unusual was to be observed, unless that the bones were thin, and particularly that part of the occipital bone which is included between the superior and inferior curved lines—the bone in this situation being quite translucent. The surface of the brain was much congested, and smeared over, especially at its posterior lobe, with a quantity of extravasated blood, mixed with puriform lymph, both on the free surface of the arachnoid, and between the arachnoid and pia mater. On removing the brain a considerable quantity of blood was found extravasated in two places at the base of the skull, on the inner surface of the dura mater, one of which covered the space occupied by the posterior and lower part of the left cerebral hemisphere, and extended forwards to the anterior edge of the "tentorium cerebelli" on this side; the other, and, apparently, distinct extravasation, was also on the inner surface of the dura mater, and covered the left orbital plate of the frontal bone. In the latter spot the blood was broken down, soft, and grumous-looking, as if it had been effused for some time; and the portion of the anterior lobe of the brain in contact with this extravasated blood was found to be cracked and ecchymosed. (For further account of the appearance of the brain see next page.) On taking off the dura mater and carefully examining the base of the skull two discontinuous cracks were discovered. The first began at the posterior part of the occipital bone, about an inch to the right of, and somewhat below the torcular Herophili, and passed almost straight downwards towards the foramen magnum, where it finished by dividing into two, as it were, and thus making the bone comminuted. The other crack began with some comminution on the left margin of the foramen magnum, and, after first passing outwards as a single crack, took a more straight direction forwards, and passed almost transversely over the petrous portion of the temporal bone, and, after passing down the anterior surface of the petrous bone, finished at its anterior border in the upper wall of the tympanum in a slightly starred manner. Between the dura mater and the petrous bone, in and near this spot, a small quantity of clotted blood was found, but no opening in the dura mater could be found in any part. In order to examine the bones more carefully, the whole of this part of the base of the skull was removed by including the petrous bone between two cuts, one transversely across and in front of it, to the

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sella turcica, the other obliquely behind it into the foramen magnum, the two being joined by sawing straight forwards through the basilar process of the occipital and sphenoid bones, from the foramen to the sella turcica. After the removal of the bones, the upper wall of the meatus auditorius internus was removed by bone-nippers, and the cut extended up to the point at which the fracture crossed the bone. It was then found that the latter had not cracked the meatus, but had extended quite through the bone immediately in front of the cribriform plate, through which the auditory nerve enters the internal ear, and thus had cracked the vestibule, and laid open the orifice of one of the semicircular canals. The nerves in the meatus (the facial and auditory) were apparently quite uninjured. On the inferior surface of the bone the crack was found to run from the foramen magnum, behind the condyle of the occiput, then transversely outwards at about mid-distance between the mastoid process and the jugular foramen, and so on through the vaginal process up to the wall of the tympanum and membrana tympani. This lower crack was but the lower part of a fissure through the whole thickness of the bones, of which the upper part has been previously described with the base of the skull. The membrana tympani was found ruptured in two places; and from the upper surface of the base of the skull a fine probe could be passed from the anterior end of the crack downwards through the cavity of the tympanum, and out again through the hole in the membrana tympani.

Appearance of the Brain.—There was a quantity of lymph effused between the layers of the arachnoid, especially about the fissures at the base, and in chief between the cerebrum and cerebellum over the crus. Also beneath the visceral arachnoid, and chiefly in the valley of the cerebellum. The vessels of the pia mater were congested, with numerous ecchymosed spots. The substance of the cerebrum was generally soft, pulpy, and over-vascular, with extravasation of blood over the anterior and posterior extremities of the left hemisphere, and also at an isolated spot corresponding with the upper surface of the left petrous bone. The substance of the cerebellum was tolerably firm. That of the medulla and of the pons was greatly congested. As regards the contusions of the cerebrum, the posterior and middle were superficial; the anterior one, however, reached to the extreme depth of one inch, irrespective of the convolutions, and measured superficially two and a-half by one and a-half inches. The brain-substance was here much softened and rust-coloured on the outer half inch; less softened, and mottled with ecchymosed spots, on the inner half. The ventricles contain some puriform fluid, and flakes of softening lymph; their capacity was enlarged, and their walls, towards the posterior horns, were somewhat congested. The septum was broken down and softened, as also was the fornix. There was some soft lymph effused about the Pineal gland, and on the under surface of the velum interpositum. The lining membrane of the fourth ventricle was congested, and particularly about the situation of the hypoglossal, glossopharyngeal, and pneumogastric nerves of the left side.

NOTES OF A CLINICAL LECTURE ON THE ABOVE CASE.

(By Mr. PAGET.)

This patient was admitted into the Hospital stunned. In a little time he recovered his consciousness, but shortly afterwards again became unconscious. The first stage is from the shock of the injury. It may be followed by complete recovery, and is generally followed by consciousness for a time, which is the second stage. When the patient passes into unconsciousness for the second time, this corresponds to the filling of the vessels in the brain, and probably to effusion of serum. This is the third stage. These stages may be illustrated by simpler forms of injury, as, for instance, a blow on a muscle. The muscle is for a time stunned by the blow, but after a while regains power, but when it becomes inflamed from the after effects of the blow the patient either cannot or will not use it.

In this case, the subject of these remarks, when the patient had recovered from the stun, he answered so rationally and seemed so well that there appeared nothing further to fear. Six hours later he became restless, then delirious and convulsed. There had been no remission of symptoms since.

There was bleeding from the ear for two days, and then a pinkish fluid drained away. It was not the serum of the blood (as it did not coagulate by heat), but probably cerebro-spinal fluid. The symptoms were those of fracture of the base of the skull, but there was no convincing and certain sign of this.

Mr. Prescott Hewett, in Holmes' "System of Surgery," has (Mr. Paget said) treated the subject of injuries to the head in an exhaustive manner, and has cleared up many obscurities.

Bleeding from the ear is a sign of fracture of the base, which is of great value, and is generally to be relied on. Yet Mr. Prescott Hewett has brought forward two cases in which there was this symptom, and no injury through into the cranial cavity. The fluid in these cases must have flowed from the mastoid cells or from the tympanum.

What is the treatment of fracture of the base of the skull? As regards the fracture, all we can do is to leave it alone. Occasionally, recovery will take place. As regards the damaged brain, do nothing but shut out all possible sources of mischief. For instance, keep away all possible causes of excitement. Just as we would keep a hurt joint quiet, so we ought to keep a hurt brain quiet. When the patient even looks or thinks, or is roused up, it is like moving the injured brain. In private practice it is difficult to keep the patient quiet, but in hospitals this can be more easily managed. The friends of such patients almost insist on something being done. This question of treatment may be illustrated by the way in which we treat an injury elsewhere, as, for instance, a bruised muscle. There is nothing to do but to keep it at rest. Would it occur to any one to bleed here? And yet it occurs to men of sense to bleed because a man has hurt his brain. What good would it do in injury to a muscle to give mercury? And yet it seems not unusual to give mercury in injuries to the head. Of course there are cases in which there are distinct indications for this kind of treatment. Its adoption as a matter of routine in injuries to the head was to be depreciated. If (Mr. Paget said) the Surgeon is not prepared to give mercury in bruised muscle, he has no ground whatever for giving it in injury to the brain. If, however (he continued), his patient had had symptoms of inflammation, he would proceed to treat it, but as yet he had had no symptoms of the kind. Delirium, convulsion, or other symptoms of cerebral disturbance, are not sufficient alone to establish the diagnosis of inflammation of the brain. The signs to be relied on are those that would indicate inflammation elsewhere—the pulse full and rapid, breathing rapid, skin hot, and the organs of sense acute, and the pupils acting more rapidly. If these symptoms are not present, we ought not to bleed or give mercury, on account of delirium or convulsions, or other symptoms of cerebral disturbance.

What we ought to do is, as before mentioned, to keep away from the patient all possible sources of excitement. We ought also most carefully to attend to the bowels and to the digestive organs. We should keep in mind that the patient can digest little, and, therefore, give but little, and that generally fluid. If the general health should flag, then we should give wine.

In another clinical lecture, Mr. Paget again alluded to this case. He again said that there were no certain signs of fracture of the base, and, as pointed out before, the escape of serous fluid from the ear was not a certain one. Even if there were paralysis of the portio dura, it did not follow that there was fracture through the petrous bone. He had (he said) seen a case of paralysis of this nerve and of bleeding from the ear, following an injury, and yet the patient recovered quickly, and had no head symptoms at all. Another case, lately in the Hospital, also showed this. A man came in with paralysis of the portio dura, with bleeding from the ear, following an injury to the head. The bleeding soon ceased, but the paralysis of the face was permanent. Otherwise he was well.

Again, no amount of cerebral disturbance showed that there was inflammation, and that, therefore, special treatment was required. In this case, for ten or eleven days, the man's breathing and pulse were not quickened, and there was no paralysis except of the bladder. There was no general indications for treatment, and nothing, therefore, was done but to shut out all excitement. On the eleventh day after the injury, along with increased cerebral disturbance, the pulse, which had never been frequent, became rapid, and at 10 a.m. was 112, and at 3 sank to 90. The pupils were dilated and the skin natural. Although the pulse was quicker, it was feeble. This showed that some important changes were taking place in the brain. Six ounces of wine were ordered, and next day,

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pulse having risen to 140, ten ounces. He had not slept for three nights, and, therefore, fifteen drops of tincture of opium were ordered. Having taken this three times he slept for twenty-four hours. This appeared hopeful, but he awoke in the same state as before, and died soon after.

It was found, at the *Autopsy*, that the anterior lobes of the left hemisphere had been bruised (the blow was on the *right* side of the occiput). The brain in the neighbourhood of the bruise was softened, and there were spots of ecchymosis in various parts. There were tracks of purulent lymph along the course of the veins of the pia mater. In the ventricle there was an increased amount of fluid, which also contained some pus. These changes, no doubt, began on the eleventh day, when the man's condition changed, when his pulse quickened.

In reference to treatment of inflammation following injuries, Mr. Paget said, that if the symptoms set in soon after—*e. g.*, within the first two or three days of an injury, or of an operation—we might bleed or depress the patient, or at least refrain from stimulating him. But, when the symptoms set in later—*e. g.*, as in this case, on the eleventh day—then clearly the inflammation was an asthenic one. It was analogous to erysipelas setting in some days after an operation. If, after an amputation, we find tenderness and swelling of the stump within two days, we may treat it with depressing means, apply leeches, or cold lotions, or, perhaps, rather, merely keep the patient quiet, and refrain from stimulants and full diet. But if on the eleventh day the stump were to inflame we should treat the patient with good diet and stimulants. Just so in injuries to parts we cannot see. If after ten days signs of inflammation set in we ought to give wine, just as we ought in erysipelas of the scalp setting in at that time. In fact, we ought to be guided by the time when the symptoms set in, as well as by the symptoms themselves. The man's breathing was more frequent, but it was more shallow; his pulse was quicker, but it was more feeble, so that everything indicated stimulants. That the treatment was unsuccessful does not necessarily show that it is wrong. In fractures of the base of the skull, if we save one in twenty, we should do very well indeed.

It was found that on the right side the bone had been broken. The fissures passed through the expanded part of the bone into the foramen magnum; but on this side it did not reach the petrous bone. Then, beginning at the left of the foramen magnum, a fissure extended outwards and forwards to a point just external to the jugular foramen. It then passed across the middle of the petrous bone, just external to the meatus auditorius internus. It passed through the vestibule, and broke into one of the semicircular canals. Both divisions of the seventh (facial and auditory) had escaped injury. On cutting away the upper wall of the external auditory meatus, two rents were found in the membrana tympani, or rather, as seen, they were oval holes. Just as an aperture from a slit in an artery becomes round, so also in this muscular membrane rents become round.

Several ounces of clear fluid had flowed from the ear during life. As to the source of this, it was in a great majority of cases cerebro-spinal, but it might be from the vestibule, or from the mastoid cells. In this case, the dura mater was intact, so that cerebro-spinal fluid could not have passed through the fissure. The fracture had not torn into the sheaths of the nerve, so that the fluid contained in the pia mater, accompanying these into the meatus internus, did not from this point pass along the fissure into the tympani, and then through the hole in the membrana tympani. In this case, then, the fluid, no doubt, came from the vestibule.

GUY'S HOSPITAL.

INJURY TO THE HEAD—BLEEDING FROM THE NOSE — DEATH — AUTOPSY — FRACTURE THROUGH THE ETHMOID.

(Under the care of Mr. POLAND.)

In this case the cause of the accident was rather an unusual one:—

A man was brought to Guy's Hospital; he had put his head out of a railway-carriage window whilst the train was in motion, and his head came in contact with some stationary object. He lived twenty-four hours. He did not show any signs of compression. Blood flowed into his nose and pharynx.

At the autopsy, a fracture was found on the left side of the frontal bone. It traversed its orbital plate, the posterior part of the ethmoid, and sella turcica of the sphenoid. There was a fissure here one-fifth of an inch wide, and the dura mater in this position was separated from the bone, to a limited extent, by clotted blood. There was much blood between the pia mater and the arachnoid. The anterior and middle lobes of the cerebrum were much crushed and bloody.

INJURY TO THE HEAD—APPARENT RECOVERY IN A FEW DAYS—SUPERVENTION OF HEAD SYMPTOMS SEVERAL WEEKS LATER—DEATH IN TEN DAYS—AUTOPSY.

(Case under the care of Mr. POLAND.)

This case shows that, after apparent recovery from injuries to the head, the patient is still in danger. He may appear perfectly well, and be suddenly seized with cerebral symptoms and die. Sometimes, however, as in a case under the care of Mr. Laurence, in St. Bartholomew's Hospital, the patient may be liable to repeated attacks of delirium, attended with violent pain in the head. In this case there was deafness on one side and discharge from the ear. It followed an injury to the head received some months before. Numerous cases are on record, and we have reported several in point.

Sometimes, as in the second of a series of cases of abscess in the brain, related in this Journal, February 23, 1861, the symptoms may begin some months after the accident. In others, as in the first of that series, the abscess may form soon after the injury. Still, in that instance, the man was reported as progressing favourably until ten days before his death, which occurred just a month after the accident. In Mr. Poland's case, which we give below, the man died six weeks after the injury, but had apparently recovered from the accident, and had returned to work. The symptoms of the morbid processes, the immediate cause of death, were not noticed by him until eight days before death. The position of the injury is also interesting.

E. J. C., aged 20, was admitted on October 29, and died November 2. This patient was admitted about six weeks ago into Luke's ward, under the care of Mr. Hilton, for concussion of the brain after a fall on the head. He went out tolerably well after some days, and resumed his work. About four days before admission, cerebral symptoms came on, and he again entered the Hospital. He was in a drowsy and semi-comatose state. He died November 2.

Autopsy, by Dr. Wilks.—There was no mark of external injury, nor was any found on removing the scalp, and the dura mater under the skull-cap was sound. The surface of the brain was healthy; but on attempting to remove the brain the anterior lobe was found to be adherent over the cribriform plate and the orbit, and was consequently torn. The brain was of an ochry colour and very soft; the cineritious matter being most affected, the medullary but little. On taking out the brain, a quantity of tenacious green lymph was seen at the base covering the optic commissures, pons, etc.; it extended beneath the arachnoid to the cord. The medulla spinalis was found thickly covered with lymph throughout its whole length. The ventricles contained opaque fluid, and their surface was covered with a thick inflammatory exudation which could be scraped off with the knife. The fornix was much softened. At the spot where the brain was adherent, near the inner angle of the orbit, there was a depression, a hollow space about a quarter of an inch in diameter. At one edge of this was an opening which passed into the orbit. There was no appearance of caries, its edge being smooth and firm, and at its lower part it was hard and smooth, like new bone. Near it, on the outer side, was a slight furrow, which might have been a fracture of the internal table. Dr. Wilks adds to the above:—If the appearance here seen had resulted from injury, repair had taken place very quickly. The opening passed into the frontal sinuses and down to the nose, and on examining these they were all found filled with purulent mucus; so that the appearances were quite compatible with a chronic disease of the ethmoid bone.

We shall next week give a further series of cases of injuries to the head.

THE *Times* of February 19 publishes the following telegram:—"Naples, February 18.—The *St. George* left last night for Malta, with Prince Alfred on board. The Prince is suffering from fever."

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PROFESSOR HUXLEY'S LECTURES.

THE Engravings to illustrate the Course are in the hands of the artist, under the direction of Professor HUXLEY. The First Lecture will appear in our next week's Number.

Medical Times and Gazette.

SATURDAY, FEBRUARY 21.

THE COMPOSITION OF THE SKULL—NASAL SEGMENT.

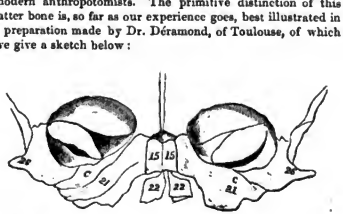
ALTHOUGH the vertebral composition of the skull was discovered by Oken in 1807, and although various works, published immediately afterwards, recognised more or less the doctrines of philosophical anatomy, we believe that the honour of the first practical impetus which was given to the science in Europe is due to Spix, the author of the magnificent work, "Cephalogenesis," published at Münich, in 1815. It was the first collection of the skulls of animals, which, accurately drawn, exhibiting the outside and inside views of the skull, and, in many cases, the cranial bones disarticulated separately, had been offered to anatomists. In spite of its cumbrous shape, and its absurd and obsolete nomenclature, it still remains the "handybook" of the philosophical student. Such a work, comprehensive, succinct, erring neither on the side of prolixity nor brevity, ought to be placed beside every anthropotomist whilst he pursues his inquiries into the composition of the human skull. As many of our readers, however, will not enjoy the advantages of this work, we do not hesitate to recommence the study of the composition of the skull *ab initio*.

The organ which our readers exercise in the task—*i.e.*, the brain—is comprised within four distinct segments of the body. Commencing peripherally, the nasal, frontal, parietal, and occipital vertebræ are each composed, like those of the trunk, of an upper and an under arch. Thus, the nasal vertebra is composed of the rhinencephalic and maxillary arches; the frontal vertebra is composed of the prosencephalic and mandibular arches; the parietal vertebra is composed of the mesencephalic and hyoidean arches; whilst the occipital vertebra is composed of the epencephalic and scapular arches. We propose to commence the consideration of these several segments in detail, and, although the most complex, we prefer to commence with the ultimate segment of the trunk—the nasal.

The centrum of the nasal vertebra is the vomer. This structure in few other animals but man is composed of the ploughshare-like piece, from which its name has been derived. In the fish it is formed like the other centra of the skull, of a long bony rod, perfectly straight, and in the median line. In the crocodile, it is bifid, being composed of two symmetrical elongated plates of bone, each of which has a distinct centre of ossification. A third ossific centre, symmetrical and azygos, is wedged in, and is connate with the expanded pterygoid plates. We shall have to consider these plates more in detail when treating of the diverging appendages of the skull.

The neurapophyses of the nasal vertebra are the "prefrontal" plates, the "*pars media ossis ethmoidei*" of the old anthropotomists. In man and in mammalia they are perforated by a large number of minute foramina, which transmit the olfactory nerves. The prefrontal supports the olfactory ganglia. The median vertical plate, or "*lamina perpendicularis*," has, however, by many anatomists—amongst whom we must reckon Professor Huxley—been considered not to represent the neurapophyses, but the centrum of the nasal vertebra, thus having the same morphological value as the presphenoid. The prefrontal in man, mammalia, and birds, is symmetrical and single; in the reptile and in the fish the ethmoid is double, situated above the vomer, to which it is connected. The neural spine of the nasal vertebra, composed of the two nasal bones in the bird, is bifid, its two long, slender portions sending forth processes to join the premaxillaries and maxillaries.

The pleurapophyses, or "ribs" of the nasal vertebra, are the palatine bones. These, in all vertebrata with the exception of fishes, form an osseous platform, which separates the buccal and nasal cavities. They are united posteriorly to the frontal vertebra by their diverging appendages, the pterygoids. In man and mammals these are slender vertical plates; in birds they are distally dilated, and articulate to the tympanic on one side, and to the palatines and presphenoid on the other side; in crocodiles, they are developed in the form of two large wings, continued on the same line as the horizontal palatines; in fishes, they extend from the palatine to the pedicle of the tympano-mandibular arch. The palatines, or pleurapophyses, are continued anteriorly by their hæmapophyses (the maxillaries), of which the peripheral extremities unite to each other by means of a true hæmal spine, the much-discussed *os intermaxillare* of old, or premaxillary of modern anthropotomists. The primitive distinction of this latter bone is, so far as our experience goes, best illustrated in a preparation made by Dr. Déramond, of Toulouse, of which we give a sketch below:



15. Nasal bone.
21. Maxillary bone.
22. Premaxillary bone.
26. Malar bone.

The nasal segment in its entirety has now been explained; in man, however, its vertebral nature is, we confess, not easily recognisable. The slender bifid neural spine; the neurapophyses, divergent above, and nearly confluent beneath, the olfactory capsules being on either side of them; the vomer, or centrum, essentially consisting of two slender plates, also divergent above; the enormously developed palatine and maxillary bones forming the hæmal arch,—all form instances which tend materially to obscure our correct perception of the vertebral signification of the nasal segment. When, however, we turn to the homologous structure in the fish, we recognise in the upper, or neural, arch of this segment (rhinencephalic arch—*Owen*) an undoubted ring of bone, composed of the nasal, prefrontal, and vomeral elements. And the composition of the maxillary arch is equally demonstrable, although the tendency to "vegetative repetition" has, by the development of such bones as those which complicate the hæmal arch of the fish, somewhat obscured their vertebral signification. Special homology, into which we shall not at present enter, has, however, demonstrated the correspondence, bone for bone, of every essential element in the ichthyic and in the human segments.

THE WEEK.

REPORTED OUTBREAK OF FEVER AT HASTINGS AND ST. LEONARD'S.

A RUMOUR of an outbreak of continued fever in Hastings and St. Leonard's has been so prevalent lately, that "the Lords of her Majesty's Council" have directed an inquiry into the matter, which inquiry proves that rumour has, as usu

exaggerated to a degree closely bordering on falsehood. There has, apparently, been nothing approaching to an "outbreak" of continued fever; but there have been a few isolated cases of fever, of the typhoid or enteric type, and, at least, two deaths from it—a Medical man and a clergyman having died; the latter from intestinal hæmorrhage, on the eighteenth day of the fever. We understand that no new cases have occurred for some weeks, so that it may be concluded that the salubrity of these pleasant health-resorts is, in reality, not deteriorated; but we would remark that the occurrence of these cases ought to impress upon the local authorities the necessity of constant watchfulness over the drainage and sewerage, lest the rapid development of these watering-places, in the hands of building speculators, should outrun the provisions made for the perfect and immediate removal of decomposing organic matters; and so our sea-side health-gardens should be converted into pest-nests and *foci* of fever. We are led to suspect that some danger of this sort has threatened St. Leonard's, not only from the type of the few cases of fever which have occurred, but also from noticing that complaints of nuisances have been laid before the local Board of Health. We are bound to add that such complaints appear to have been promptly attended to.

MEDICAL APPOINTMENTS IN THE HOUSEHOLD OF THE PRINCE OF WALES.

THE *London Gazette* makes the following announcements, which will be received with universal satisfaction by the Profession:—

To be Physicians in Ordinary to H.R.H. the Prince of Wales.—William Jenner, Esq., M.D., and Edward Sieveking, Esq., M.D.

To be Surgeons in Ordinary.—James Paget, Esq., and George Pollock, Esq.

To be Surgeon Extraordinary.—John Minter, Esq., R.N., M.D., F.R.C.S.

To be Hon. Physicians.—Thomas King Chambers, Esq., M.D., William Henry Acland, Esq., M.D., and Alexander Armstrong, Esq., M.D., R.N.

The Royal Family of England set a good example to the country at large of sound and discriminating appreciation of Medical services.

RUSSELL *v.* ADAMS.

THE interest excited by this case amongst our Professional brethren is by no means abated, although it is gratifying to find that it is taking a practical and general turn, and not a personal one. It is generally felt that it is luckily quite unnecessary to consider the case in the interests of Mr. Adams. His Professional friends have rallied round him, and it is quite certain that he will suffer neither in his personal nor his Professional relations. Luckily, he does not need the offer of pecuniary help; and the whole thing, so far as he is concerned, will resolve itself into a somewhat ridiculous and costly misadventure. In reviewing the case in its Professional aspect, the question naturally arises,—Why did Mr. Adams suffer Hospital patients to come to his house; why did he visit them at their apartments; and why did he lay himself open to this abominable and ridiculous charge? To this we reply, that the private history of the whole case, when it shall be ripe for publication, will exonerate Mr. Adams by showing that he is but one of a series of Professors of Law, Physic, and Divinity, in Wales or London, in St. Marylebone, in St. Barnabas, who have, in turns, been captivated by the artless eloquence of these injured and unfortunate ladies, and who, in turns, have supplied them with sympathy and cash. If Mr. Adams was, as may be admitted, foolishly goodnatured—too chivalrously kind towards the widow and daughter of a Professional brother—too ready to admit them to the *status* of friends, and not of paupers,—all we can say is, that (unless rumour is unusually false) he erred in goodly company; and that, if the protector *par excellence* of Medical widows and orphans—the man who, *ex officio*, has had the largest experience of Medical charity—had not been similarly beguiled, it is most improbable that we should never have had the case of "Russell and Adams" before a jury. But, leaving Mr. Adams and his ill luck to the consolations of time, we feel that the whole question of Professional conduct and responsibility deserves to be well discussed. Actions for *malapraxis*, and for neglect, are on the increase; and if our Profession is open to such attacks, the least that we can do is to organise some scheme for mutual protection. Some limitation of gratuitous advice is clearly demanded, not only for the pecuniary interests, or the etiquette, but for the safety of Medical Practitioners. It is worth noticing, that the late Dr. Thomas Elliotson, when Physician to the Surrey Dispensary, found, to his horror, on his desk, one morning, a notice of action for breach of promise of marriage from one of the patients.

DISCREPANCY IN MEDICAL EVIDENCE.

A CASE of alleged ill-treatment of a servant by a mistress has lately been decided at the Surrey Sessions. The jury returned a verdict of Guilty, notwithstanding the glaring contradiction of the Medical men. We reprint the depositions of the Medical witnesses, only remarking that it is from such opposed statements the public draw the damaging inferences we constantly meet as to the value and reliability of professional evidence:—

"Mr. James Broad, Surgeon, practising at Mitcham: On December 20 I was called in to examine the girl Jarvis. I found her emaciated in appearance. Her cheeks were sunken, her eyes hollow, and one was black and cut. There were two large swellings on the back of the hands. There were bruises on both elbows and on her back, and she was in an extremely weak condition. My opinion is that her emaciated condition was caused by insufficient and improper food. The hands now show the effects of the injury. These wounds could have been caused by a fishing-rod. The state of the body was not caused by constitutional defect.

"Cross-examined by Mr. Robinson: There was nothing in her appearance to denote a scrofulous disease.

"Mr. Thomas Evans, Surgeon, Trinity-square: I agree entirely with Mr. Broad."

The following gentlemen were called on the part of the defendant:—

"Mr. Arthur Sergeant, F.R.C.S., twenty years in practice at Queen's-road, Peckham, had examined the girl. She was apparently in fair health, but rather scrofulous. He had seen her hands and fingers, and should think the swellings were caused by scrofula, and not by violence. He thought it was brought on by anxiety, and on that being removed she would in a few days recover her health.

"By Mr. Sleigh: I don't say that the marks on the hands, etc., were not caused by violence.

"Dr. Richard Stokoe, of Peckham Rye: I have examined Sophia Jarvis, and I perfectly agree with the last witness. Had there been starvation during four months she could not have recovered in a week.

"Mr. John Davis, Surgeon, Great George-street, Westminster, fully concurred in the evidence of the other Medical witnesses for the defence."

THE DUTIES OF MEDICAL MEN TO RAILWAY COMPANIES.

A CASE in which two Medical men were severely censured by Mr. Baron Martin for negotiating compensation in a case of railway accident, has brought the subject of the propriety of Medical men acting as agents for Companies in such cases again prominently into notice. The case was one of injury caused by a collision on the London, Brighton, and South Coast Railway. Dr. Hall, the Medical adviser of the Company, and Mr. Taff, the patient's Medical attendant, offered, on the part of the Company, £10, which was refused, and afterwards £15, which was accepted; and the patient's father signed a document renouncing further claim. However, the patient's condition did not improve, and an action for com-

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tation was brought. The result was an award of £500 damages against the Company. The Judge, on this occasion, said, "that the conduct of the Company was such as he hoped not to see repeated. If Medical men, in the position of Dr. Hall and Mr. Taff, chose, in addition to their Professional duties, to act as a Company's agent in settling claims against the Company, and obtaining receipts for the same, they must expect to hear some unpleasant comments made on their conduct; and he hoped he should hear of no more such cases in future. He would be sorry, however, to impute actual fraud to Dr. Hall." We may regret the strong terms of this censure; but we decidedly hold, that a Physician or Surgeon who lends himself to such a proceeding quits his true Professional *status*, and places himself on the level of an attorney's agent. We think it incompatible with his Professional duty to his patient. The question of damages always before him, it would be more than human not to be biassed, both in diagnosing the seat and cause of symptoms, and in prognosticating the time of recovery. It may be said that, to avoid litigation, it is expedient that slight cases should be settled in this manner. We do not think so. Railway Companies have plenty of channels through which they can make fair offers to the persons they have injured, without employing a Profession whose calling it is to minister to the sick and maimed, and not to weigh human suffering in the balance against pounds, shillings, and pence.

PROFESSOR FRANKLAND ON ARTIFICIAL ILLUMINATION.

Professor Frankland's lecture on Friday last, at the Royal Institution, was a remarkably happy specimen of its class. It was an attempt to give, in a nutshell, an account of the practical improvements in this most important social art, and it did give it with such clearness and simplicity that there could have been no educated person present who failed to understand, and carry it away with him. The sanitary and economical bearings of the lecture were manifold. After referring to the electric and magneto-electric lights, and to the very clever mercurial electric light, whose disadvantage is its flickering propensity, and the feebleness which attends all luminosity derived from incandescent *vapour*, he went on to consider gas lighting, in which not much improvement was palpable in the last ten years; for all coal gas still contains sulphur (by law it may contain twenty grains per 100 feet), but it often contains more, and hence most of the offensive and unwholesome vapours given off during combustion. A process had been devised which effected this admirably on a small scale, the inventor of which, as readers of the *Medical Times and Gazette* well know, is the Rev. Mr. Bowditch, of Wakefield. Be it remembered that coal-gas, as supplied to us, does not contain sulphur in the form of sulphuretted hydrogen—for it is purified from that by means of lime or oxide of iron—but in the form of volatile sulphide of carbon and organic sulphur compounds, which these re-agents will not touch. Mr. Bowditch's process consists in passing the gas over slacked lime heated to 400° F., which converts the refractory sulphur compounds into HS, which then can be nearly or altogether abstracted in the ordinary way. A new illuminating constituent in coal-gas, acetylene, unlike other hydrocarbons, is the product of great heat. It may be made by heating carbon in hydrogen or light carburetted hydrogen with carbonic oxide. By passing coal-gas through a solution of oxide of copper in ammonia, a reddish acetylide of copper is thrown down, which, heated with hydrochloric acid, promptly gives off a gas of great illuminating power. The acetylide of copper explodes with great violence on application of heat or friction; hence many mysterious explosions, which have injured workmen employed upon copper gas-pipes and old meters. Oils, vegetable and animal, have long been common sources of artificial light, and to these is now added oil from the bowels of the earth; whether produced by the artificial distillation of bituminous coal at a low temperature, as is the mode in which the now famous paraffine oil is prepared by Mr. Young, of Bathgate, near Edinburgh, or whether it is distilled by the subterranean forces of nature herself. It is necessary that this oil should be burned in lamps which do not heat it—of glass, for example; and it is requisite, too, that the manufacture should be conducted without much heat, else a light naphtha will be generated, which will volatilise readily, and explode when a match is applied. A sample of Young's and of two American kinds of paraffine oil were heated to 120°, when it was seen that the first did not, but the last two did, volatilise and form an explosive mixture. The 20,000 gallons obtained from the Canadian oil wells are reckoned to give light equal to that of 150,000,000 lbs. of sperm candles. The following is a list of

Illuminating Equivalents.

Young's paraffine oil	. 1 gallon gives light equal to that of		
American rock oil, No. 1,	1·26 ,,	,,	,,
,, No. 2,	1·30 ,,	,,	,,
Paraffine candles	. 18·6 lbs.	,,	,,
Sperm candles	. 22·9 ,,	,,	,,
Wax	. 26·4 ,,	,,	,,
Stearic	. 27·6 ,,	,,	,,
Composite	. 29·5 ,,	,,	,,
Tallow	. 39 ,,	,,	,,

Comparative Cost of Light equal to that of Twenty Sperm Candles, each burning for Ten Hours, at the rate of 120 Grains per Hour.

	s.	d.
Wax	7	2½
Spermaceti	6	8
Tallow	2	8
Sperm oil	1	10
Coal gas	0	4½
Cannel gas	0	3
Paraffine candles	3	10
Paraffine oil	0	6
Rock oil	0	7¾

The speaker then gave some general observations on flame, whose excellency consists in the number of solid incandescent particles which it contains, and in the temperature to which it is brought. The richness of flame depends, of course, on the nature of the substance burned. It is also greatly intensified by high atmospheric pressure, for it is found that a fall in the barometer of one inch causes a reduction of 5 per cent. in the luminosity of gas. The effect of a heightened temperature is produced by the device of putting a glass cylinder outside that of the Argand burner, so that all the air which feeds the flame shall pass downwards first of all between the two surfaces of heated glass.

	Rate of consumption per hour. Cubic ft.	Illuminating power. Sperm candles.
Argand burner supplied with cold air	3·3	13
	3·7	15·5
	4·2	17
Same burner supplied with hot air	2·2	13
	2·6	15·5
	2·7	16·7
	3	19·7
	3·3	21·7

For an equal amount of light the saving of gas = 33 per cent. For an equal consumption of gas the gain in light = 62 per cent.

A light, to be perfect, should be capable of showing all colours, and of being refracted into a spectrum which can show them; for, of course, no light can show colours which it does not contain. Light emanating from incandescent solids, as the carbon in flame and in the electric light, has this property. Not so the light of incandescent vapours, which show but one colour on the spectrum, and which absorb the corresponding ray emitted from a solid body if it pass through them. Thus the heated vapour of sodium, produced by burning common salt with alcohol, shows only a yellow ray on the spectrum, and shows a dark band if the electric light be passed through it.

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Solar light does not show some yellows, in consequence of the presence of sodium in the solar atmosphere. Experiments were shown which demonstrated how entirely the colour of every object depended on those in the light thrown upon it. The excellency of sunlight is, that it contains proportionately less heat than any other; for it had been rendered highly probable that the uneasiness of the eyes following the use of artificial light, depends on the absorption by the eye of the heating rays given off by the luminous body. The following table shows the

Amount of Carbonic Acid and Heat generated per Hour by Various Illuminating Agents, each giving the Light of Twenty Sperm Candles.

	Carbonic acid. Cubic feet.	Heat.
Tallow	10·1	100
Wax, Spermaceti	8·3	82
Paraffine	8·7	66
Coal-gas	5	47
Cannel gas	4	32
Paraffine oil, Rock oil	3	29

The succeeding table shows the

Behaviour of the Eye towards the Heat-Rays of a Moderator Lamp.

	Ox.	Sheep.	Pig.
Rays reflected at the surface of the cornea	4	4	4
,, absorbed by the cornea	59·8	56·9	57·5
,, ,, ,, aqueous humour	19·2	—	20·6
,, ,, ,, crystalline lens	6·8	30·7	7·2
,, ,, ,, vitreous humour	2·5	—	1·0
,, which penetrate to the retina	7·7	8·4	9·1

We repeat, that a lecture such as this is pregnant with facts of interest for the Medical Practitioner.

DR. BROWN-SÉQUARD'S LECTURES.—LECTURE II.

Dr. Brown-Séquard delivered the second lecture of his course at the National Hospital for the Paralysed and Epileptic, on the 12th inst. He began by some remarks on the treatment of Paralysis in general, and on Wasting Palsy in particular. He insisted strongly that the main object to be kept in view should be to increase by all means possible the amount of blood in the part affected. Hot baths applied locally during three-quarters of an hour twice a-day, unless swelling supervenes, are amongst the most potent remedies. Whether baths are used or not, the heat should be retained in the limb affected, by surrounding it with non-conductors—thick flannel, for instance. The cupping-boot, invented by Dr. Junod, will often prove of great service. It consists of a metal vessel which, when used for the leg, has something the shape of a large boot coming above the knee, and from which the air is exhausted, the result being a large determination of blood to the limb operated upon. There is sometimes a drawback to the use of this effective instrument: it not infrequently induces œdema, by disturbance of the venous circulation. These means may be often useful in, at least, preventing the extension of wasting palsy; but this "terrible disease," as the lecturer justly designated it, is itself all but, if not absolutely, incurable. In the treatment of paralysis, galvanism is also frequently of great value. In the first instance it contracts the blood-vessels, and, therefore, lessens the amount of blood in the part submitted to its action; but the dilatation which follows results in great additional warmth. The lecturer spoke of acupuncture, as a curative agency, in terms of strong commendation. He exhibited the needles which he employs, and which were between two and three inches long; he ascribed the benefits arising from them to one of two causes: they either promote reflex action, or, by the slight wounds which they inflict on the capillary vessels, cause effusions, resulting in a renewal of vitality. Especially in the treatment of paralysis due to poisoning by lead, they are of great use. Shampooing, pounding of the flesh, and friction in the direction of the venous current, may often prove advantageous. The lecturer was very emphatic in insisting on the importance of using friction only in the direction named. He said that if the friction be made in the direction of the arterial current, the acceleration of the circulation will be incomparably less than that which may be induced by the opposite method. Of internal remedies, the only one of which he spoke with confidence was strychnine: in other medicines having any beneficial influence he remarked, "we are very poor." Strychnine can only be used with advantage if the paralysed muscles have not yet wholly lost their contractile power: the medicine must cause them to contract even if it should first induce great movement in the healthy muscles, or it will fail to be of use. Having thus adverted to the general treatment of paralysis, the lecturer directed the attention of his audience to a very interesting case of a woman who had been stabbed with a knife in the back of the neck by a sailor in a fit of jealousy. She was in the London Hospital, under the surgical care of Mr. Maunder, by whom Dr. Brown-Séquard was requested to see her. He found that one latera half of the spinal cord was all but severed, and that the remarkable group of symptoms which he has artificially produced in dogs, by division of one lateral half of the spinal cord in the cervical region, presented themselves. On the side of the lesion there was complete paralysis of the motor nerves; and that part of the sympathetic nerve going to the brain, to the blood-vessels of the face, to the dilator of the iris, to the muscle of Müller, and to the ear, being also divided, there was, on the same side, increased heat, hyperæsthesia, contraction of the pupil, incapacity of advancing the eye forwards, and slight approximation of the eyelids towards each other. The hyperæsthesia was of all kinds: ordinary sensibility, the sense of pain, of heat and cold, and of touch being each intensified. On the opposite, or, so-called, healthy side there was total loss of these four kinds of sensibility, but the "muscular sense" was perfect. (Of course, it was impossible to determine whether or not this sense persisted on the wounded side.) This case proves that the decussation of the conducting fibres of the muscular sense does not take place in the spinal cord. There were symptoms of some inflammation of the cord, and Dr. Brown-Séquard remarked that this inflammation probably conduced to the healing of the wound. Reunion of the cord has taken place, and will often occur, as it does in animals, when its division has been effected, as in this case, by some cutting instrument, or cause not of the nature of disease. The treatment consisted in giving iodide of potassium in small doses, together with belladonna and ergot of rye. The patient can already use her limbs, the only remnants of her paralysis being a contraction of the forefinger, and of the foot inwards, on the wounded side. She can walk with the help of a stick, and says she has "only a little weakness of the knee." A second case, similar in character, but of twenty-two years' standing, was also exhibited. As the accident causing the symptoms in this instance occurred so long ago, and as no accurate record of them has been kept, this case is, of course, less clear and instructive than the one just described. The next case referred to by the lecturer was one of myelitis, in which a complete cure has been effected. The patient had got wet through on a warm day; he soon afterwards experienced pricking and tingling; the feeling as if a cord were tied round his belly; jerking of, and complete loss of sensibility in, the lower limbs. The sphincters of the bladder and rectum were not affected; therefore, it is probable that in this instance the disease did not extend upwards beyond the middle of the lumbar swelling, thus allowing the nerves controlling those muscles to escape. He had all the other usual symptoms of myelitis. He was treated with iodide of potassium, sulphate of quinine, and sesquicarbonate of ammonia, as well as belladonna and the ergot of rye. Dr. Brown-Séquard remarked that he had never seen a complete cure of

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a case with symptoms like this before. A case of inflammation of the membranes of the spinal cord, and of the sheaths of the nerves at their exit from it, was also shown: a coachman had pain and tenderness along the spine, from the sixth dorsal vertebra downwards; his sexual power is lost; and for some time he had pain in and jactitation of the legs. He now says that his feeling in them is normal, but, as indicated by the compasses, great anæsthesia exists. Referring to this case, Dr. Brown-Séquard remarked that the only reliable test of the degree of the tactile sense is the compasses, and that the best test of the sense of heat and cold is water of two temperatures. This patient has not as yet made much progress towards recovery. In conclusion, the lecturer mentioned a case occurring in his private practice of complete paralysis from caries of the bodies of two vertebræ: there was entire loss both of sensibility and of motive power, as well as of all control over the sphincters of the bladder and rectum. A cure was effected by causing the patient to lie on his belly, and by placing, at the same time, a pillow beneath him. His body having been supported by a suitable apparatus, he began immediately to move about in society, and is now quite well.

EPPING FOREST.

THE people of London have to thank Mr. Peacocke and the House of Commons for a vote on the 13th inst., which, although it may be only a temporary measure, and may be rescinded to make way for some more carefully considered means of attaining the same object, is really a substantial interference on the part of the Legislature to preserve, for the metropolitan population, not only a privilege which they have held for centuries, but a provision for health, recreation, and physical and mental enjoyment, which every year's numerical increase renders more indispensable. Mr. Peacocke's motion, carried by a large majority, proposed an address to the Crown, praying that no sales be made to facilitate the enclosure of Crown lands within fifteen miles of the metropolis. It is quite true that the only power which the Crown possesses over such tracts as Epping-forest is derived from the old Norman forest laws, giving the monarch the right to use them for hunting purposes,—to run stags, roebucks, and wild boars over them. It is equally true that there are no deer now in Epping-forest, and that in England *Sus aper* has followed *Bos primigenius* into the regions of palæontology. But, whilst the Crown maintains its right, it is impossible to enclose these lands, and to shut out from them the Queen's subjects. No royal hunt now sweeps over Epping and Hainault, and for many a long year their glades have not echoed a horn; but artisans of the Tower Hamlets, and school children of St. Giles's and Bethnal-green, have to thank the old Norman love of the "gentle craft" for an acquaintance with bush and brake, dingle and haunted dell, and leafy summer, as nature gave them to their forefathers. Take a London compositor or seamstress, and put him or her in Epping-forest on a fine Easter Monday, and mark the effect on mind and body, on respiration and pulse, on temper and muscular tone. Parks for the people under a sky of London smoke, gravel walks and smooth grass-plots, stunted trees and dusty flowers, are all very well, but they are not, and never can be, substitutes for *country*. The Medical Profession, therefore, as conservators of the public health, will hail this effort on the part of Parliament as a piece of legislation practically wise, whatever objection may be brought against it on the ground of its being a revival of an obsolete claim. Epping-forest must not be enclosed; and although, as we have hinted, this proceeding in Parliament may only serve a temporary purpose, it will, at least, prevent present encroachment, and must be the forerunner of a measure, which, on the broad basis of public good, will secure for the people of London a most salutary and necessary boon.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE Hunterian Oration, now *biennially* given in the theatre of the above institution, was delivered, on Saturday last, the 14th inst. (the anniversary of the birth of John Hunter), by Professor Gulliver, F.R.S., before the President, Vice-Presidents, and Council of the College, and a great number of distinguished visitors.

The ORATOR commenced by observing, that it had been often said or implied that the matter for these orations was so far exhausted as to make it quite hopeless to look for anything new or interesting so often on such a limited subject. But he dissented from the general tenor of this view, and expressed some surprise at such a sorry representation of the Profession as unable or unwilling to find in the great book of Hunter an appropriate text "to point a moral or adorn a tale" in the rich chapters of physiological history; as if we, to whom his fame had descended as an honourable heirloom, were becoming indifferent to the sacred trust, which, indeed, it is our duty to perform, and in which it is to be hoped that we shall never fail to feel a just pride, and to take every fitting opportunity of rejoicing. As to "such a limited subject," the genius of Hunter so far embraced the whole domain of organised nature, that he became its very Evangelist since the revival of letters, and left such records of it as never human hand and mind had done before. And, whatever difficulty there would always be in finding absolute newness, surely there might, and ought to be, a relative novelty, and, at least, perennial interest and instruction, in reviewing the works of a man of genius, both in the steady and fitful lights and shades of advancing science; nor could a more grateful homage than this be paid to the memory of a great man, as it is to view his reputation in the very glass he himself would like to see it, were he to re-appear among us, and, though dead, to show him yet speaking. By "the book of Hunter" was meant the grand exposition of the works of nature to be found in his magnificent Museum, as well as in his writings: these last contain some parts since supplanted by better matter, and others, even, not equal to the knowledge of his time; though we cannot fail to admire the vast amount of truths displayed in them, and so formed into a consistent whole, with the illustrations of his Museum, as to afford a beautiful example of what poor things mere facts are, compared to what they may become when touched by the magic wand of genius, and seen in the light of comprehensive truth. And so Hunter had established the most important era in modern times in physiological science, and the foundation of philosophical Surgery. Nay, he had done still more, for in his time physiology and zoology were so oppressed by mere facts, as to be in danger of sinking under their number, confusion, and weight, until he so surveyed and arranged them as to show their affinities and contrasts. Thus he transformed the old dead order into a living method; and this legitimately from relation and difference, progression or development—proofs of which abound in his Museum and writings.

A somewhat familiar acquaintance with them had taught the orator to look up to Hunter as the foreteller of many principles or central phenomena, only recently become well known by new and improved means of research, and claimed accordingly as late discoveries in utter ignorance of his earlier observations. His description of the leading fact in the formation of the buffy coat of the blood was selected for explanation as an example, not only for its importance, but because Hunter's observation was so long unknown or disregarded, that it was left to the orator to show how it had anticipated the excellent results of Schroeder Van der Kolk, Nasse, Henle, Wagner, and Wharton Jones: "The increased disposition of the blood to separate into its component parts," and "the mottled appearance and spots of red," described by Hunter in the lateral separation, not mere downward sinking, in thin layers of blood. This was only an instance of disregard of his priority; but, while careful that this is not unfairly ignored, we should be equally solicitous not to give him the merit of discoveries to which he has no just claim; a caution the more needful, as such mistakes have been too often committed, as shown in the introduction to the Sydenham Society's edition of Hewson's works.

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While it is hopeless to attempt in a single oration anything like a view of Mr. Hunter's labours, it seemed that this might be done in an interesting and instructive manner in a number of successive orations, especially as the subject had received so much illustration from the present orator's predecessors. To this end, we have only to choose some remarkable truth in which the genius of Hunter shone; to note the state of our knowledge when he found that truth; and, finally, to survey it and his labours in connection therewith by the lights of modern science. This was the course adopted on the present occasion; and so far from feeling any want of matter, it so abundantly crowded before the mind that the chief difficulty was one of selection. No time could fade the infinite variety of Hunter's labours, so long as proper care was taken of them. And this had involved a great amount of labour and expense, accruing with the growth of the Museum, which the Council had met, and was prepared still to meet, if not always most judiciously, certainly with becoming zeal and liberality, and, it is hoped, with a due sense of the importance of this great and pure fountain of Hunterian biology. Of such care was cited, as evidence, the example of the twenty-five quarto volumes (besides the octavo Synopsis) of the "Descriptive Catalogues and Memoirs of the Museum," which were characterised by the orator as a magnificent series, of which the College might be justly proud, not only as a fitting tribute to the memory of Hunter, but as a particular and comprehensive account of the design and contents of that Museum, and the most valuable work of the kind in Europe.

The subject chosen for illustration of the genius of Hunter was the life of the blood, and the special anatomy and physiology of the fibrin; and, more especially, as great errors still prevail as to his merits on these points. The history of the subject given, as far as it relates to his labours, was such as is included in our report of the orator's tenth and eleventh College Lectures. Nothing could be more unfair to Hunter's view of the life of the blood than to say, as was too often said, that "he only discovered what the ancients, as well as Harvey, had described aforetime;" for the fact was, that Hunter specially described the vital endowments of the fibrin, which was as much a discovery as similar properties would have been in any other proteic matter, and not to be confounded with the properties of the compound blood. Both on the Continent and in England, the membraniform appearance of clots of fibrin, as well as the true nature of the so-called polypi of the heart and of the buffy coat of the blood, had been well described long before Hunter's time; but those excellent observations were hid, and the fibrin ignored, during the strange reign of fancy in physics and poverty of imagination in poetry, which prevailed about the period of Davies and Hewson, both of whom preceded Hunter in accurate observations on the three chief parts of the blood. But Hunter's idea of the vital endowments of the fibrin was a step far in advance of anything done by the fine old observers, such as Harvey, Malpighi, Borelli, and Collins. The first had an exalted and just doctrine of the life of the compound blood; and the three latter, as well as Ruysch, distinguished the fibrin as the spontaneously coagulable matter, and its form and texture when coagulated; but that was all, and it was left to the genius of Hunter alone to invest the fibrin specially with a dignity never dreamt of in their philosophy, just as one touch of nature's own poet may give an enduring value and interest to the most common-place objects. He observed not only that "a clot of fibrin may be as tough and elastic as the coats of an artery, becoming fibrous, and even forming laminæ . . . . which gives us a clear idea how a membrane may be formed, and probably can be varied, according to the impression made on it by the surrounding parts," but that it "can be organised by forming in and by itself blood-vessels, like the membranes of the chick," as related more particularly in the orator's eleventh Lecture, appearing by the merest accident in our impression of last week. He was old enough to remember when the charm of the novelty of this doctrine had not quite passed away; and when, to the minds of Hunter's contemporaries or immediate successors, it was a sort of spell. The venerable and respected Clift, in his proud sanctuary of the Museum, might have his enthusiasm ever and anon lit up most delightfully on this subject by the student-visitor; and when some of our great teachers, as Mr. Abernethy, had well wound-up the soft melody of their eloquence on the vital endowments of the coagulated lymph of Hunter, the warmth of their admiration and reverence was like—

"An Orphic tale of high and passionate thoughts
To their own music chanted!"

But this was an old tale; and the original view of Hunter, supposed to be gone the way of all the Capulets, since the advent among us of the cell-doctrine of Schleiden and Schwann, which had eclipsed, or supplanted, this leading tenet of Hunter, and was believed to have put it out evermore. The orator then submitted that this verdict required re-consideration, and that its validity would be disproved on a new trial. And, certainly, when he showed such a typical form as a membranous closed sac, produced by simple coagulation of fibrin, or in a mere mixture of varieties of serum—and this, as was proved, utterly independent of any cells whatever, or of any principle involved in the cell-doctrine—it must remain with the advocates of this view to reconcile such a fact with their doctrine, before it can be fairly regarded as having supplanted that of Hunter. Fibres as well as organic molecules are often, as in the coagulation of fibrin of the blood, and in the chyle and other fluids of animals and latex of vegetables, prior in formation to cells, contrary to the leading tenet of the cell-hypothesis. But the whole of this part of the argument, which was gone into at some length, need not be repeated here, as it was generally to the same effect as reported in the orator's eleventh and twelfth College Lectures. He concluded this part of the oration by asking whether the results of these experiments were not as confirmatory of the old, simple, and beautiful doctrine of Hunter as they were adverse to those more novel, complex, and meretricious theories by which it was supposed to be extinguished; inquiring, also, what is the new plasma, blastema, or cytoblastema, and the matter of some such other hard words, of the Germans but the old coagulable or coagulated lymph of Hunter? Finally, expressing the hope that he had adduced sufficient proof that even this single scene in the great drama—this little episode in the grand epic of Hunter's labours, would be alone sufficient to show the depth of his genius, to entitle him to the gratitude of posterity, and to the place of honour in philosophical Surgery. Alluding to the marble statue to his memory, amid the deeds he loved so well, it was remarked that all the shows of art, pictured pomp or sculpture, speak in feeble imagery their own cold powers, frail and vain for his renown. His best eulogy, as of other great men, was to be found in his works, and especially in his Museum. There, verily,—

"He, in our wonder and astonishment,
If th built himself a live-long monument;
And so sepulchred in such pomp doth lie,
That kings for such a tomb might wish to die."

And here (observed Professor Gulliver) we might have concluded, but that, since the last oration, death had been so busy as to number among his victims such worthy disciples of Hunter—*haud passibus æquis*—as Quekett, Norman, Stanley, and Brodie, to whom a passing tribute must be paid. The three latter died full of years, and in the enjoyment of that which the greatest secular judge of human nature tells us "should accompany old age, as honour, love, obedience, troops of friends." But Professor Quekett was early lost to science, and not without leaving beautiful marks of his course behind him; indeed, he was one of the first, if not the very first, gone in this country, of those eminent men who devoted their talents exclusively to the abstract and higher branches of our Profession, quite regardless, in this noble pursuit, of the meaner considerations of practice and profit. His researches, small or insignificant as they might appear to superficial minds, are really large and important; and the remark that has been often repeated of late, to the effect that his observations were only of a fragmentary or isolated character, deficient in connexion, the orator believed to be unjust to his memory. Mr. Quekett explored the field of histology in its widest sense. His inquiries not only extended through the animal and vegetable kingdoms, but also to mineral substances; and his collected specimens of intimate structure of organic nature surpassed in number and value anything of the kind before displayed in this country. And those which he had, indeed, found and collected as a mere heap of isolated facts, with little more affinity than the order of words in a dictionary, he soon reduced by their relations to arrangement and method, of which only a mind diligent and comprehensive could have been capable, as was well attested by his published lectures and by several volumes of the Descriptive

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Catalogue of the Museum, more especially by the histological series. Such a mind could not be thus employed without discovering central or comprehensive phenomena—could not be confined to mere fragmentary, subordinate, or minor facts. Accordingly, among other fundamental or leading truths, his early observations on the nature and arrangement of capillaries led him soon to exhibit in the blood-vessels alone, rational evidence, proof of function from structure, of the significance and use of the air-bladder in fishes. His original researches, two or three years afterwards, on the intimate structure of bone, were of still higher import, for they at once and for ever demonstrated the analogies and contrasts of this structure, and with such admirable precision and clearness as not only to establish the essential characters in this respect of the vertebrate sub-kingdom, but also the means of determining the affinities of minute fragments of the organic remains of a former world. (The orator, with distinguished modesty, omitted all mention of his own valuable discovery of the relative sizes of the blood corpuscles, which so singularly confirmed Quekett's views, more especially with regard to the piscine or batrachian character of that rare animal, the Lepidosiren, some time since exhibited at the Crystal Palace.) So no wonder (added the learned Professor) that results of such importance should have been conveyed, as ancient Pistol would say, by certain Germans pretending to give the literature of the subject, but carefully excluding the mere mention of Mr. Quekett's name, though we cannot but feel something stronger than surprise to find this frequent practice, this sorry violation of truth and of the just claims of British science, silently acquiesced in, if not approved, adopted, and patronised by our societies, translators, or commentators, and too many of our eminent teachers. But, as Mr. Quekett more than once emphatically remarked to the orator, he suffered this indignity in very worthy company; and (added Mr. Gulliver) the fair fame of our illustrious countrymen should be accepted by us as a sacred trust, a precious heirloom, to be cherished while our science lasts, in the hope, too, that generous hearts would not be wanting to defend Hewson and Quekett on the proud pedestals which they had so honourably gained. Though Mr. Quekett, like Pope, might truly have complained of "that long disease, his life," he retained to the last his wonted serenity and affability, kindness, and humility. Neither was his constitutional sweetness of temper affected by the plagiarism of his labours abroad, nor even by the pitiful attempts of anonymous detraction at home. In truth, it was Mr. Quekett's happiness to have his mind so full of the importance of those pursuits which he loved so well and truly, as to leave no room in it for the nurture of lower feelings. His gentle nature could not entertain what our great epic poet calls "the troubled sea of noises and hoarse disputes," but preferred, in a calm and pleasant retirement, to enjoy the still air of his delightful studies. He was not, like honest Isaak Walton's poor rich man, condemned to riches, and then to a busy discontent, but enjoyed, in his meekness, as foretold by the Psalmist and St. Matthew, a far richer and better possession, and thus had truly found the ways of pleasantness and the paths of peace. And if thus, in the happiness of the common routine of his life, "in populous city pent," he would his heart leap up when he left it for a short country recreation, such as angling, which he loved, and did then behold with joy and gratitude the outward forms and shows of rural nature! Such were some of the ruling traits of this meek and good disciple of Hunter.

Mr. Norman was a man of a different stamp. He early marked out the goal for which he panted, and won it in a manner alike honourable to himself and to the Profession, having been twice elected chief magistrate of the city of Bath and deputy-lieutenant of the county. In 1825, he successfully tied the external iliac artery, and also the arteria innominata, and some years earlier had tied the common carotid. But his chief operation was that of taking up both the lingual arteries. He was the author of some valuable contributions to the advancement of Surgical science.

Mr. Stanley was chiefly distinguished in Surgical anatomy and pathology, and was one of the best and most successful teachers of his time, and a great master of what he loved to call "practical anatomy." He was the author of numerous papers in the *Transactions* of the Medico-Chirurgical Society, and of several independent works.

Of Sir Benjamin Brodie, the last survivor of a great race, the orator paid a well-deserved eulogium, and for which we regret we cannot find space. After alluding, in eloquent terms, to the discoveries or merits of those young and illustrious physiologists, Hewson and Falconer, the orator expressed a hope that if he had rather forcibly submitted to his audience some of the just claims of the British school of physiology in the labours of John Hunter and his disciples, it had been done conscientiously and in the defence of Truth, and, he hoped, temperately, and not lightly or inconsiderately, and yet with sufficient decision and accuracy to assert, if not maintain, her sacred cause. "Let us never forget," said Professor Gulliver, "that we belong to the country of Harvey and the Hunters; nor, when we deplore the loss of such of their followers as Brodie, Norman, Quekett, and Stanley, cease to feel that excellent consolation which is afforded by the character of their lives, and the example they also have left to us and to our posterity, for 'these were honourable men in their generations.'"

An interesting occurrence took place immediately before the oration. When Mr. William Adams, F.R.C.S., of the Orthopædic Hospital, the defendant in a recent action in one of our law courts, entered the theatre, he received quite an ovation from his Professional brethren: this mark of sympathy considerably affected him. In the evening the President and Council entertained a large and distinguished number of visitors to a banquet at the Albion Tavern.

REVIEWS.

A Treatise on the Physiological Anatomy of the Lungs. By James Newton Heale, M.D. London: Churchill and Sons.

Many original works on anatomy have not of late years issued from the English press, and it is on this account that we are disposed to look with more critical eyes on any new book professing to be an addition to English anatomical science, than on others treating of lighter subjects. If we can show but little, that little should be of the best quality. In human descriptive anatomy not much is left to be done. To use an often quoted simile, the great workers of the last century have, like a band of lusty reapers, cleared the harvest; their successors, like humble gleaners, must be content to pick up here and there an ear which may have escaped the notice of their more fortunate predecessors. But our own and the last generation have been instrumental in building up the splendid fabric of tissue anatomy, and have witnessed the greatest amount of light yet thrown on the structure of the special organs. It is to this latter department that the work before us professes to be a contribution, and it puts forward claims to originality in discovery, which, if supported by fact, would at once place it in the same rank with the most valuable monographs that have issued from the German press. We shall endeavour to lay before the reader an account of the discoveries to which Dr. Heale lays claim, and, as far as opportunity may permit, shall try to test their validity. We would *in limine*, however, express our opinion that great credit is due to Dr. Heale for the conscientious labour with which he has pursued his researches.

Passing over the introduction which reiterates the author's peculiar notion, "that every organ of the body is galvanised into its vital activity, through the instrumentality of the atmospheric oxygen, acting upon the blood in the lungs," in a tone of confidence and positiveness, which, we think, is not only precipitate and unwarrantable, but will, we suspect, prejudice most readers against the ready reception of the conclusions in the after part of the work, we at once proceed to examine the points of novelty which Dr. Heale advances, with regard to the anatomy of the pleura. The first is the assertion, that the blood-vessels which are actually distributed to the tissue of the pleura are exclusively derived from the pulmonary arteries. On this assertion he establishes a theory, that the function which the pleura is called upon to discharge is wholly and exclusively connected with the process of "respiration;" since he considers that he has proved conclusively that the pulmonary vessels are engaged solely in the respiratory process, and that the bronchial vessels are entirely subservient to nutrition, and have no anastomosis with the pulmonary vessels. He includes the costal pleura in this description, asserting that "eight or ten arteries (pulmonary) of considerable size, and about twelve or sixteen corresponding veins of some magnitude, cross behind that of the pleura which is sometimes called the broad lig

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to reach the thoracic pleura, and to become distributed upon it, imparting, therefore, to that structure also properties auxiliary to the process of respiration." It is admitted by most anatomists that the pleura receives branches from the pulmonary system of vessels. On this point Kölliker observes' "Vessels are seen in the pleura, most abundantly in that covering the lung, where they are furnished to the subserous tissue from the bronchial *and pulmonary* arteries; the parietal lamellæ (costal pleura) are supplied more scantily by the intercostal and mammary vessels." On the other hand, that the pleura is *exclusively* supplied by the pulmonary arteries, is an assertion which is contrary to the positive observations of preceding writers. We might quote testimony on this point from Cowper and Haller downwards, but we will only refer to Kölliker's description, that the last distribution of the bronchial arteries is to the pulmonary pleura, "the twigs for which go off, partly at the hilus, and in the fissures between the main lobes, partly arise between the secondary lobules from the vessels accompanying the bronchia." We may also observe that, if it be shown that pulmonary arteries are supplied to the pleura costalis, we cannot admit that that membrane is a respiratory structure, for we have no notion of respiration without the access of air, and we have yet to learn that air comes in contact with the costal pleura. In our opinion, therefore, if Dr. Heale's account of the distribution of pulmonary branches to the pleura costalis be correct, it is insufficient to support his corollary. We, however estimating the anatomical testimony in opposition to the observation of Dr. Heale as to the exclusive supply of the pleura from the pulmonary system, must withhold our assent until his views have received further confirmation. The next point of novelty advanced is a description of certain longitudinal channels of a remarkable character which are said by the author to exist in the pleura. The largest of these channels are, he tells us, "to be found at the reflections of the pleura over the acute margins of the lobes." These channels, he further asserts, are in connexion by means of certain tubular passages running through the sub-pleural cellular tissue with the open extremities of minute bronchial tubes. Again, we would say that this observation requires confirmation. Excellent anatomists, who have studied with most painful scrutiny the structure of the lung have never observed these passages. The mode in which Dr. Heale demonstrates the channels is by inflation, and the open extremities of the minute bronchial tubes are made evident by stripping off the pleura and sub-pleural cellular tissue from the surface of the lungs. Both these methods of examination are open to the objection, that they are the very means by which channels and open extremities of tubes might be artificially manufactured. Dr. Heale's description of these "longitudinal channels" is also very vague: he nowhere tells us whether they possess a lining membrane. He at first compares them with the sinuses of the dura mater, observing, however, that they are colourless and transparent, and certainly do not transmit a coloured fluid; he afterwards asserts that, "without doubt, these longitudinal channels are rudimental representatives of the air channels which exist in the long bones of birds!" We commend this observation to the consideration of transcendental anatomists.

For our part, we are unable to conceive either homology or analogy between the problematical pleural channels of Dr. Heale, and the means by which the diverging appendages of the vertebral column in birds are rendered light and adapted for flight.

We must pass on, however, to the author's observations on the anatomy of the lung itself. The first point on which Dr. Heale believes he is correcting previous anatomists is, as to the mode of division of the bronchial tubes. He remarks that this is not dichotomous or trichotomous, as has been asserted, but that it is strictly that of a panicle. "In every part a straight diminishing tube may be observed, which closely resembles the midrib of a leaf; and from this, branches are given off, alternately on each side of it, throughout its whole length." There can be no doubt that Dr. Heale is right in asserting that there is no regular binary or ternary division of the bronchial tubes; but he is wrong if he is under an impression that this is a discovery. Alternation of branches from the bronchial tube is most clearly figured in the first plate of Reisseisen's work on the "Anatomy of the Lung." Dr. Heale's own plate (p. 32) shows that the branches (like those of a tree) are not given off with any great regularity; but the same figure shows also that, besides branches given off alternately, there is occasionally a close approach to exact binary division of the main trunk. The author proceeds to say, that "the bronchial tubes thus given off form no sort of anastomosis nor junction among themselves, and they are divided into sets or groups which remain distinct from each other, and do not become mingled or intermixed." Here he only confirms the descriptions given by most competent observers. He then proceeds to remark that the distribution of the pulmonary artery follows closely that of the bronchial tube:—

"Each group of lobules, then, is distinct and separate, as regards the distribution of its bronchial tubes; and as the peculiarities of the pulmonary artery also strictly coincide in those particulars with those of the bronchial tube (with the course and distribution of which it closely corresponds), and as its branches, like those of the bronchial tube, do not at all inosculate with one another until they finally split up into their capillary subdivisions, it follows that, as regards the pulmonary artery likewise, each group of lobules is quite distinct from those which surround it. The same prevails also with respect to each lobule, and, in a modified degree, with respect to each leaflet. Each lobule receives its own special bronchial tube and pulmonary artery."—Pp. 29, 30.

Again,—

"The pulmonary artery is always seen accompanying the bronchial tube, dividing as it divides, and maintaining an exact correspondence with its subdivisions down to the point at which the terminal bronchial tubes give off their pedicels." . . . "Throughout the lung the pulmonary artery always runs on the upper side of the bronchial tube, and whenever the bronchial tube is of sufficient size to have an accompanying pulmonary vein, this is placed as universally underneath the bronchial tube."—Pp. 65, 66.

We have no doubt that this, in the main, is an accurate description of the distribution of the pulmonary artery in connexion with the bronchial tubes, as in it Dr. Heale has confirmed the observations of previous writers. Thus, Reisseisen—"Etenim arteria pulmonalis, bronchia ad extremos fines secuta, singulos ad extremas vesiculas ramos emittit." Bourgery, also—"Ainsi, en rappelant ce qui a été dit plus haut des gros troncs, il est évident que les artères, quel que soit leur volume, sont toujours satellites des canaux aériens." Addison says—"The pulmonary artery accompanies the bronchi, branch for branch, to the minutest divisions of the latter;" and Kölliker observes, that "the branches of the pulmonary artery generally follow the bronchia, and lie above and in front of these tubes." Dr. Heale's description of the origin of the pulmonary veins also confirms that given by Bourgery and Addison. He writes:—

"These do not, like the former, penetrate, as it were, into the substance of the lobules, and thus become identified with a particular lobule, but they are invariably placed between contiguous lobules, and between contiguous groups of lobules, and collect their venous radicles (conveying, of course, arterial blood) indiscriminately from the lobules between which they are situated. The only pulmonary veins, therefore, which are found in connexion with the minute bronchial tubes and their accompanying arteries are the ramusculi, which collect the blood from the mucous membrane which lines those tubes: the true pulmonary veins, on the contrary, are placed in the interlobular spaces which separate contiguous lobules and contiguous groups of lobules, and, as respects the smaller bronchial tubes and their accompanying pulmonary arteries, are placed at a distance from them. The smaller veins issue out from each lobule, and partially cross the interlobular space to join the trunk of the vein."

Bourgery speaks of the pulmonary venules as being found at the periphery of the lobules; and Addison says:—"The pulmonary vein may be distinctly traced from larger to smaller trunks towards its source, until we reach the common cellular membrane between the ultimate lobules, from the exterior of which the vein appears to originate." Kölliker also asserts of the pulmonary venous radicles, that they run between the smallest lobules. In these particulars, therefore, Dr. Heale's description is of value, as confirming those of previous observers. With regard to the ultimate distribution of the pulmonary artery, the author writes:—

"When each bronchial tube spreads out into its final pedicels, the corresponding twig of the pulmonary artery expands into a very remarkable reticulation. This reticulation is a mesh-work of minute capillaries, which anastomose in the most intimate manner; and this anastomosis is not con-

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fined to the meshes of each terminal twig of pulmonary artery; but there is likewise a close intercommunication between the capillary networks of adjoining leaflets; so that, like the bronchial tubes, the trunks of every subdivision of the pulmonary artery are kept wholly asunder and distinct until they arrive at their final distribution, and then the most equal and free intercourse is established between all the capillaries."

The fine anastomosis of the capillary network formed by the pulmonary artery on the air cells has been described and represented by various writers, amongst whom we may name Rossignol, Rainey, Adriani, and Kölliker. Mr. Rainey speaks of the smaller ramifications of the pulmonary artery anastomosing very freely with the ultimate ramifications of neighbouring pulmonary arteries; and Kölliker, after describing the excessively close capillary network into which the lobular branches of the pulmonary artery break, states that the network "extends continuously over all the alveoli of an ultimate lobule, and is partially connected also, at least in the adult, with the plexus on neighbouring lobules."

One of the chief points on which Dr. Heale insists is, that an extensive plexus formed by the pulmonary veins is distributed over the bronchial mucous membrane. He speaks of this plexus as constituting a diverticulum, whereby a portion of the blood returning from the lobules undergoes a second exposure to the air previous to reaching the larger trunks of the veins. We have no doubt that such a network exists, but here again Dr. Heale has been anticipated by other anatomists. In Weber's edition of "Hildebrandt's Anatomy," it is asserted that the pulmonary veins originate not merely from the capillary network covering the terminations of the air tubes, but also from a capillary network lining the inner surface of the bronchi. It is true that the author quoted believed this net-work received its blood from the bronchial arteries, and Dr. Heale denies all communication between the two systems of vessels, but the former ascribes the oxygenation of the blood in part to this plexus. Adriani again states that the pulmonary arteries and the pulmonary veins are the vessels chiefly concerned in the formation of the capillary network on the surface of the bronchia. According to Beau, the pulmonary arteries supply the mucous membrane of all the bronchial tubes, even up to the trachea. The difference between Dr. Heale and these two latter observers amounts to this, that the former asserts that the plexus in question is formed by the small pulmonary veins returning from the lobules, the latter that the pulmonary arteries assist in forming or form the plexus; but Dr. Heale allows that the plexus can be injected through the pulmonary arteries. All the statements made refer this plexus to the pulmonary as distinguished from the bronchial system of vessels.

The bronchial or "sustincnt" arteries, as Dr. Heale, in reference to their function, prefers to call them, supply the fibrous and cartilaginous structures of the bronchial tubes, and by means of a very fine network, which he asserts is entirely distinct from the pulmonary plexus above referred to, the mucous membrane lining the bronchial tubes. Adriani, however, asserts that in this situation there is a connexion between the two systems of vessels. The bronchial arteries, besides, supply, by means of a fine plexus, into which they ultimately subdivide, the whole of the pulmonary tissue; they also send branches to the subpleural tissue. In these observations Dr. Heale confirms the statements of Reisseisen.

The assertion, which, if it be true, is, we think, the most important in the work before us, is that of the entire absence of communication between the bronchial and pulmonary systems. Dr. Heale's statement is certainly supported by his own injections; but even he allows that, unless the experiment of injection be conducted very carefully, it is easy to force fluid from the "sustinent" arteries into the pulmonary vessels.

"It may occasionally happen, when an injection is made through the sustincnt arteries, that, in consequence of some violence being used, the capillaries in connexion with the arteries are made to burst into one or more of the vessels belonging to the pulmonary system, and then the pulmonary vessels of one or more of the lobules may become injected from the sustinent arteries; but, whenever that happens, it is always in consequence of a clumsy amount of force having been employed."

We are by no means convinced that this is a true explanation. That an anastomosis between the two systems of vessels exists, has been maintained by Ruysch, Haller, Sœmmerring, Reisseisen, Rossignol, Adriani, Williams, Waters, and many other observers. Guillot's observations first threw doubt on the existence of any communication between the bronchial artery and the pulmonary artery; and Rossignol also showed that fluid thrown into the bronchial artery did not find its way into the pulmonary artery, although it did find its way in large quantity into the pulmonary veins, and in smaller quantity into the bronchial veins.

Adriani and Rossignol both assert that the bronchial vessels can be injected from the pulmonary veins, and *vice versâ* the pulmonary veins from the bronchial arteries.

Dr. Waters fully confirms their observation, as far as the pulmonary veins and bronchial arteries are concerned. But, apart from experiment, there are pathological facts which, in our opinion, are not consistent with a belief in the entire separation of the two systems. Where the circulation through the pulmonary arteries has been interfered with, the bronchial have been found enlarged, the extent of their distribution increased, and they have taken on the function of true respiratory vessels.

Lastly, we may remark that a belief in the entire separation of the two systems of vessels is not for the first time promulgated by Dr. Heale. It had previously found a supporter in Hasse.

We have left ourselves no space for noticing several other points in Dr. Heale's work. We regret that he has not entered more fully into the minute structure of the lung itself. For instance, we should have been glad to have seen his opinion on the question of the epithelial lining of the air-cells. Although we have not hesitated to criticise his book, and although we doubt the truth of some of his observations, and conceive that others have been anticipated, we yet allow no small degree of merit to the author. Right or wrong, he has evidently worked hard and worked honestly. There are not many provincial Physicians in considerable practice who would devote leisure, and labour, and expense to the elucidation of points of abstruse science as Dr. Heale has done. If he has done nothing more, he has at least confirmed some observations that needed confirmation, inasmuch as they had been denied. His errors, if they be errors, would have been excusable if his subject of investigation had presented far fewer difficulties.

In conclusion, we would say that the exquisite woodcuts, from preparations made by Dr. Heale, are, in themselves, a valuable contribution to anatomical science. We differ from Dr. Heale in many things, but we concede to him the merit due to an honest and a diligent investigator.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

CASE OF HYDROPHOBIA.

As our readers are aware, hydrophobia has been of late prevalent at Vienna. The following are some of the particulars of a case recently treated in the General Hospital:—On October 11, a boy, aged 6, was bitten in the left cheek by a mad dog. A Surgeon, called at once, merely approximated the edges of the wound, which was partly healed when he was brought to the Hospital. It was then re-opened and cauterised, and the child remained in the house without any bad symptom until the night of November 5 (twenty-five days after the bite), when the signs of hydrophobia began to manifest themselves, and rapidly became highly characteristic of the disease. Belladonna was given internally, while externally mercurial friction and subcutaneous injection of opium were resorted to. The boy died forty-eight hours after the outbreak of the disease, and three hours prior to his death erections existed. At the autopsy, the wounds were found cicatrised and covered with scabs. The dura mater was tense, and the sinus contained not only dark fluid blood, but also soft fibrinous coagula. The membranes and substance of the brain were considerably injected, and about a drachm of serum was found in the ventricles. The pons Varolii and the medulla oblongata were soft and humid, but to this in so young a subject Professor Rokitansky attached little importance. A few fibrinous coagula were found in the sinus at the base of the skull. The mucous membrane of the mouth and throat was pale, as was that covering the tonsils, although these

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were swollen, and discharged a discoloured purulent matter. The par vagum and sympathetic nerves were red and swollen, appearing also thicker on the right side. The sympathetic was remarkably softened. The left ventricle of the heart was contracted, and contained some soft fibrinous coagula, as did the left ventricle, which was in a relaxed condition. The stomach was contracted, and at its fundus a portion of the mucous membrane, the size of a thaler, had disappeared. The rest of the membrane was very pale, although there were also numerous ecchymoses, the size of pins' heads, scattered over it. The intestines were much distended and pale, the follicles being also enlarged, The kidneys were firm and the bladder contracted. The urine in this case was examined very carefully by Professor Haller. Its specific gravity was 1036, and it contained a most surprising quantity of uric acid. The proportion of urea was also greatly augmented, but only mere traces of any abnormal bodies were discoverable. The chlorides were only moderately diminished, while the sulphates were increased to an extent seldom met with, except in sulphuric acid poisoning. The earthy phosphates were also greatly increased.—*Wien Spitals-Zeitung*, No. 46, 1862.

[Professor Schuh, in a clinical lecture on this disease, states hat our only reliance is in prophylactics, and that the best of hese is the caustic potass. He adds, that seeing the great number of persons who are bitten by mad dogs in Vienna, and who neglect applying at the Hospital for treatment until the day after the accident, and the very few cases of hydrophobia that occur, it follows either that man is very little susceptible to the contagion of this disease, or that the caustic may be applied with tolerable certainty of success twenty-four hours after the occurrence of the accident.—*Ibid*, No. 48.]

EXCERPTA MINORA.

Ointment in Decubitus.—The following ointment, contrived by M. Brandes, an apothecary of Salzuffen, has been found by several German Practitioners a most efficacious application for bed-sores:—Armenian bole, prepared litharge, of each ℥ss; camphor, gr. v.; yellow wax, ʒiij.; lard, ℥vj.; M., to be spread on thick linen.—*Deutsche Klinik*, 1862, No. 32.

Dislocation of the Great Toe.—A workman, passing over a bridge on a dark night, fell into the river, and, in spite of the strong boot he wore, dislocated his right great toe. Compared with the opposite side, the toe was directed somewhat outwards and upwards—an obliquity of the great toe often met with, as a consequence of wearing too narrow shoes. A projection was felt plainly over the posterior surface of the metatarsal bone, while on the plantar surface the cavity in front of the metatarsal could be completely traced. The skin was uninjured, and the swelling was only slight. There was considerable pain, and walking was impossible. Chloroform having been administered, reduction was effected without much difficulty by employing strong extension (no apparatus being, however, required), after having bent the toe backwards to a right angle. The sesamoid bones offered no obstacle to the reduction. Some swelling followed, which subsided under the use of a bandage, splints not being required. The difficulty which has often attended the reduction of this dislocation, and the ill-consequences which have sometimes ensued, render it desirable to place this case on record.—*Ibid.*, No. 29.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 10.

Dr. BABINGTON, President, in the Chair.

A REPORT, by Dr. JEFFERY A. MARSTON, Royal Artillery, upon

SYPHILIS, IN ITS MANIFESTATIONS AS A CONSTITUTIONAL DISEASE,

was communicated by Mr. Henry Lee.

After referring to a previous paper,* the writer gave a short *resumé* of previously declared doctrines. Upon the subject of one attack of true syphilis affording an immunity against a second, the writer made some remarks illustrative of its general truth, to which, however, there were a few rare exceptions. Under this category he gave a case in which a soldier had been treated twice during eighteen months for indurated chancre. The writer next briefly adverted to the comparatively modern reaction relative to the contagious character of secondary syphilis. He then passed to the subject of secondary sores upon the penis, commencing either by a recrudescence in the cicatrix of a former sore, or upon some part not previously diseased. These he described under three heads:—1st. Such secondary lesions may commence as a circumscribed patch of purple or bluish redness, very slightly raised, from which the epithelium is shed, the surface becoming abraded, cracked, or covered with ill-formed and degenerating epithelial products. 2nd. This purplish-red spot, after becoming raised, takes on a chronic ulceration, similar to that of the scooped-out ulcers seen upon the tonsils. The first variety corresponds with, and often accompanies, a squamous or erythematous exanthem; the latter appears allied to the syphilitic tubercle, the ulceration of which plays so important a part in the evolution of syphilis in some subjects. The third variety appears as a persistence of the ulceration, or an unhealed condition of the chancre, which becomes transformed into a mucous tubercle, as described by Ricord. Of these he gave illustrative cases. Upon syphilitic infection, contracted from some other source than contact with a virus obtained from a primary lesion, the following were cited as in all probability instances:—1. A wife and two children. The former had syphilitic nodes and an ulcerating tubercle upon the lower extremity. Of the latter (who slept with her), one was an infant, in whom the disease was probably hereditary, though not congenital in its outward manifestations; the other was a girl of five years, with anæmia, non-ulcerated sore-throat, engorged post-cervical glands, cutaneous syphilida of trunk, with psoriasis palmaris. All had very restless nights. The husband lived separately, and was healthy. 2. The subject of disease was a military servant, a married man, who suffered from secondary and tertiary symptoms after intercourse with a woman known to be constitutionally syphilitic. Attempts to trace any primary lesion in this man failed. 3. The infection of a female by labial contact with diseased secretions from secondary lesions upon the lips of a male. The disease so produced in the female commenced as an irritable and indolent fissure upon the mucous membrane of the lower lip. The writer next adverted to the evolution and succession of syphilitic symptoms as ordinarily witnessed among soldiers. Under the cutaneous affections, he particularly remarked upon the mixed character of these: the majority of cases partaking of more than one affection at the same time, and upon the same or different parts of the body. Although great modifications in the future health and efficiency of the soldier were, doubtless, the result of syphilitic infection, yet cases of the more severe and intractable forms of constitutional disease were not very common. With the view to prognosis, the writer said it was important to inquire, what relation, if any, has the severity of the primaries to those of the later symptoms? From a consideration of his own observations, he inferred that the following were as approximate expressions to the truth as the facts warranted:—1st. That the greater the induration, and the longer the period during which primaries remain unhealed, the more certain will it be that the constitutional infection will be severe. 2nd. That the amount of ulceration, etc., of the primary sore stands in some relation to the worse and more intractable forms of secondary lesions—*e.g.*, the pustular, erythematous, and rupitic eruptions—the unhealthy ulcerations, nodes, and gummatous tumours. The writer then passed to those cases in which there was an irregular evolution and succession of the stages and symptoms of syphilitic disease. Assuming that, when an indurated sore has been recognised, some specific treatment has been employed, and that soldiers are exposed to changes of climate, etc., we might infer, what is actually the case, that the constitutional symptoms would be irregular in their appearance and varied in their kind. As illustrative of his remarks, the author cited:—1. A case of Hunterian chancre unhealed at the end of three months, when syphilitic rheumatism and a node upon the left parietal bone appeared. 2. A case in which, three years after a sore upon the external integument of the penis, a soldier suffered from two attacks of jaundice, anæmia, nodes upon the tibiæ, synovitis of left knee-joint, and rheumatism, without any history of secondary

* Syphilis, with Reference to the More Mixed and Unusual Forms of the Primary Symptoms.—*Medico-Chirurgical Transactions*, vol. xiv.

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symptoms having been traced. 3. A case of repeated epileptic attacks, with violent pain in the head (upon which a node appeared), cured by specific treatment. The subject of the disease had suffered from repeated attacks of venereal disease, but not from any primary disease for two years and a-half previously. 4. A case of chronic dyspepsia, slight icterus, pseudo-epilepsy, and paralysis of the third nerve. History of syphilitic attack two years before. Treated then by mercury. No history of secondary symptoms elicited by close questioning. 5. A case of osteocopic pains, paralysis of seventh nerve, followed by lichen and iritis, in a man undischarged from Hospital for primary disease. 6. One of secondary syphilis, in which symptoms of intracranial inflammation appeared, followed by marked alteration of manner, loss of memory, dirty habits, etc. 7. Case in which there were—first, symptoms indicative of venous lymphatic absorption of pus, or some of the diseased products of secondary lesions; second, ocular disease, paralysis of third nerve, and other symptoms indicative of intracranial mischief. The writer adduced also other cases, and made some remarks upon the character and nature of these nerve lesions. As illustrative of the long interval which sometimes ensues between an attack of primary and secondary symptoms, he adduced the following:—8. Lepra, psoriasis, and syphilitic cachexia in a man who had not suffered from primary disease for nearly five years; he had been married for three, and his offspring were healthy. 9. Syphilitic cachexia, etc., in an infant, who died of the disease; the father not having had primary symptoms for four years, and having been subsequently the parent of one healthy child. The author then spoke of the occasional latency of the syphilitic element, until some other disease or impairment of health appeared, which seemed to act as an exciting cause to its manifestation. He also remarked upon the modifications of diseases, or convalescence from them, that are sometimes, apparently, the result of a prior syphilitic infection. In support of the foregoing he gave some cases. The paper concluded by stating the experience of the author to show that the effect of the Mediterranean climate upon the syphilitic diathesis was very inimical during the summer months.

Mr. Solly said that it appeared to him, after the reading of the paper, that the anti-mercurial treatment of syphilis was now bearing its fruit in the remarkably frequent occurrence of secondary symptoms. When he was a pupil at St. Thomas's it was thought a disgrace to a Surgeon that his patient should suffer from secondary symptoms. That was the period when mercury was mainly relied on in the treatment of the primary affection. Then the army Surgeons said there was no necessity for the use of mercury, and the disease was treated without. He (Mr. Solly) might be wrong in attributing the present prevalence of secondary disease to the abandonment of mercury; but with respect to the facts there could be no doubt.

Mr. Holmes Coote said that there was difficulty in replying to an essay which embraced so many points as the paper which had just been read. He begged, however, to record his protest against the prevailing practice of including so very many diseases, without further and more stringent proof, in the category of constitutional syphilis. He had never met with cases of syphilitic pericarditis or peritonitis, nor did he understand syphilitic inflammation of the lungs. That persons who had suffered from syphilis might be the subjects of such affections there was no doubt, but he saw no relation between the two. Respecting the treatment of primary syphilitic sores, he entertained no doubt, in the first place, that mercury was unnecessary in by far the greater number of cases; in the second place, that when administered, even in the best selected cases, that mineral afforded no security against the occurrence of secondary symptoms. He thought that the use of mercury was to enable the Surgeon to expedite the healing of an indurated chancre. It mattered not at all whether it were administered by the mouth, or, as in the fashion of the past times, by inunction. The occurrence of secondary symptoms, or rather, he should say, of constitutional symptoms (for secondary and tertiary symptoms by no means invariably preserved their numerical relations), was greatly influenced by the habit and position of the patient. The immunity of the convicts at Gibraltar from such disease was only an instance of what temperance and healthy avocations would effect. Among the people of the Levant, who are certainly abstemious, syphilis in any form is uncommon. He had taken some pains to ascertain at St. Bartholomew's Hospital the relative frequency of constitutional syphilis among those who had and those who had not taken mercury for the treatment of the primary sore, and he should say that, *ceteris paribus*, the returns were equal.

Mr. Spencer Wells defended his old associates in the Navy, and their brethren in the Medical Department of the Army, from the charge implied in the remarks made by Mr. Solly. It would be most unjust if a statement were to go forth from that Society without contradiction, that the prevalence of secondary syphilitic disease in the public service was the fruit of the disuse of mercury by Army and Navy Surgeons in the treatment of the primary sores. There was no foundation for any such charge. It is to the Army and Navy Surgeons that we are indebted for much of the knowledge we possess of the pathology and treatment of syphilis. Soldiers and sailors are under the observation of their Surgeons for many years, and the rules of the services require that records of all cases of illness must be preserved; so that Army and Navy Surgeons have far better opportunities of observing the final result of their treatment than can often be found in private practice or in civil Hospitals. Thus, as syphilis is so very common a disease in the services, a greater number of facts has been collected to determine the true influence of mercury upon syphilis than can be obtained with regard to any other Medical question, with the exception, perhaps, of vaccination. These facts, carefully observed and accurately recorded, and numbered by many thousands, prove not only that mercury is unnecessary for healing primary sores, but that it actually retards the cure of the common or non-indurated sore, although it hastens the healing of the indurated sore, or true Hunterian chancre. And they prove not only that mercury is no preservative from secondary symptoms, but that the frequency and severity of the secondary symptoms are increased in direct proportion to the quantity of mercury used, and that many of the more formidable varieties of tertiary disease are caused, not by syphilis, but by mercury. The true use of mercury in small quantities in the treatment of the primary indurated sore, and in some forms of secondary disease, is well understood in the Army and Navy,—its failure in preserving from secondary symptoms is better known than it is in civil practice; and it would be most unjust to blame gentlemen because they had ceased to follow a mode of treatment which ample experience has proved to be not only useless but injurious.

Mr. Wyatt did not understand that Mr. Solly cast any reflection on Army Surgeons, but merely stated the fact, that when primary sores were not treated with mercury, secondary disease was more common. He (Mr. Wyatt) differed from Mr. Coote in respect to the influence of syphilis on pulmonary disease; he had seen it modified by syphilis on many occasions. This influence he had observed in several other diseases.

Dr. O'Connor said it was a delusion to suppose that a blood disease like syphilis was purely Surgical, and he had no hesitation in stating that nearly all the mischief resulting to patients who were the subjects of primary syphilis was owing to their being supposed to be cases requiring only Surgical interference. This would account for the errors in treatment which Mr. Coote seemed to labour under. Notwithstanding the large field for observation at St. Bartholomew's Hospital, he (Dr. O'Connor) had quite as extensive opportunities at the Royal Free Hospital, where he had seen a vast number of patients, the subjects of syphilitic diseases of the nervous centres and internal organs. Mr. Coote doubted the existence of such forms of constitutional syphilis, although they had been for years written on by many truthful authors, including Drs. Graves, Stokes, Todd, and Head. He had himself placed on record many interesting cases of paralysis and epilepsy depending on syphilitic origin. Dr. O'Connor related the particulars of cases of syphilitic disease of the liver, lungs, ovaries, and cases of syphilitic menorrhagia, which had come under his care, and all of which he treated successfully. He was of opinion that there was no blood poison that so extensively influenced the true nature of disease at the present day as the existence of constitutional syphilis. That condition he believed to be due either to non-mercurial or imperfect mercurial treatment. He contended that what was good in the treatment of syphilis was mercury, and what was not good was not mercury; when to use and when to discontinue it was the great desideratum in the treatment of syphilis. The insoluble preparations of mercury he believed to be the most efficient,

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used externally by inunction, internally, or in the form of suppositories. Iodide of potassium he believed to be valueless as an anti-syphilitic remedy, but much benefit was derived from its use after a proper mercurial treatment, in promoting the elimination from the tissues of the insoluble preparations of mercury already partially acted on by the juices of the body. Besides, iodide of potassium was a prophylactic to tertiary symptoms. It was supposed by some that syphilis was communicable from a wet nurse to her nursling without the presence of an eruption. He was of a contrary opinion; many cases had been under his care where the disease was communicated by the milk and saliva, and he related the particulars of one case, a patient at the Royal Free Hospital during the last year.

Mr. Solly had no wish to cast a slur on either navy or army Surgeons. The matter before them was one of opinion, and was open to discussion.

Mr. Coote did not dispute the statements made by the author; but he contended that we required more stringent evidence than he had given as to what was or was not syphilitic. The effects of mercury, as spoken of, were not sufficient tests. He was not prepared to admit the occurrence of the internal syphilitic diseases enumerated by the author.

Mr. Hilton regarded the paper as an able one; but there were so many complications in the treatment of the cases, and so much depended on change of climate and other causes, that it was difficult to deduce any direct opinion from the facts presented. What did Mr. Solly mean by the non-mercurial treatment now bearing its fruits? Did he refer to the general treatment of syphilis thirty years ago in the army by nitric acid? He thought that it had been proved by that practice, that there were fewer cases of secondary affection than when mercury was indiscriminately employed. He (Mr. Hilton) thought the great error in the treatment of the disease at the present time was the complication of remedies employed; so that it was really difficult to determine what symptoms were the results of the disease and of the remedies respectively. Mercury, properly administered, was the best treatment in syphilis; but, when given internally, it must not be allowed to interfere with digestion, or it would do harm by setting up irritation—a very common effect when mercury was given in a routine way. He preferred the treatment by inunction. Small quantities of mercurial ointment, such as five or ten grains, rubbed in night and morning, were sufficient to produce the specific effect of the remedy, and cure the disease in almost every case. His (Mr. Hilton's) Hospital experience of the disease differed from that mentioned by Mr. Coote. He found that most of the cases admitted presented complications, the result of improper treatment, the administration of mercury by the mouth, variety of remedies, and carelessness in regard to diet. When mercury was administered by the skin, it was not necessary that the same great care as to changes of temperature, etc., should be observed. Complications arose from improper treatment, which served to confuse that which in reality was a simple disease.

Dr. Wasman said, although Physicians were sometimes considered as no great authorities in reference to syphilis, he would nevertheless remark that this disease was occasionally assigned in asylum reports as a cause of mental alienation. Indeed, one of the cases described in the paper read formed a good illustration. Some observers believed such a sequence was by no means uncommon, especially among persons hereditarily predisposed. On that point he would appeal to Dr. Wood, then present, who, having had much experience in mania, was in a position to answer the inquiry. Respecting another question—namely, whether climate ever exercised any influence—he (Dr. Webster) did not wholly agree with the author; nor in the deduction implied, that hot summer weather aggravated syphilis and rendered it more common compared with a cold temperature. In support of an opposite opinion, Mr. Coote had just mentioned its rarity at Smyrna; while he (Dr. Webster) would assert, after lately visiting Spain and Portugal, notwithstanding the malady was rife in those countries, it did not appear either more severe or more general than throughout northern regions. For example, at St. Petersburg and Moscow syphilis prevailed quite as inveterately as the author had noticed in warm, moist, Mediterranean climates. To Stockholm similar remarks applied, as, likewise, to other large towns in the north of Europe, where the disease seemed both as prevalent and marked in symptoms as elsewhere. Regarding this fact, a recent report presented to the Norwegian government might be quoted, which stated that in Christiana 3560 individuals—all being from the lower ranks—were admitted into the Hospital appropriated for syphilitic patients during the last thirty years. But as the above number did not include persons analogously affected who belonged to other classes of society, nor those treated at their domiciles, that official statement proved the frequency of syphilis in that northern city, which contains only about 35,000 inhabitants. Thinking the circumstance might be interesting to British practitioners, Dr. Webster added that at the Venereal Hospital of Moscow the non-mercurial treatment was not much in favour with the Medical officers, who chiefly relied upon mercury for effectually curing true chancre and its consequences.

Dr. Wood said that, during the time he was at Bethlehem, cases, he believed, were occasionally admitted which were stated to have been caused by syphilis; but he could not be quite positive on the matter. Since he had been Physician to St. Luke's no case had been admitted in which alienation was attributed to syphilis. It was very rare indeed to find insanity produced by that disease. It might tend to the production of insanity, no doubt, by its exhaustive influence on the system, as did other exhaustive diseases; but it did not, he thought, act as a direct cause.

Mr. Solly regarded the most successful treatment of syphilis as that by inunction. He believed that the greater success of treatment at St. Thomas's over St. Bartholomew's was to be explained by the fact, that in the former the mercury was administered by the skin, and in the latter by the mouth. It was difficult to say what was the real amount of secondary symptoms in his Hospital patients; but in his private practice it was certainly very small.

Mr. Coote said that the inunction system was only the old fumigation plan revived. The results were equally good in whatever way mercury was administered, provided proper care and discrimination in its employment were exercised.

LEGAL INTELLIGENCE.

LIVERPOOL COUNTY COURT.

(*Before Mr. Serjeant* Wheeler, *Judge.*)

ACTION BY A SURGEON TO RECOVER HIS FEES.

PARKER v. CHILTON.

This was an action brought to recover £8 8s., the balance of an account for Medical attendance. The plaintiff, Mr. E. Parker, is a Surgeon, residing at Kirkdale; and the defendant, Mr. J. Chilton, is a solicitor, of Liverpool, but residing at Walton. £2 15s. was paid into court.

Mr. Dodd appeared for the plaintiff, and Mr. M'Oubrey for the defendant.

It appeared from the evidence of the plaintiff that he had been in practice for twenty-four years. During 1861 he visited Mrs. Chilton's family professionally. Mr. Chilton resided at Orchard Hey, near Preston-road station, about two miles from the plaintiff's residence. His attendance began in March, 1861, and was continued until July of the same year. Mrs. Chilton was confined in June, 1861, but the plaintiff's visits prior to her confinement were to the children and Mrs. Chilton, and not in connexion with the confinement of the latter. Mrs. Chilton presented the plaintiff with three guineas on the day of her confinement. The three guineas paid him up to that time. On the 26th of June Mrs. Chilton asked the plaintiff to send in his bill, and he did so. He charged 10s. 6d. for a night visit, and 7s. 6d. for the other visits, which he considered to be a reasonable and the usual charge. The bill amounted to £6 10s. 6d. He made five visits subsequently, and charged 7s. 6d. a visit; and he sent in a second bill for £1 7s. 6d. He had called to get his bill paid, but was ultimately informed by Mrs. Chilton that her husband was not sure that all the visits charged had been made, and the plaintiff said he would send a bill of particulars to Mr. Chilton.

In cross-examination, the plaintiff said that he had been sent to Mrs. Chilton by Mr. Banner, Surgeon, of Rodney-street, who had previously attended the family. He (plaintiff) had prescribed for her with reference to her general health.

His Honour asked if Mrs. Chilton was to be called as a witness, and Mr. M'Oubrey said that she would not be called. His Honour said it appeared to him the only question that could be disputed was, whether the charges made by the plaintiff were proper. It was a serious imputation upon a

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Medical Practitioner in Liverpool, who had undoubtedly, as far as he (his Honour) had seen him in the box, given his evidence with the greatest possible regard to truth, to turn round upon him in this way. This case had been adjourned to allow Mrs. Chilton to be in attendance, but he had so good an opinion of the sex that he should have been very sorry to see her go into the box to disparage the Medical gentleman who had attended her.

Mr. R. J. P. Harris, Surgeon, of Rodney-street, deposed that the charges made by the plaintiff were, in his opinion, reasonable. In cross-examination, he said the charges of a Practitioner were influenced by distance and the respectability of the patient.

Mr. Brown, of London-road, was called for the defence, and in answer to his Honour said he was a Physician.

His Honour: How can a Physician tell a Surgeon's charges?

It was intimated that Mr. Brown was also a Surgeon. He was a Doctor of St. Andrew's.

His Honour: Just what I expected. This is done away with now, is it not?

Mr. Brown: No; residence is now required.

His Honour: Formerly a person could go there one day and get a degree, and walk away dubbed "Doctor" the next. I have a great objection to this, and prefer degrees got by hard work.

It was stated that Mr. Brown was a member of the College of Surgeons, Edinburgh, and his Honour expressed his satisfaction.

Mr. Brown said he had attended Mrs. Chilton. If witness's patients were of the ordinary class, and if he called upon them in his round, he should charge 5s. 6d. a visit and for expenses—that was 6d. for the toll-bar.

His Honour gave a verdict for the plaintiff for the amount claimed.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a General Meeting of the Fellows, held on Monday, February 16, the following gentlemen, having undergone the necessary Examination, and satisfied the College of their proficiency in the Science and Practice of Medicine, Surgery, and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

John James Barrett, 29, Merrick-square; Joseph James Henry Bartlett, Ludbrooke-lodge, Notting-hill; Hermann Beigel, M.D., 19, Woburn-place, Russell-square; Charles Blatherwick, Highgate; Richard Luscombe Elliot, Kingsbridge, Devon; Anastasius Jeannides, M.D., 43, Chepstow-place, Bayswater; William Jones, Ruabon; Washington Lovegrove, 34, Dowgate-hill; and George Padley, Swansea.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary Examinations at a meeting of the Board on the 18th inst., received the Diploma to Practise the Art and Science of Dental Surgery:—

James Gabriel Surenne, M.D. Edin., Heriot-row, Edinburgh; Edwin Holbord Green King, Portsmouth; William Vanderkemp Moore, Plymouth; John Hewitt Hatfield, Lloyd-square, Pentonville; Geo. Frederic Fox, Gloucester; Edwin Cox, Chapel-street, Preston; Samuel Amos Kirby, Huntingdon; John Henry Brown, Brighton; Henry Holt, Rowe, Preston, Lancashire; and John James Holford, Princes street, Cavendish-square.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, February 12, 1863:—

Francis James Ryder, Royal Kent Dispensary; Thomas Osmond, Thorpe-le-Soken, Essex; Isidore Bernadotte Lyon, 20, Euston square; Arthur Beadles, Broadway, Worcestershire; George Granville Bothwell, Rathmullan, Ireland; and Thomas Edward Williams, St. Bartholomew's Hospital.

The following gentleman also on the same day passed his First Examination:—

Alexander James Low, St. Bartholomew's Hospital.

APPOINTMENTS.

BRADLEY, SAMUEL M., M.R.C.S. Eng., has been appointed Physician's Assistant at the Manchester Royal Infirmary and Dispensary.

BRITTAIN, THOMAS LEWIS, M.D. Edin., has been elected Assistant House-Surgeon to the Chester General Infirmary.

COUTSON, WILLIAM, F.R.C.S. Eng., appointed, by his Royal Highness the Prince of Wales, Sheriff of Cornwall.

COWELL, GEORGE, M.R.C.S. Eng., has been appointed Surgeon to the St. George's and St. James' Dispensary.

DUNN, ANDREW, M.D. Edin., has been appointed Ordinary Medical Officer to the Public Hospital, Jamaica.

FIDDES, ALEXANDER, F.R.C.S. Edin., has been appointed Ordinary Medical Officer to the Public Hospital, Jamaica.

FORBES, D., M.D., has been appointed Surgeon to the Glasgow Lock Hospital.

GERVIS, HENRY, M.D. Lond., has been appointed Assistant-Physician to the Surrey Dispensary.

GRIFFIN, F. U. G., Weymouth, B.A. Lincoln College, has been elected to the Radcliffe Travelling Fellowship, Oxford University.

MCDONALD, KEITH N., L.R.C.S. Edin., has been appointed Resident Medical Officer to the Eastern Dispensary, Bath.

MASON, FREDERICK, L.R.C.P. Edin., has been appointed Surgeon to the Bath Eye Infirmary.

NUNN, THOMAS WILLIAM, F.R.C.S. Eng., has been appointed Surgeon to the Middlesex Hospital.

SCHOLLICK, T. J., M.R.C.S. Eng., has been appointed Resident Medical Officer to the Guildford and West Surrey Dispensary.

STERN, MORITZ, M.R.C.S. Eng., has been appointed Resident Medical Officer and Medical Registrar of the Public Hospital, Jamaica.

TEVAN, WILLIAM FREDERIC, F.R.C.S. Eng., has been appointed Third Surgeon to the West London Hospital.

WATSON, WILLIAM, M.R.C.S. Eng., has been appointed Honorary Surgeon to the Lancaster General Dispensary and House of Recovery.

DEATHS.

CHALLICOTT, FREDERICK JAMES, M.D., at Sydney, Australia, on December 22, 1862, aged 37.

COLLYNS, WILLIAM, M.R.C.S. Eng., at Chudleigh, Devon, on January 15.

FREMONT, C. J., M.D., of Quebec, Dean of the Faculty of the Diocese of Laval University, at sea, on board the Canadian mail steamship *Bohemian*.

HENDERSON, P., M.A., M.D., of Ottawa, at Burlitts Rapids, on December 26, aged 45.

HUMPHREYS, W. H. J., M.B., only son of G. Humphreys, M.D., of Harcourt-street, Dublin, on February 2.

THOMAS, JOHN, M.R.C.S. Eng., at Ladbroke-place West, Notting hill, on February 15, formerly Resident Medical Officer of Bethlem Hospital.

WILLIAMS, RICHARD PARRY, L.F.P.S. Glasg., at Bron Offa, Adwyr-Clawdd, Wrexham, lately.

ANTHROPOLOGICAL SOCIETY OF LONDON.—We hear that the above young society is already so far in a flourishing condition as to be able to hold its first meeting on Tuesday next, the 24th inst., at 4, St. Martin's-place (7.30 p.m.), when an introductory address will be delivered by Dr. James Hunt, F.S.A., President.

LONDON INSTITUTION.—In Mr. C. Carter Blake's second lecture on *Aves Præcoces*, after briefly describing the general characters of the class of Birds, he discussed in detail the order *Natatores*, divided into *Brevipennatæ*, *Longipennatæ*, *Totipolmatæ*, and *Lamellirostratæ*; the order *Grallatores*, divided into the *Macrodactyles*, *Cultirostres*, *Longirostres*, and *Pressirostres*; the order *Cursores*, exemplified by the *Apteryx*, Dodo, Ostrich, Cassowary, Notornis, and Dinornis; and the order *Rasores* divided into the *Clamatores* and the *Gemitores*. The next lecture will be devoted to the *Aves Altrices*.

NOBLE MUNIFICENCE.—Miss Rosa Frances Lewis, of Cadogan-place, the only daughter of the late Mr. W. T. Lewis, the celebrated comedian, and past proprietor of Covent Garden Theatre, has left nearly 15,000*l.* to charitable institutions, and has not forgotten some of our Medical institutions, having bequeathed to St. George's Hospital, 200*l.*; the Hospital for Consumption at Brompton, 200*l.*; the Asylum for Idiots, 100*l.*; the Lying-in Charity, Liverpool, 200*l.*; the Infirmary, Brownlow-hill, Liverpool, 200*l*; and the Dispensary, Vauxhall-road, Liverpool, 200*l.* By the death of this estimable lady a sum of 10,000*l.* and the portrait of her father by Sir Martin Shee reverts to the National Gallery.

THE Metropolitan Association of Medical Officers of Health will hold their next meeting this (Saturday) evening at half-past seven o'clock, at 8, Richmond-terrace, Whitehall. A communication will be read from the Secretary of the Epidemiological Society, respecting the "Proper Registration of Sickness among Paupers." Mr. Chadwick will make a proposal in reference to an application to Parliament on the "Sanitary Requirements of Public Schools." At eight o'clock, Dr. Murchison, Physician to the London Fever Hospital, will read a paper on "Continued Fever." A communication will be read by Dr. Boycott, Physician to the Canterbury Hospital, on the "Fever of Canterbury." Visitors may be introduced as usual.

DISCOVERY OF HUMAN REMAINS.—Five skeletons have been found in a field on the right of the road leading from Guildford to Merrow. They were buried in excavations

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in the solid chalk, at a depth of between two and three feet from the surface. The skeletons lay due east and west, the head to the west and the feet to the east. Mr. F. D. Ross, Surgeon, who examined the bones, pronounced them to have belonged to individuals of different ages. The pelvic bones of one skeleton indicated that it had belonged to a female. A blade of iron much corroded, about four inches in length, was found in one of the excavations. There have been various theories started with regard to the remains, but none assign to them a very high antiquity.

RUSSELL *v.* ADAMS.—The case of Russell *v.* Adams is creating considerable attention in Professional and general circles, owing to the equivocal character of the verdict for the defendant. On Wednesday afternoon an influential preliminary meeting was held at No. 5, Cavendish-square, John Brady, Esq., M.P., in the chair, at which a resolution was unanimously passed, calling a public meeting, and inviting members of the learned professions and the public to take into consideration the best means to suppress the increasing practice of attempting to extort money by false charges. A resolution was also passed, electing a general and executive committee. The following gentlemen were present:—W. Coulson, Esq., Borlase Childs, Esq., J. B. Brown, Esq., J. F. Clarke, Esq., Haynes Walton, Esq.; Dr. Markham, Spencer Wells, Esq., W. Harvey, Esq., G. Lawson, Esq., Dr. Leared, Dr. Wynn Williams, Dr. Dick, H. Thompson, Esq., W. L. Leaf, Esq., H. H. Cannan, Esq., John Churchill, Esq., Ernest Hart, Esq., J. Tomes, Esq., S. S. Scriven, Esq., Dr. Brown-Séquard, John Chapman, Esq., W. F. Low, Esq., Dr. A. L. Fisher, Erasmus Wilson, Esq., Dr. Bloxam, John Gay, Esq., John Erichsen, Esq., Dr. Cape, Dr. Ross, etc., etc. The following executive committee was also elected:—The chairman, John Brady, Esq., M.P., M.D.; John B. Walker, Esq., 17, Clifton-gardens, W.; hon. secretary; W. L. Leaf, Esq.; Benjamin W. Richardson, Esq., M.A., M.D.; J. Dangerfield, Esq.; Mr. Sheriff Jones; T. Spencer Wells, Esq., F.R.C.S.; H. H. Cannan, Esq. The proceedings of the meeting were enthusiastically received, and terminated with a vote of thanks to the chairman.

IT is now definitely stated that the principal officers of the staff at Fort Pitt Hospital, Chatham, together with the professors and heads of departments connected with the Army Medical School at that establishment, will leave the garrison and enter on their duties at Netley Hospital during the first week in the ensuing month, immediately after which the entire invalid depôt at St. Mary's Barracks will also move to the same establishment. As soon as the new arrangements are completed Chatham will cease to be the station to which troops will be forwarded from all parts of the world for the purpose of being discharged. Under the new system the vessels arriving from abroad with troops will lie in Southampton Water, near Netley, where the time-expired men and invalids will be landed, when those not requiring Medical or Surgical treatment will be at once sentinland to their depôts or forwarded to their homes, while the sick and wounded only will be detained in the hospital, the plan of keeping up what is termed an invalid depôt, as at Chatham, being discontinued. The intention to convert Fort Pitt into barracks for the reception of officers and troops has, it is understood, been abandoned, and the building will still be retained for a hospital, for which its excellent site eminently fits it. According to present arrangements, it is intended to make Fort Pitt the central hospital for the whole garrison, thus doing away with the necessity of separate hospitals for the Royal Artillery, Royal Engineers, and the Line, as is the case under existing arrangements. The officers of the staff already named as selected for the new hospital at Netley are Col. R. Wilbraham, C.B., Governor; Major J. M. Kennedy, Paymaster; and Capt. W. Hawtree, Captain of Orderlies.—*Times*, Feb. 19.

UNIVERSITY OF DUBLIN.—The Spring Commencements were, according to custom, held on Shrove Tuesday, in the Examination Hall of Trinity College. More than ordinary interest attached to the proceedings this year, in consequence of the installation of the Earl of Rosse, as Chancellor of the University, having been fixed for the same time. The auspicious occasion was chosen also to confer on three distinguished members of the Surgical Profession the well-merited and high compliment of the honorary degree of M.D. Mr. Mackesy, of Waterford, whose distinguished Professional reputation led to his being the first provincial Surgeon ever chosen to fill the office of President of the Royal College of Surgeons in Ireland; Dr. Arthur Jacob, the discoverer of the membrane in the eye, which has received his name; and Mr. Butcher, well known by his numerous and valuable contributions to Surgical science, were the gentlemen thus honoured. With respect to the selection by the Senate of the Earl of Rosse to fill the highest office in the University, we copy the following just remarks from one of the oldest of the Dublin newspapers, *Saunders's News-letter and Daily Advertiser:*—"Lord Rosse is an Irish nobleman of ancient and distinguished family, the owner of large estates, and, better still, a resident on the land he owns. He possesses not only the advantages of rank and fortune, but, apart from his distinguished position as a peer, is known to the world as one of the first of living men in point of scientific attainments. An acute and persevering observer, it has been his lot to throw new light upon the study of astronomy, to discover unknown worlds, to explode chimeras, and to establish just and well-founded theories. His magnificent telescope is one of the world-wonders of the present age; and although the cloudy skies of our climate have, no doubt, much impeded his course of observation, his discoveries have raised him to a European fame. Lastly, he is an *alumnus* of the University,—a fact which, in itself, constitutes no mean qualification, and which, taken in connexion with the other circumstances that rendered him so well fitted for the office to which he has been elected, leaves no room for wonder at the unanimity displayed in the recent vote of the Senate. No other candidate could, by any possibility, have been preferred to one who so fully satisfies all the conditions required in the Chancellor of the Irish University—Irish birth, distinguished position, an honourable name, high talents, extensive scholarship, and popular esteem. The College authorities have acted wisely, not only in electing Lord Rosse, but in making his installation an event of the first importance. No fact which has been chronicled in their calendar ever awakened as deep interest, or, in all probability, accomplished such permanent good. They have chosen to draw still closer the bond which links the University to patriotism, genius, and public service; and there is little doubt that they will have their reward in the growing strength of the affection with which intelligent Irishmen of all creeds and classes, who possess one spark of national pride, shall henceforward regard the institution of which the Earl of Rosse is the head." The following degrees in Medicine and Surgery were conferred by the newly-installed Chancellor:—*Baccalaurei in Medicina*—Matthæus Steele, Christopher John Weir, Johannes E. Purdon, Gulielmus West Quinton, Gulielmus Stokes, Carolus Cameron, Gulielmus H. Symes. *Magistri in Chirurgia*—Carolus Cameron, Johannes E. Purdon, Gulielmus Stokes, Gulielmus H. Symes. *Doctores in Medicina*—Thomas L. Mackesy, Præses Coll. Chir. *(honoris causâ)*; Arturus Jacob *(honoris causâ)*; Ricardus G. H. Butcher *(honoris causâ)*; Gilbertus De Poulton Nicholson, Philippus Crampton Smyly, Johannes B. Hamilton, Johannes Barker, Gulielmus Stokes. Among those on whom non-Medical degrees were conferred were:—William, Earl of Rosse, LL.D. *(honoris causâ)*; Benjamin Lee Guinness, the munificent restorer, at a cost to himself of about £100,000, of St. Patrick's Cathedral, LL.D. *(honoris causâ)*; Sir Patrick South, LL.D. *(honoris causâ)*; The Right Hon. and Hon. John Prendergast Vereker, *filius nobilis*, Lord Mayor of Dublin, LL.D., etc., etc. The proceedings were honoured with the presence of his Excellency the Lord Lieutenant, who, in the evening, entertained at dinner, at Dublin Castle, the Chancellor, Provost, Fellows, and Professors of the University, and a distinguished company.

MEDICAL STATISTICS OF BERLIN IN 1861.—At the end of 1861 there were 522 Physicians; 44 Surgeons of first class; 29 Surgeons of second class; 36 Dentists; 42 Apothecaries; 62 Veterinary Surgeons; and 154 Midwives.—Total, 889. In the Charité Hospital there were treated during the year, 11,188 patients, viz., 6432 men, 4059 women, 370 boys, and 297 girls: of this number 8791 are returned as cured or improved, 162 as incurable, 7 as sent away, 1104 as dead, and 1124 as still under treatment. Among the deaths were 71 children born dead. The proportion of deaths to the entire number treated was 9·8 per cent. The days of treatment amounted to 413,639. Returns are given of the patients treated at various other establishments, belonging to the different religious bodies and private persons; but the numbers of each are insignificant. Still, in the aggregate, they are considerable, making 22,444 patients treated at all the Berlin Hospitals, the days of treatment being 976,734.

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NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

To Correspondents.—The present arrangements of the *Medical Times and Gazette* only allow the insertion of deaths of members of the Medical Profession.

Veritas Vincit.—Certainly not.

Dr. Kidd.—We regret that the space at our disposal does not permit us to insert Dr. Kidd's letter, nor to enter on the controversy to which it refers.

Dr. Morell Mackenzie's communication, on the "Dispensary for Diseases of the Throat," has been received.

M. D., 100.—The paper shall be inserted, but the great press of matter in our columns will necessitate some delay.

West Haddon.—Our correspondent will see, on referring to the report alluded to, that it was sent us by a correspondent, and referred only to the *Medical* details of the case. Our comments are reserved until the whole facts have been investigated before a legal tribunal.

The College of Dentists has found it expedient quietly to give up the principle of independence, and to seek amalgamation with the Odontological Society. We are well content that the body of Dentists should be one and indivisible, but we think that they would have better consulted their own dignity and professional standing by remaining a separate profession than by obtaining a doubtful standing within the walls of the College of Surgeons. We hear that a strong effort is to be made to induce the Medical Council to allow the enrolment of the certificated Dentists of the College of Surgeons on the Medical Register. We are certain that any such concession on the part of the governing body of our Profession will be received with marked disapproval by the legitimate Practitioners of Medicine and Surgery.

The Dwellings of the Working-Classes at Belfast.—Dr. Henry M'Cormac has addressed a letter to the mill-owners, house-proprietors, and employers of Belfast, calling attention to the condition of the working-classes in that city, and especially to their house accommodation. He says that, for many years, he has been labouring to bring about an amelioration in their condition, but hitherto in vain. We hope, however, that his very able remonstrance and appeal (from which we append an extract) will not be unproductive of good result:—

"It is not, I suppose, too much to say—is it?—that the municipality, that house proprietors and employers generally should inquire efficiently, see with their own eyes, into the state of the habitations of the poor. There is a very great—there is, in fact, an incredible—deficiency in house conveniences and propriety. If anything I could say would but lead to a periodical personal inspection on the part of mill-owners, employers, and others, I should rejoice indeed. Kindlier sympathies would awaken at the aspect of human suffering, and lead to commensurate efforts at relief; for, indeed, the houses of the Belfast poor are ill-constructed and worse supplied in respect of appliances for insuring human comfort and human decency. Few windows are made to pull down, and the vicinage of the dwellings is not kept adequately clean.

"Religion needs to be carried into action. A spoken religion merely is not sufficient. The verbal must become a living creed. This, I believe, is the great want at once of Christendom and the world. Religion should be a practice, and not a profession simply. I see abundant tracts here and there in the houses of the poor—tracts proclaiming that man is a wretch, and that a proximate hell yawns open for him. But I want to see distributed broadcast tracts that tell him that God and heaven are also nigh, and that man may be a very angel if he will but follow the path of right and duty. I would have tracts to tell that pure air must be breathed, day by day and night by night, to cleanse the blood, to keep the inner system clean. I would have tracts to urge outward purity—tracts declaring that the living frame, if not daily, at least weekly, should be bathed from head to heel. I would have tracts to urge the preparation of wheatmeal bread; for white bread, with weak tea, used three times each day, is not azotised enough, is quite unfitted for exclusive sustenance, and impairs in this town yearly the health of thousands. I would have tracts to point out the confection of wholesome stews and other cheap and wholesome nutriment. For how are working people to know these things unless through printed tracts or spoken words? The art of cooking and of keeping garments clean and comfortable should be taught in every school. I would have practical lessons in temperance—I do not mean abstinence simply—with the names and rational uses of wines and fermented drinks. Everywhere there should be free lending libraries, free public baths, concerts, lectures, museums, and gardens. Everything, in short, ought to be done, not to degrade, but to elevate; not to confine the aspirations to this life, but to lead them to the reasonable hope and expectancy of a yet more elevated life to come."

The late Graduation at the University of St. Andrews.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I was so staggered by the statements made in your Journal of January 31, with reference to the candidates admitted to examination in December last at the University of St. Andrews, that I at once wrote to Professor Day, calling his attention to the subject. I send you a copy of his letter in reply.

I have waited for this day's issue of your Journal, expecting that the Senatus Academicus would have thought the subject "deserving of notice." I am surprised that no communication has been forwarded to you relative thereto. If it be true that persons were admitted who possessed no legal qualification, such a proceeding was not in good faith with the published regulations, a believed adherence to which on the part of the Senatus Academicus may have kept many a third-year-man from presenting himself for examination. Of the character of the examination as a whole, for Practitioners, I have written you in an October number of your Journal, up to which time I have reason to believe the regulations were strictly followed out. I am, &c.

John Robert Kealy, M D. St. Andrews,
Gosport, February 14. L.S.A. 1854, M.R.C.S, 1855, etc., etc.

"St. Andrews, February 3, 1863.

"Dear Sir,—My attention has already been directed to the mis-statements contained in the article you refer to. I shall direct the attention of the Senatus to the subject, but do not know whether they will think the subject deserving of notice. Faithfully yours,

"Dr. Kealy." "G. G. Day.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—As I happen to be one of the individuals concerning whom a letter from "A Mature Graduate" appeared in your impression of February 14, it is but right that I should disabuse his perturbed mind and allay its excitement. His letter states that students of only two years' standing were admitted to examination at St. Andrews for the M.D. degree in December last. If the Senatus Academicus have, through force of circumstances, rather deviated from the usual track, and admitted a select number of gentlemen to examination before the completion of their entire curriculum, I could show your correspondent that such a procedure is by no means without precedent with other examining boards; and that, in this case, the Senatus have been especially careful in withholding the parchment until such curriculum in its entirety is fulfilled.

I cannot but condemn the language of my fellow graduate, and congratulate him upon his good fortune if he is not severely censured by the Senatus for such a depreciation of the performance of their duty.

Perhaps the time is not far distant when, in medicine as in kindred sciences, a man's attainments will gain the meed of honour, even though the prescribed onerous formula of classes should remain unfulfilled. I may say it is my opinion the junior candidates were by no means the most leniently dealt with. I am, &c. Alpha.

[We have received private information that certain students, who would have been eligible under the old regulations for examination for the M.D. in April of this year, and who had commenced their studies with the intention of graduating at St. Andrews, petitioned the Senatus for leave to be admitted, when they had completed their curricula, under the old regulations. A strong memorial on the subject was sent to the Scottish Universities' commissioners, who, however, refused to relax the ordinance in favour of these candidates. Under these circumstances, and with the approbation of high legal authority, it was resolved that they should be admitted to examination in December last, provided they gave written pledges to complete their course of study. Five or six candidates presented themselves on these conditions, of whom three or four passed.—Ed.]

The Largest Provincial Medical Society.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your account of the annual meeting of the South Hants Medical Society, it is stated that, having ninety-one members, it is the largest provincial Medical Society in the kingdom. This is an error, as the Liverpool Institution Medico-Chirurgical Society numbers over 100 members. The Liverpool Medical Institution was built about twenty-five years ago by the Profession at great cost, and is, probably, the handsomest non-corporate Medical building in the kingdom; and is considered one of the ornaments of this great town. It has, in addition to its extensive library and reading room, a large theatre, a smaller lecture room, a museum, council chamber, and other minor apartments. In this building the British Medical Association held their meetings a year or two ago, and found ample accommodation. There is also a residence attached for the Librarian. The meetings of the members take place every alternate Thursday during the session. At these meetings specimens are shown, cases related, and papers read, and then follows a discussion on the various subjects brought before the meeting.

I am, &c.

Alex. Stookes, M.D.,
Hon. Sec. Liverpoool Medical Institution.

Liverpool Medical Institution, Mount-pleasant, Liverpool, Feb. 16.

On the Therapeutical Action of Quinine.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Having seen Dr Laycock's paper and some letters signed "M.D." in your late Number, I think this a favourable opportunity of advancing my opinion on a subject which has occupied my attention for some time.

I believe that quinine is held to be a direct tonic on insufficient grounds, and that its real action is that of a sedative to the efferent nerves of the sympathetic, a conclusion at which I have arrived from the observation of the following facts:—

a. It requires very much larger doses of quinine to produce its physiological effects in robust persons than in the debilitated; and in extreme asthenia even small doses are poisonous.

b. It decreases the force and frequency of the pulse.

c. When given in inflammatory fever, it restores the activity of the secretions, according to the following laws:—

1. In sthenic cases, it requires large doses (from five to ten grains) to produce any appreciable effect, but then it invariably establishes profuse diaphoresis, and frequently diarrhœa, and diuresis, too.
2. In asthenic cases, these results follow the use of much smaller doses, but in the extremely debilitated it fails to act so altogether.
3. Stimulants very much increase its action in all asthenic cases.

d. When administered to apparently healthy persons, it produces diaphoresis, diuresis, diarrhœa, or all, or none of them, in such an extremely capricious manner as to leave its claim to be a special stimulant to any organ concerned, out of the question.

e. When administered along with stimulants which act specially on any secretory organ, it very much increases their efficacy.

These facts, which I have verified over and over again, I think point rather to the subduing of some antagonistic force than to the stimulation of that by which the secretions are induced; and I deduce from them along with the foregoing hypothesis, the following practical point, which will also be found true:—

Quinine is only useful in dyspepsia which results from suppression of the digestive secretions from febrile irritation. It should be used rather in sthenic than asthenic cases of inflammation. It is not suitable in disease of the heart. I may also mention here that in erysipelas, and the exanthemata generally, the pulse cannot be modified by quinine, so that it becomes a useful diagnostic agent in Surgery; for, in the fever which follows injury, should its administration fail to affect the pulse, erysipelas may be certainly predicted. I am, &c.

Robert Walker, F.R.C.P. Edin., F.R.C.S. Edin.

Longtown, February 13.

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THE WIRE COMPRESS, A SUBSTITUTE FOR THE LIGATURE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—As you have thought Mr. Hilliard's plain worthy of a place in your columns, I suppose it demands a reply from me.

If, instead of coming to a hasty conclusion from reading a mere abstract of my paper, he had waited until the said paper is published in *extenso*, he might have saved himself from the folly of rushing into print with an altogether imaginary grievance, for he would then have found that I have given him full credit for his share of the matter; which, if any of your readers care to know, may be thus briefly stated:—

In my paper on "Acupressure," published in the *Medical Times and Gazette* of June 2, 1860, having pointed out certain disadvantages of the needling process, I suggested, "as a crude hint," the use of a fine suture wire instead of the needles, which, I believe, was the first promulgation of this idea. Next post brought me a communication from Mr. Hilliard, of Brighton, stating, his experience of the defects of the needles had "made him resolve that on a future occasion he would adopt the very method which I then proposed." At the same time came a letter from Mr. Hilliard, of Glasgow, till then utterly unknown to me, in which he says, "I am much pleased to see the modification which you suggest on Simpson's method. He goes on to state that the same idea had occurred to him, and points out a way of applying the wire differing somewhat from my crude plan, which, says he, "I think embraces fully your suggestion, and in addition is, perhaps, more simple and expeditious."

And so, indeed, sir, it has turned out; and accordingly my paper, read before the Medical and Chirurgical Society, contains the following passage: "Here I ought to mention it was from Mr. Hilliard I first learnt that the abrupt bending of the wire is not an impediment to its removal; he also suggested to me the use of two needles in the way just described, by which the wire is applied much more expeditiously and exactly than by using a single needle." I also showed his needles and wire, and spoke of them as the best I had seen for the purpose.

Now, Mr. Hilliard ignores the fact that my paper on "Acupressure" not only referred to the defects of the needles, but also "promulgated the idea that the wire would be free from all these disadvantages, and would eventually supersede the needles," and claims to have first suggested to me the use of the wire, and taught me its application.

But, sir, I think you will agree with me that all discussion as to originality in this matter is perfectly preposterous. In my paper, I have, for myself, expressly disclaimed it, and am free to confess that I get the idea of compressing arteries by a metallic substance, instead of strangulating them by an organic ligature, from Dr. Simpson, of Edinburgh, to whom I am happy to repeat publicly my own sense of obligation for his happy invention.

I am, &c.

Hull, February 11. JOHN DIX.

THE RECENT TRIAL IN LEEDS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Having been present in court during the trial, I can bear testimony to the accuracy of your correspondent's report.

There were two highly respectable Practitioners ready to give evidence in favour of the reasonableness of the plaintiff's charges, and a third, who did not remain on account of an important engagement, and also because of the arrangement made at the opening of the case—to refer the charges to Medical arbitration.

I have carefully examined the "bill," and can assure "Amicus Justitiæ" he is in error as to three guineas being charged for three visits: and those two charged one guinea each on the day of the accident, which this "friend of justice" says were paid within two hours of each other, were each of about two hours' duration, at a time, I find, when the patient's life was in imminent danger.

"Amicus Justitiæ," in his attempt to patch up the defendant's conduct, omitted to state that he did not offer £5 until legal pressure had been put upon him; he also omitted to inform you that he offered it in terms such as no gentleman could accept. The feeble attempt of "Amicus Justitiæ" to damage your correspondent's report would not have been worth a moment's notice, did it not afford an opportunity of saying a word about the Medical award.

It has hitherto been an acknowledged rule, that the station in life—in other words, the ability to pay—should, to some extent, regulate Medical and Surgical charges in all cases, but particularly in cases of accident. Now, it could not, in common fairness, be argued, that this working man (who, by-the-by, is a skilled workman at the head of an important department) was the person really called upon to pay this bill, because he had already received the money from the wealthy firm who were responsible for the accident, and then, impudently buttoning up his breeches' pocket, denied his obligation; and on the plaintiff asking him to hand over what he had received, he coolly told him "to go the devil," which the judge jocularly suggested had been done by going to the county court." Perhaps the judge was right. The Medical award was here made, upon the ground that the defendant was called upon to pay the money out of his own pocket. Had such been the case, no one could much fault with the cutting down of the charges; but as no notice whatever is taken in the award of the collateral circumstances, particularly of the clenching fact, that the defendant had received the full amount. No doubt this case will, in the Leeds court, be taken as a precedent for the payment of the very smallest fees in cases where railway companies or rich firms are, by their carelessness, the cause of serious injury to her Majesty's subjects.

I must add, that the plaintiff deserves the best thanks of his Professional brethren for bringing the defendant before the court; for, if tamely submitted to, such flagrant injustice as that contemplated would have been derogatory to his own character, and a direct injury to the Medical Profession.

I am, &c.

FAIR PLAY.

COMMUNICATIONS have been received from—

Dr. Black; Dr. Stallard; Mr. Haynes Walton; Dr. Richardson; Mr. J. Dix; Mr. G. Harding; Dr. Kealy; Mr. S. Highley; The West Surrey Times; Dr. R. Walker; Dr. Darwine; Fabis; Dr. Ramsbotham; Dr. Althaus; Mr. Charles G. Ritchie; Dr. H. Weber; Dr. John Ward; Dr. Stock-s; Dr. Moore; Veritas Vincit; Mr. Savory; Dr. Day; Dr. A. Mitchell; The Secretary of the Army Medical School; Dr. Devenish; The Secretary of the Royal Institution; M. Demarquay; A Lover of Fair Play; Mr. Carsten Holtsoue; Dr. Morell Mackenzie; Professor Gulliver; Mr. Sylvester Grimes.

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 14, 1863.

BIRTHS.

Births of Boys, 1092; Girls, 1016; Total, 2108.
Average of 10 corresponding weeks, 1853-62, 1805·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	677	669	1346
Average of the ten years 1853-62	635·5	643·9	1279·4
Average corrected to increased population..	..	..	1407
Deaths of people above 90	..	..	7

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	2	15	7	6	4	7	1
North	616,210	7	5	21	5	11	12	3
Central ..	378,058	1	4	10	1	9	7	..
East	571,158	11	4	19	3	14	9	1
South	773,175	2	3	12	3	19	10	8
Total.. ..	2,803,989	23	30	69	18	57	45	13

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·170 in.
Mean temperature	40·7
Highest point of thermometer	49·1
Lowest point of thermometer	29·8
Mean dew-point temperature	36·3
General direction of wind	Variable.
Whole amount of rain in the week	0·09 in.

APPOINTMENTS FOR THE WEEK.

February 21. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

Royal Institution, 3 p.m. Professor Max Müller, "On the Science of Language."

23. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

Medical Society of London, 8½ p.m. Lettsomian Lectures on Surgery—Lecture III.—Thomas Bryant, F.R.C.S., "On the Diseases of the Osseous System, and on Tumours, &c."

24. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal Institution, 3 p.m. Professor Marshall, "On Animal Mechanics."

Royal Medical and Chirurgical Society, 8½ p.m. Meeting.

25. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

Hunterian Society, 8 p.m. Mr. Hutchinson, "On Herpes-Zoster, a Pathological Riddle."

Royal College of Physicians of London, 5 p.m. Gulstonian Lectures—Dr. Pavy, "On the Amyloid (so-called) and Fatty Degenerations."

26. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 3 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

Royal Institution, 3 p.m. Dr. Frankland, "On Chemical Affinity."

27. Friday.

Operations, Westminster Ophthalmic, 1½ p.m.

Royal College of Physicians of London, 5 p.m. Gulstonian Lectures—Dr. Pavy, "On the Amyloid (so-called) and Fatty Degenerations."

Royal Institution, 8 p.m. Mr. J. Lubbock, F.R.S., "On Swiss Lake Habitations."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday (to-day) at 2 p.m.:—

By Mr. Ferguson—Ovariotomy; Excision of Breast; Lithotrity; Amputation of Penis; Prolapsus Uteri.

By Mr. J. Wood—Radical Cure of Hernia.

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ORIGINAL LECTURES.

INAUGURAL LECTURE
ON THE
SKELETON OF A GLYPTODON,
RECENTLY PRESENTED
TO THE MUSEUM OF THE ROYAL COLLEGE OF SURGEONS.
DELIVERED AT
The Royal College of Surgeons,
By PROFESSOR HUXLEY.

Mr. President and Gentlemen,—All those branches of human knowledge which, because they are pursued by definite and precise methods, and lead to definable and verifiable results, are called Sciences, have, I apprehend, two principal objects in view, and two great goals after which those who follow them strive. The one aim is to increase man's knowledge and to develop those faculties by which he alone, among the whole of the living creation, is capable of becoming a conscious mirror of the order and method of the universe. The other great object is to increase man's welfare, to diminish the number of those causes which tend to produce pain and evil, and to remove, as far as possible, the results of those causes when they have been in operation. There is nothing new in this view; there is nothing in it but a commentary at large upon the noble words of Bacon, that all knowledge tends to the advancement of God's honour and the bettering of man's estate; and I know of no more concise or more weighty statement of the objects of science than those words of the great chancellor.

That duality of aim of which I have spoken is nowhere better exemplified than by those biological sciences which we all here follow. That duality of aim is illustrated by your museum, containing, as it does, a magnificent series of objects illustrating the whole range of animal structure, and, at the same time, comprising a no less elaborate series of preparations intended more particularly to illustrate the physical evils to which man is liable, and to serve as beacons and warnings, and as instructions to the practical Surgeon. Nowhere is it more clearly shown than in the assemblage in this theatre at the present moment, where you, sir, so worthily represent that great Profession which more than any other tends to assuage the ills of human life; and where I, for the hour that you favour me with your attention, am the feeble representative of that other great branch of biological science, which deals with broad and abstract principles, following truth for its own sake, but trusting that, in the end, its fruits will more and more become available for practical ends.

But it will be obvious to you, that the objects for which we both work, although not really separated, are yet, from the convenience of the division of labour, practically distinct. For the practical Surgeon—for the man in pursuit of the healing art, all knowledge as it comes to him is questioned, whether it will eventually bear upon the curing of the patient, or the healing of the sick—and its value is justly estimated in its exact proportion to the aid it will yield in that direction. But, to those who deal with life from what I might call its speculative side, were it not for the unsatisfactory meaning that has been attached to that word—but, if using the word "speculative" in its proper sense, I look upon myself for the nonce as representing the workers at the speculative or purely scientific side of biological science—then I say that our standard of value for every particular fact, and for every acquisition, is not this, but is another. The object we have in view, in the long run, is to obtain an a knowledge of that chain of causation which has led to the present condition of organic nature, to unravel it, and trace the connexion of its links; and every fact is specially and particularly valuable, as it tends to show us that chain of causation and unravel its coil one from the other. And, inasmuch as that particular division of biological science which is called "palæontology," but which is, in truth, hardly deserving of any special name, seeing that it is simply the application of all the other biological sciences to the explanation of the past course of life upon the globe—seeing that palæontology includes all these, it is, perhaps, that science which has for us, at present, the highest and most profound interest; indeed, to sum up shortly my own view of the case, I may say that Palæontology and Pathology—using pathology in the broadest sense of the word—that those are the two summits and outcomes of all biological knowledge; that they are the twin summits of the tree of life, to which the streams of knowledge, pouring to its roots, are constantly adding. And, holding these opinions, you will understand why it was that, when I had the honour of being appointed to a Chair of Comparative Anatomy and Physiology in this College, I gladly seized upon the opportunity which offered itself in the occurrence and gradual growth, under my own eyes, of this remarkable specimen of an extinct animal, to illustrate this favourite notion of mine—certainly with pleasure to myself, and, I hope, not without some profit to my hearers. I propose, in fact, to take it as a text, and to endeavour to show how, in the elucidation of a fossil of this kind—in order to build it up, to understand its place in nature, and to comprehend the lesson it teaches us, many different branches of biological knowledge must be brought to bear upon it, so that, as an example of palæontological study, it should exemplify what I have said—that that science is the ultimate out-come of all the rest of our biological studies.

In attempting this task, I do not propose to go into the complicated business of analysing and putting before you precisely the share which many observers in succession have had in bringing our knowledge of this particular fossil form to the condition in which it now is. The discussion of that point must be gone over for the sake of justice and right; but, having been once dealt with, the sooner it is forgotten the better. It will take its place in that formal memoir which it will be my duty to draw up on the subject. Nor do I purpose to enter, to any great extent, into anatomical details; for, if I were to attempt anything of that kind, the time at my disposal would not be one twentieth of that which would be necessary. On the contrary, what I suggest is, that we should consider this skeleton as a problem presented to us for the first time,—to be solved, approximately, by the help of that anatomical knowledge with which we are all, more or less, familiar; and I ask you not so much to follow me as to go with me, in tracing out the steps by which it is necessary to proceed in attempting to solve the problem. Before commencing our task, however, there is one pleasant duty to be performed, which is the expression of our great obligation to Señor Don Juan N. Terrero, the gentleman upon whose property this most valuable specimen was discovered, and by whose exertions it was forwarded to this country, and was presented to the Museum at the time Mr. South filled the presidential chair. It is impossible to overpraise the zeal, and, at the same time, the discretion with which this present was made—so large was the number of bones collected, so complete the freedom of admixture from foreign elements; while it is exactly those parts which have been made known by this particular skeleton of *Glyptodon*, which have revealed peculiarities of structure which are not known to exist throughout the mammalian series, or, rather, which were not known before these valuable fragments were put together.

The specimen was found in an exceedingly shattered condition upon the banks of the Rio Salado, about eighty miles to the southward of Buenos Ayres, in South America, in that wide-spread alluvial deposit which has yielded the remains of a great number of extinct mammalia, some of which are among the ornaments of our museum. That deposit, whatever its precise age may be, belongs to the latest of the geological epochs which preceded the present—that "post pliocene" deposit which has lately been so thoroughly described in this and other countries by Sir Charles Lyell, and in which the oldest known remains of men have been found. So that, speaking geologically, the age of the specimen is not worth talking about; but, speaking historically, it is immense, and historical epochs furnish us with no term by which it may be measured. And there remains yet another word to be said respecting the exertions of the skilful artist by whose care these broken fragments have been put together. Mr. Waterhouse Hawkins, who has been employed upon this task by the wise liberality of the Council, by the skill and perseverance he has devoted to these fragments, and by the infinite pains he has taken in their arrangement, until at length he brought the specimen to the condition in which you now see it, has, I think, earned our warmest thanks.

I will now ask you to follow me in a brief sketch of the

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characters of the skelcton, during which I will point out those parts which are made known to us for the first time by this specimen, or made known to us better by this specimen than by any other. I will indicate, first, the skull. Here, the parts which have been added to what was already known, are the fore part of the skull, and the whole of the palate, with eight deeply grooved teeth on each side, whence the name of the animal. And then we have an exceedingly valuable addition

FIG. 1.—Side view of the skeleton of Glyptodon. *a.* trivertebral bone; *b.* sacrum.

in the complete lower jaw. In Professor Owen's well known paper on the specimen of *Glyptodon* already in the possession of the College, the lower jaw is represented in outline, and, as it happens, not correctly. That arises not from any fault of the describer, but from the fact, that a drawing of the jaw only was sent with the original osseous fragments, and this drawing turns out not to have been correct. M. Nodot has, indeed, proved that his *Schistopleuron* had a mandible of the same character as this, but it is not yet proven that *Schistopleuron* and *Glyptodon* are synonymous, so that we may fairly look upon this as the first complete example of the lower jaw of the *Glyptodon*.

It is to be noted that the teeth are not only grooved in the way I have described, but grow constantly from below, and consist of dentine and cement, with no external coating of hard enamel. The grinding surfaces of the teeth are broad and flattened by wear, and they indicate clearly that the food of the animal was of a kind requiring crushing and grinding. Next, there are two very interesting fragments of the cervical region of the vertebral column—there is a piece of the atlas, and a fragment of the axis, anchylosed with at least one other vertebra; then follows the remainder of the cervical and the dorso-lumbar portion of the vertebral column, consisting of two very definite portions. The first is this wonderful flat bone (*a*, Fig. 1), composed of three vertebræ anchylosed into a solid mass, and produced into a sort of handle, which represents, in fact, the spinous process of this great "trivertebral bone." Anteriorly and posteriorly the trivertebral bone exhibits very peculiar articular surfaces in addition to those on the ordinary articular or oblique processes; and these enable it to move in a vertical plane on the vertebra which follows it, allowing the vertebra (sixth cervical) which precedes it to move in a vertical plane on it. The anterior pair of these additional facets are convex—the posterior concave. There is nothing like this in ordinary Mammalia, but remarkable joints, constructed upon quite the same principle, are found in the armadillos. Next comes the great series of dorso-lumbar vertebræ, all anchylosed together, so that there could be no motion whatever in this vertebral column. It constituted, in short, a kind of solid tubular bridge, the bodies of the vertebræ being converted into segments of cylinders, while their arches are exceedingly flattened, and rise in the middle into spinous processes, which have all been broken off, but were, for the most part, anchylosed into one continuous high crest, so that we have a vertebral column, consisting of anchylosed vertebræ, arched from before backwards, and with a peculiar tunnel running through the whole, which lodged the spinal marrow.

The sacrum exhibits a similar structure. The sacral vertebræ are anchylosed together with a considerable number of anterior caudal or coccygeal vertebræ, and, as you will see, the hindmost of these send out large, broad, transverse processes. The spinous processes of the sacral vertebræ are anchylosed and form a high crest, which unites with the expanded haunch bones, so that there was a kind of T-shaped support formed, with very broad and rough expanded edges; and then the iliac bones were united at the acetabulum with the ischia in the ordinary way, while these are tied to the coccygeal vertebræ by the great transverse processes already mentioned; so that, in fine, from the hinder extremity of the trivertebral bone to the commencement of the tail, there was one solid double arch of bones, consisting of all the vertebræ of the back save two, and of the lumbar, sacral, and anterior caudal regions, fused together into one mass. It is this structure which I referred to just now as being, so far as I am aware, without any parallel whatsoever in the mammalian series.

Unfortunately, the vertebræ of the tail are entirely absent. This is particularly to be regretted, for, in most other respects, this specimen enables us to reconstruct the animal. If we have not a bone of one side, we have that of the other side; or, if a part is absent anywhere, we have sufficient to make it up from other portions; but of the tail, all that is known is represented by this exceedingly precious fragment. It is one portion of a single ring of that great osseous case, which included, at any rate, the anterior part of the tail, just as other parts of the same vast shield protected the trunk and the head. You will see here that the top of the head was covered over with large bony plates, with serrated edges, all anchylosed together, and composed of so tough a bony material, coated externally, no doubt, with plates of horn, that it may be doubted whether even our modern bullets could very well have pierced it. The covering of the body is not yet complete, but you must imagine that multitudinous polygonal ossicles were united together to form a shell or carapace for the whole trunk, similar to that already in the Museum. The margins of this great shield were formed by special pieces, and it rested on the fulcra furnished by the ischia, by the sacral and iliac crests, and by the ridge furnished by the spines of the fixed dorso-lumbar vertebræ.

Even this brief description of the principal parts of the skeleton will bear out what I started by saying, that this is one of the most valuable and remarkable presents ever made to this great collection.

Having thus briefly sketched the character of the skeleton, I will now ask you to follow me through these enquiries—What was the place of this animal in the scale of animal life? What was there peculiar about it physiologically?

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With what existing forms or fossil forms of life was it most closely allied? That it possesses a vertebral column is, I need hardly say, sufficient evidence of its belonging to the vertebrate division of the animal kingdom. But, furthermore, if we look at the articular surface of the atlas which is articulated with that occipital bone in the skull, which is absent in this skeleton,—this fragment of the atlas is sufficient to prove that this first bone of the vertebral column articulated with the occipital region of the skull by means of two facets; in other words, there were two occipital condyles. Again, if you look at this angular part of the ramus of the lower jaw, you will see that it goes straight down and is not bent in at all. Moreover, it is quite certain from other specimens that the mandible articulated with the squamosal element of the skull.

In these three characteristics the anatomist at once recognises full evidence that the fossil before us had, when alive, certain other characters. He does not hesitate to deduce from the existence of these three peculiarities four other very important concomitant structural features. He feels certain that the young of this animal was connected with the mother by means of that structure which is known as a placenta. He is also certain that the young, when born, were suckled with milk, and that the mother, therefore, had mammary glands. He is further certain that the animal had a four chambered heart, two auricles, and two ventricles. And he is no less certain that its blood was of a red colour; that it was warm; that it contained corpuscles which were of a red colour, and were, in truth, free nuclei.

In other words, to translate these propositions into ordinary zoological language, the anatomist is quite certain that this animal was one of the Mammalia, and, furthermore, that it belonged to one of the placental divisions of the Mammalia. I think you will agree with me that it is a remarkable circumstance that we should be able to speak with certainty and confidence on such points as these from such evidence, and to reason, in this definite manner, from such propositions as those which I first laid down to you; and it may be worth while to consider what is the basis of this certainty—what constitutes the logical validity of our conclusions. I doubt not that there are many persons here far more capable than I am of working out an argument from purely physiological data; but I think that, if I were to give to them the first three facts, and ask them to point out to me, by reasoning from the known laws of physiology, the necessary connexion between the first three conditions and the last four, I should have to wait long for an answer. In truth, the problem is an insoluble one. No person, however large his physiological knowledge, can show the slightest necessary connexion between a mandible with an incurved angle, and the absence of a placenta, or between the articulation of the mandible with the squamosal, and warm blood with free red nuclei. Doubtless, there is some good reason for the co-existence of these phenomena; but it is a reason which we have not discovered, and which, therefore, for practical, working purposes, does not exist. So, you see that the conditions of certainty in this case have nothing whatsoever to do with physiology, or with that description of the adaptation of parts to the performance of functions or purposes, which has been known by the name of the doctrine of adaptation to purpose. However excellent in many ways such considerations may be, they have most assuredly nothing to do with the basis of the argument, by which the place of an animal in the zoological scale is determined from more or less of its skeleton.

It is a very simple matter to state what the basis of that argument really is. It so happens that the studies of zoologists have led them to a knowledge of a great number of empirical laws, of which we have the same certainty as we possess of a great number of the empirical laws with which we work in daily life, the great mass of our actions being guided by such laws of experience, of which we can give no further account than that they are always verified by experience. And, at the present time, experience has led us to believe in the perfect validity of this law, among many others, namely, that any animal which has two occipital condyles, a mandible articulating with the squamosal bone, and a straight angle to the mandible, suckles its young, develops a placenta, and has hot blood with free red nuclei. I say we do not know why these correlations should exist, but it is a universal law of experience that they do—a law which has been universally verified hitherto, and, therefore, we work with it as confidently as we do with any other kind of empirical law. I think this conclusion must be obvious to any one who will take pains to analyse the methods of palæontological reasoning. Many years ago it was so obvious to me that I ventured to differ (though I always do so with the utmost hesitation from that great man) from Cuvier, and even to say that, in giving another account of the matter, he had "mistaken his own mental processes." Reflection has not led me to alter a conviction which I hope the case I have put before you will lead you to share with me.

(To be continued.)

LECTURES ON THE

BLOOD OF VERTEBRATA.

DELIVERED AT THE

Royal College of Surgeons of England,

DURING THE SESSION 1861-62.

By GEORGE GULLIVER, F.R.S.

Professor of Comparative Anatomy and Physiology to the College.

LECTURE XII.—*Fibrin Cells — Softening of Fibrin—Cause of Coagulation of Fibrin unknown—Doctrines of Mr. Hunter and Dr. Richardson—Review of the Vital and Chemical Doctrines—Adhesion between two Parts not a Proof of Life in both those Parts—Coagulation after Death by Lightning or Electricity; and after Death by Hunting and Fighting—Coagulation in dead Serum — Coagulation after Pickling and Freezing — Coagulation without Emission of Ammonia — Fluidity of Fibrin— Life of the Blood, and Doctrines of Harvey, Hunter, and Schwann—Conclusion of the Session.*

Fibrin-Cells.—Having said so much of the fibrils of fibrin, we come now to the corpuscles or cells which are often found in its clots. These cells are generally so faint or indistinct, that I know not that they had been shown before the publication, in the Appendix to Gerber's Anatomy, of the drawings and descriptions in 1842; and, afterwards, the existence of any such corpuscles in fibrin, save a few of the common pale globules of the blood, was either doubted or denied. But they have since been discovered again, and distinguished by hard names which need not be repeated, because they were and are needless, and no better than the original ones. The corpuscles may occur either in the form of cells or of naked nuclei, and, as

Fig. 15.

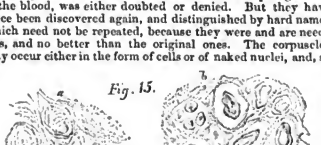

FIG. 15.—Cells of fibrin: *a*, the cells in a granular matrix with a few fibrils; *b*, the same, after having been many hours soaked in acetic acid; one cell with a triple, another with a quadruple, nucleus, and the rest with single, undivided, oblong nuclei.

from the very first described, may be quite independent of inflammation. But that they are often the result of disease of another kind is very probable, though it is difficult to conclude that they are always so; for then the morbid condition must be of great frequency, and we should be precluded from considering the corpuscles as ever forming a part of an early and healthy organisation of fibrin, destined for such further development as may be determined by the conditions, or, as Hunter would say, the "stimulus of necessity." And in this point of view they were often mentioned as "organic germs" at the time of their discovery. You may find them, often abundantly and as often scantily, in clots of blood of healthy animals, provided the coagulation have taken place within the body, when the fibrin remains so long fluid that the red corpuscles sink so far through it as to leave more or less of its surface pale. I have seen the fibrin-corpuscles in two dogs two days after they had both been shot for disturbing the deer in Windsor-park; in many horses killed on account of chronic lameness; and seldom failed to find the corpuscles whenever they were carefully looked for in pale clots from the heart of the human subject, at all ages, as well as in abortions fre-

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the fifth to the seventh month of utero-gestation. Still, the verification of this point is not quite so easy as might be supposed; for the common floating white globules are, comparatively to the red corpuscles, so light as to remain entangled in the clot after the latter have sunk through it. But the fibrin-corpuscles generally differ from the common pale globules of the blood, not only in form, but as you may see by comparing the

Fig. 5

Fig. 5.—Red corpuscles and pale globules of blood, and lymph-globules. At *a*, four red corpuscles; *b*, five pale globules; *c—d*, four lymph-globules. The first pale globule, at *b*, contains spherical granules, the last is only minutely granular, and the fourth is collapsed and sending off processes; these three globules are in the natural state; but the second shows its circular nucleus exposed by the action of weak acetic acid, and the third the nucleus divided after treatment by strong acetic acid. Of the lymph-globules, which are from an inguinal gland, at *c*, the first two are in their natural state; and at *d*, the last two, after having been long steeped in strong acetic acid. From a child, aged 3, accidentally killed.

diagrams, but by the action of acetic acid, which is much less energetic on the cell-wall of the fibrin-corpuscle than on the cell-wall of the pale globule of the blood.

Softening of Fibrin.—A knowledge of this structure is important, because a clot of fibrin is liable to become softened, so as to produce a matter somewhat resembling, but truly differing from, pus; and they were always so confounded formerly, thus leading to a false inference in physiology and bad practice in Surgery. This softened fibrin, so common in the heart and veins, is truly a pathological element, distinct from pus, and a peculiar disease, essentially different from suppuration or phlebitis, and "independent of inflammation," though so long and erroneously confused therewith; that is to say, up to the year 1839, when these facts were proved by experiments and observations (*Med. Chir. Trans.*, vol. xxii.; *Edin. Med. and Surg. Journ.*, vol. lx., p. 163), as well as the interest belonging to inquiries concerning the morbid effects of a mixture of this softened fibrin with the circulating blood. These observations comprehend the Thrombosis, many years afterwards so ingeniously announced by Professor Virchow, and were the forerunner of the Leucocythemia, so well and originally treated by Professor Bennett. Nor should the early labours of Dr. Davy ("Diseases of the Army," chap. viii.) be forgotten on a subject of so much interest as the softening of fibrin, more especially when the Berlin Professor seems to claim for himself also Hewson's discovery of an office of the lymphatic glands and spleen. But the history of disease forms no part of our present Lectures; if it did, this would be one of the most curious episodes of an important chapter in our pathological annals; and it would not have been alluded to on this occasion but for the admirable evidence afforded by the researches of the Edinburgh Professor of the validity of Hewson's doctrine concerning the so-called "blood glands"; while also it is difficult to avoid resenting the unworthy treatment by the Würzburg and Berlin Professors of Hewson's physiological labours. Besides, the subject has an independent physiological interest: thus, we all know how Mr. Hunter, or his disciples, considered this softened fibrin as pus in the centre of clots in the heart, and, consequently, as proof of the secreting power and vitality of such clots; whereas the fact is, that a coagulum of dead fibrin, kept for a while at a temperature of about 100°, becomes so softened as to assume that semblance of pus which had so long deceived pathologists; and this is a character of fibrin not even yet recognised in our current physiological treatises.

Cause of the Coagulation of Fibrin.—The interesting question of the cause of the coagulation of the fibrin still remains so problematical that it would be little profitable to employ our time in a review of the numberless speculations which have been entertained concerning this phenomenon. But in our foudness for anything of Hunter's, we cannot dismiss his opinions without notice; nor can we withhold a due respect to the arbiters of the Astley Cooper prize essay, and Dr. Richardson's valuable work for which that prize was awarded.

Doctrines of Mr. Hunter and Dr. Richardson.—The language of Hunter's great book on the Blood is, perhaps, more vague than it would have been had he lived to see its publication completed. He says that blood is an inorganised substance, though ready to become organised according to the stimulus of the surrounding parts (iii., 36, 113, 119). In his Surgical Lectures he observes that coagulation of the blood appears to be that process which may be compared with life in the solids, and that this disposition to coagulate, when out of the vessels, or retained in them without motion, is one of the effects of the life of the blood (i., 236). And, in short, that the coagulation arises from the living principle of the blood, for if that be destroyed it does not coagulate at all; coagulation being that process which may be compared to life in the solids (iii., 113). Accordingly, he endeavours to prove (iii., 113) that the coagulation of the blood is analogous to the action of muscles, which we know depends on life, and that certain causes of sudden death will at once kill the blood and body together, and so prevent both the post-mortem contraction of muscles and coagulation of the blood. Hence, as far as we can gather from his writings, his opinion was, that the cause of the coagulation is an act of life. As facts in support of this view, he states, that in animals killed by lightning and by hunting, there is neither coagulation of the blood nor contraction of the muscles after death; and adduces instances in two deer which had been run till they dropped down and died (iii., 14). He mentions other forms of sudden death as having the same effect. To the student of his works—which we all ought to be—the firm conviction which these facts, and his leading opinion connected therewith, so long had on Hunter's mind must be remarkable. They form the warp and woof of his theory, always more or less displayed whenever he discourses on the principles of the blood, and were as distinctly announced in his Surgical Lectures as in his last great book. He appears, also, to have had an opinion that adhesion between parts of an animal is a proof of the life of both those parts. Thus, the blood coagulates for the union: the simple act of coagulation, apart from its causes, is an operation of life proceeding upon the same principle as union by the first intention (iii., 34). It is well known how he transplanted teeth and cocks' spurs, and saw them become fixed to their new seats, and his inference accordingly. Dr. Richardson, on the contrary, concludes, from many ingenious experiments and observations, that the cause of the coagulation of the blood is simply a chemical one—an escape from the fluid blood of the volatile alkali. Hence, we have the vital hypothesis of Mr. Hunter and his disciples, and the chemical one of Dr. Richardson and others; and it is remarkable that Mr. (now Sir Benjamin) Brodie noticed the coagulation of the blood as a "chemical change."

Review of the Vital and Chemical Doctrines.—Before attempting a judgment of the value of these two very different opinions, let us examine them by the light of such evidence as we can fairly bring to bear on the questions at issue. First then, as to *Adhesion.*—Dead parts will sometimes unite with living parts, and even increase by external addition, like a mineral. In the course of some experiments at Chatham, many years ago, I introduced splints of dead bone into the medullary canals of the tibiæ of living rabbits, and occasionally found that the dead portion had become firmly united to the living bone; while there might be also a deposit of new osseous matter on the surface of the dead bone, and this even when union had altogether failed. In those cases, where the dead and living bone had become united, the adhesion was by new osseous matter, so that the two were thus simply cemented together without the aid of any kind of ease or clasp formed by the living part. The preparations of these parts are in the Museum of the Army Medical Department at Fort Pitt; and, as I gave a specimen to the late Mr. Liston, it should be at University College. One of the specimens is depicted in the 3rd fasciculus of drawings from the Army Medical Museum at Chatham, plate x., fig 13, and the experiments are detailed in the *Medico-Chirurgical Transactions*, 1838. Thus, it may be inferred that union between two parts in the living body is by no means conclusive proof of the life severally of those parts.

Lightning and Electricity.—In my notes to the Sydenham Society's edition of "Hewson's Works," cases are cited in which coagulation of blood and rigidity of muscles occurred in man and other animals after death by lightning and by electricity. Subsequently, a very eminent Teacher, having exhorted his pupils to lose no opportunity of making observa-

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tions on the subject, received a communication from one of them (Mr. Henry Thompson), which Professor Sharpey kindly placed at my disposal, and nothing can be more conclusive of the fact, that the blood is regularly coagulated in sheep killed by lightning. More recently, Dr. Davy ("Diseases of the Army," p. 408-9) examined the body of a man who had met with instantaneous death from lightning at Malta, and, though putrefaction was very far advanced, there was rigidity of the muscles, and the heart contained some frothy blood, and a little soft coagulum.

Hunting and Fighting.—In all my examinations (*Edin. Med. and Surg. Journal*, Oct., 1848) of the state of the blood and muscles in animals either hunted to death or killed by fighting, not only was the blood found coagulated afterwards, but the rigidity of the muscles often increased and hastened. In stags, foxes, and hares hunted to death, the blood coagulated, and the muscles quickly stiffened. Such, too, was the case in game-cocks worried to death by fighting. In some of these birds the blood was found coagulated within the body in less than thirty minutes after death, nor did it fail to coagulate in any one of them; and in every instance the muscles were firmly contracted within four hours from the time of death. These are facts, to be taken for what they may be worth, which you are as well able to estimate as I can be. If you further inquire of old and observant sportsmen as to the state of foxes run very hard or until they drop down dead, you will most probably be told in such cases, as I have often been, that the animal quickly becomes "as stiff as a brickbat," so that he may be held out horizontally by the hind legs.

It would seem hopeless to attempt to reconcile these with Mr. Hunter's facts and opinions. Perhaps he had seen animals after the post-mortem rigidity had ceased, as it occurs so quickly in these cases, that any one not familiar with them might be thus deceived. And, as to the blood, there might have been delayed coagulability, as in the examples given by Dr. Polli; or in hot weather it might have clotted soon, and become soft and pulpy, or even fluid again, from commencing putrefaction. Or a diffluent gore or cruor might be found in one part, while fibrinous clots were hid and escaped notice in some rather distant situation. And this last I have found to be the fact in more than one case, in which the blood was shown to me as having never coagulated after death in the human body. After all, Mr. Hunter's cases were probably true and exceptional, for it is difficult to suppose that such an acute observer could have been deceived in such a plain set of observations. Still, as we have seen, his remarks on the state of the blood in animals killed by lightning are equally unsatisfactory.

Coagulation in dead Serum.—As we cannot, therefore, admit the certainty or validity of the facts which he adduces in support of his view, let us see how far it may accord with any other facts available for us in this inquiry. If we admit that coagulation is an act of life, we must also admit that the serum is alive, that it may retain its life for days out of the body, and coagulate afterwards at the temperature of the air, under certain circumstances, as mentioned in the last Lecture. I have seen two varieties of serum, which had been kept separately in open glasses for upwards of three days, produce, when mixed together, a soft, trembling clot within six hours, the air at the time being from 49° to 60°; and the fibrin thus coagulated was not destitute of fibrils.

Coagulation after Pickling and Freezing.—Further, if coagulation be an act of life—if we adopt this doctrine, how can we refuse to admit also that we are able to preserve that life for an indefinite time by pickling with salt and by congelation by cold? As noted in the 12th and 21st pages of Hewson's Works, I have kept blood fluid with saline matter for more than twelve months, after which that blood coagulated when diluted with water; and since the experiments of Hewson have been confirmed and extended by Mr. Hunter and Dr. Davy, it is well-known that blood may be repeatedly frozen and thawed, and yet retain the power of coagulating spontaneously. These observations are not, and never were, given as dogmatically conclusive against Mr. Hunter's opinion; but merely to suggest what we must be prepared to accept if we adopt that opinion. They are more favourable to it than to the more modern hypothesis, that coagulation is the death of the blood. Nor do they give any support to Dr. Richardson's tenet.

Coagulation without Emission of Ammonia.—What probability is there that ammonia was retained by the specimens of serum as long as they were kept separate, and given out to cause coagulation after they were mixed together? No evolution or discharge of ammonia would make them coagulate while unmixed, nor, indeed, will they coagulate at all, while separate, under any circumstances, at the temperature of the air, as I proved by numberless comparative trials. Again, after the blood has been kept fluid by salt for months, what likelihood is there that the addition of a little pure water produces coagulation by driving out ammonia or indeed any other volatile matter? This alkali was not thought of in those experiments, which were made for a very different purpose many years since. But in some blood which had been kept fluid by salt in an open jar for thirteen days no emission of ammonia could be detected by the most careful examination from the time of commencing coagulation to its completion; and repeated trials of the like kind gave the same negative results. Dr. Davy, too, before I had experimented with a special view to this subject, had come to the conclusion that the escape of ammonia is not the cause of the coagulation of the blood, and, indeed, that it is not caused by the escape of any volatile matter at all. His first experiments were made on the blood of fowls, and repeated since with the same result on the blood of the pig. Some observations which I made last summer (*Ann. Nat. Hist.*, March, 1862) on the spontaneously coagulable juices of plants were to the same effect. No trace of ammonia could be detected even when the coagulation took place at a temperature of 80°, nor under any circumstances whatever in the fresh coagulating juices, and much less evaporating from them. These are examples of the obstructions which lie in the way of this chemical view, and which will have to be removed before Dr. Richardson can expect it to be unconditionally admitted.

Fluidity of Fibrin.—After all, we might as well inquire the cause of the fluidity of the blood; or, with Mr. Hunter, ask, why it does not coagulate while circulating in the body? Probably, it never is regularly very long fluid. The wants of the economy may appropriate the fibrin not long after its production; and thus the constant formation and assimilation of fibrin may keep up the balance so nicely as to preserve the fluidity of the blood, and so this fluidity would necessarily be lost when removed from the conditions by which it was maintained. The blood never can be the same in diseases, or even in comparatively near parts of its course. We know that successive small portions of blood from the very same orifice of one vein may possess different qualities. And how wonderfully must the blood be incessantly changing as it gives out the multitudinous materials for growth or nutrition, and receives additions by absorption, either from the chyle, lymph, air, or effete parts of the frame. And with what wonderful rapidity and abundance fibrin is incessantly being produced in the living blood, and used in the animal economy, may be inferred from the observation in the preceding Lecture, that all the fibrin disappears from the hepatic and renal blood after every passage of that blood through the liver and kidneys.

Life of the Blood: Harvey, Hunter, and Schwann.—Thus the life of this marvellous fluid, its power of self-preservation, amid quick and unceasing mutations, again presses on our attention. Professor Milne Edwards most erroneously represents me as arguing against that life; whereas I was only stating the objections, already detailed, to Mr. Hunter's view of the cause of coagulation. As to the life of the blood, it always seemed most strange to me that any physiologist could have doubted this great truth, from the inspired writer of the Pentateuch to Aristotle, from Aristotle to Harvey, from Harvey to Hunter, and from Hunter to our day: so manifold and plain are the proofs we have so often adduced, that any questioning of them so far always seemed mere trifling, to my apprehension. The corpuscles have already been seen in this point of view; and that the matrix or bed in which they exist, the fibrin, is also alive, as Mr. Hunter was so fond of asserting and proving, is not likely to be doubted by any one who has attended to his experiments and reasoning, so beautifully conclusive are they on this important point. This, indeed, was his great merit, in which he far transcended all his predecessors. However truly they had proved the general life of the compound blood, it was left for him alone to demonstrate the special vital endowments of the fibrin. Hence, it is most unjust to his memory not to resent the prevailing error, so often repeated of late years, that he only discovered that life which was so well known both to his modern and ancient predecessors. Further, it has been suggested in the preceding Lecture, that

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his simple views on those endowments of the fibrin are still more exact than the recent, and, as far as regards this subject, more meretricious doctrine of the Germans. In short, Hunter began where Harvey ended, just as the cell-doctrine is rather the complement than the subversion of the Hunterian doctrine thus far; and, whoever would truly study Schwann's system, should not only so regard this part of it, but seek for further light by the aid of the later researches of such excellent British observers as Goodsir, Bennett, Huxley, Savory, Rainey, Nelson, and others. Then will the little defects be sifted from the vast excellencies of Schwann.

Conclusion.—If, in the course of these Lectures, we have sometimes insisted rather strongly on the just claims of the British school of Physiology—the school of Harvey and the Hunters—it has been simply in the cause of Truth, outraged by the strange indignity with which several of the best members of that school have, since the meridian of that truly ingenuous and eminent German, been treated by those very foreigners who have most profited by its fruits. Finally, we are led back to the grand declaration of our illustrious countryman, Harvey, that the blood is the prinogenial part of the body, where the Lares and Penates of life are enshrined—the immediate and chief seat of the vegetative faculties of the animal; the first part to live and the last to die of this our wondrous microcosm. I may add, also, as the child is more worthy than the cradle, so is the blood more worthy than the parts which merely contain or defend it. And so, Mr. President and gentlemen, as we cannot part with a better impression of the dignity of our subject, I beg to take leave of you for the present, to thank you for your kind attention, and to express a hope that I may have the honour of meeting you again on the same ground.

ORIGINAL COMMUNICATIONS.

A CASE OF

ASTIGMATISM COMPLETELY REMEDIED BY CYLINDRICAL LENSES.

By J. ZACHARIAH LAURENCE.

In a late Number of this Journal I inserted an exposition of the *rationale*, diagnosis, and treatment of that peculiar optical malformation of the eye known as "Astigmatism." At that time my practical knowledge of this defect was rather limited, from my not possessing a complete set of cylindrical trial-lenses. These, however, I have since obtained from Messrs. Paetz and Flohr, of Berlin, and will, with your permission, lay before the Profession the following well-marked case of their beneficial application:—

Hannah M., aged 24, a tailoress, consulted me at the Surrey Ophthalmic Hospital in September, 1861, on account of asthenopia, from which she had suffered for the last ten years. The symptoms were dimness of vision, a sensation of "burning" in the eyeballs, congestion, and lachrymation, all of which came on after reading, etc., for a quarter of an hour, or after five minutes, if she had previously been hard at work at her business. I found that No. 22 was the highest type she could read at fifteen feet distance; and finding that no glasses, either convex or concave, enabled her to read any lower type, I, after a month's ineffectual treatment by tonics, eye-waters, rest, etc., gave her case up in despair.

On the 13th of the present month, I desired her to call on me with a view of seeing whether, perhaps, her symptoms depended on astigmatism?

Repeated examinations have yielded the following results with each eye:—

(1). On requesting her to regard a luminous point of two millimeters' diameter, and placing a twenty-inch convex lens before the eye, she, after a time (a), declared it appeared to her as a narrow vertical line.

(2). On her regarding a series of black, vertical and horizontal lines at about eight feet off, she saw the vertical ones perfectly distinctly—the horizontal ones very indistinctly: a sixteen-inch spherical concave glass reversed the order of things—the horizontal lines then became distinct, the vertical ones indistinct.

(3). With the naked eye, at twelve feet, she could read no lower than XX. of Snellen's types; but with a cylindrical concave lens of sixteen inches focus, she read XII. Thus, her "sharpness of definition" increased from $\frac{1}{12}$ (= $\frac{1}{2}$ nearly) to 1—became, in fact, absolutely perfect. This only occurred, however, when the axis of the cylindrical lens was transversely placed: if vertically, she could hardly see at all. In order to eliminate all source of error, I tried the crucial experiment of placing an ordinary (spherical) sixteen-inch concave glass before the eye: this only made her see worse than with the naked eye.

I then found that she, with her cylindrical glasses, could also read an ordinary printed book at a usual reading distance without feeling any fatigue in the eyes.

Both eyes, on careful examination, proved to be equally astigmatic.

From the above, it follows that this patient's eyes possess a normal refraction in their horizontal meridians, but are myopic ($\frac{1}{12}$th) in the vertical ones, her astigmatism equalling $\frac{1}{12}$th.

I intend exhibiting this case at the next meeting of the Harveian Society, on Thursday, March 5.

(a) In experimenting on my own eyes with cylindrical lenses, I have observed, the phenomena of astigmatism of a luminous point never appeared perfect, till a sufficient time was allowed for my accommodation to settle down into one constant condition.

DIGITALIS IN DELIRIUM TREMENS.

By W. B. KESTEVEN, F.R.C.S.

In a case of delirium tremens, which occurred to me a short time since, I administered three separate doses, one drachm each, of tincture of opium, without the least benefit, stimulants being freely given at the same time. Finding that no good result followed, I gave four doses, of half-a-drachm each, of tincture of digitalis. The patient continued still excited, not having closed his eyes for ninety hours. The relatives then requested a consultation.

Two hours after the last dose of tincture of digitalis had been given, Dr. Ballard met me at the patient's bedside, when we found that he had just fallen into a quiet sleep. This lasted more or less completely for thirty-six hours, and the patient was apparently safe. He was a man of middle age and an habitual toper. It was his first attack. He had, however, a relapse a few days afterwards. I at once gave him two drachms of tincture of digitalis, to be followed every two hours by half-drachm doses. In less than three hours he was soundly asleep. Several weeks have since passed, and there has been no return of the malady. I would add, that in the next case of delirium tremens that falls to my lot, I shall be disposed to begin with a larger dose than I gave in this case.

Upper Holloway.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CASES OF DISEASE OF THE PONS VAROLII.

As the three following cases were the subject of a recent Clinical Lecture by Dr. Brown-Séquard, we take this opportunity of recording them along with other cases of disease of this part of the brain. Most of the remarks appended to them are such as we have gathered from the clinical observations of Dr. Brown-Séquard on these and similar cases, or from his published works. We shall allude, also, to cases already recorded elsewhere.

NATIONAL HOSPITAL FOR THE EPILEPTIC AND PARALYSED.

HEMIPLEGIA FROM DISEASE OF THE PONS VAROLII—PARALYSIS OF THE RIGHT ARM AND LEG, AND THE WHOLE OF THE LEFT SIDE OF THE FACE—PARTIAL ANÆSTHESIA OF BOTH SIDES OF THE FACE.

(Under the care of Dr. BROWN-SEQUARD.)

Charles R., aged 62, a farmer, was admitted on February 16, Eleven weeks ago, after dinner, he was seized with vomiting

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and severe pain in the back of the head. There was, however, no paralysis observed until six hours later. He used to suffer from giddiness, but has in general had good health. He is a large, powerful-looking man. There is no arcus senilis, but there is some rigidity and tortuosity of the temporal arteries. His pulse is good, and there is no cardiac disease. The left side of the face and the right arm and leg are paralysed. There are, also, peculiarities as to the facial paralysis.

The Face, Tongue, etc.—The whole of the face on the left side is paralysed, as in disease of the trunk of the portio dura, so that the orbicularis and, in fact, all the facial muscles are affected. Yet, although he has lost voluntary control over this side of the face, there is evidently corrugation of the forehead on the paralysed side, and the face is rather drawn to this side. [At the next visit, three days later, this spasmodic condition of the paralysed side had disappeared.] The tears run over the cheek from paralysis of the tensor tarsi. The pupil on this side is slightly smaller than the other, and there is slight impairment of the external rectus. He has not now double vision, but he had soon after the attack. There is also loss of sensation of the face, not of the scalp, but this is equally affected on *both sides*. He contracts the temporal and masseter muscles equally. When his tongue is touched with salt or sugar, he fancies it is an acid, but the power of feeling the points of the compasses is normal. He can shout well, and his speech has never been affected. There is no defect of sight or hearing; in fact, his wife says that his hearing is better since the attack. He moves the muscles of the neck easily. He has no pain in the head now, but there is tenderness over the cervical vertebræ near the occiput.

The Arm and Leg.—The arm is considerably wasted, and the hand looks puffy and swollen. There is considerable œdema of the leg. There is tenderness in all the joints of the right side, on moving and on pressure. There is almost total loss of power in the arm, and considerable impairment in the leg. He can stand on the sound leg, which, in most cases of hemiplegia to this extent, is impossible. On examining the palm of the hand as to sensation, it is found that on the paralysed side he feels the point of the compasses at an inch and a-half. This was tried repeatedly. On the sound side, he feels sometimes two, and sometimes one, at four and a-half lines. Feeling is considerably impaired in the thigh. He very often gapes, and when he does so he has a sudden, involuntary throwing out of the arm and leg. The left side of the chest dilates very much more than the right. His memory is good, and his mind generally is as good as before.

He was ordered iodide of potassium, and blisters to the back of the neck. On account of the pain, he was to take a drachm of tincture of hyoscyamus every night.

HEMIPLEGIA FROM DISEASE OF THE PONS VAROLII—PARALYSIS OF THE RIGHT ARM AND LEG, AND OF THE LEFT SIDE OF THE FACE—SPASM OF THE AFFECTED SIDE OF THE FACE—PAINS IN THE PARALYSED PARTS.

(Under the care of Dr. BROWN-SEQUARD.)

Joseph B., aged 50. Except that he had been for several years subject to gout, he was quite well until 1859, when he was attacked with sickness, but not with vomiting. He had also giddiness and prostration for about a month, and was delirious at night two or three times during that month. One day he was suddenly attacked with a violent pain in the right shoulder-joint, which lasted two or three days, and went away suddenly. It was a sharp pain, suddenly ceasing and suddenly coming on again. It was increased or brought on by pressure. There was no swelling and no redness. He said that the pain in the shoulder was quite unlike the pain of gout. When this pain began, the other symptoms of giddiness, etc., had left him. For the month he felt quite well, but at the end of that time he was attacked with difficulty of breathing, and could hardly take a breath without effort for nearly three or four weeks. He was then admitted into St. Thomas's Hospital, under the care of Dr. Peacock. He recovered, though he remained weak. Soon after leaving the Hospital, he had an altercation with some one who annoyed him. He felt "queer, as if tipsy," and would have fallen if he had not been supported. His eyes were red, and he had a sensation as if something were actually burning the top of his head, and soon afterwards a very severe pain in the same place, and he felt almost powerless. After a few minutes the pain and the sensation ceased. He was carried to his bed, and was found to be hemiplegic. He could not whistle at first, but could afterwards. There was no difficulty of breathing or of swallowing, no gaping or vomiting, no involuntary movement, no numbness, no feeling of pricking, and no tinnitus aurium. His sight was much affected: he saw double. The next day, at intervals, several times he lost consciousness, but had no convulsion and no biting of the tongue. After five days he again went to St. Thomas's Hospital, and was under the care of Dr. Peacock. He then had a severe pain in a small spot on the *left* side of the forehead, and the *left* eye was closed and suffused. He became stronger, and in five weeks could stand and walk by help. It was chiefly the pain in the head which at this time prevented his standing or walking. A few days after he went to the Hospital he had a burning sensation (which he compared to that of the actual cautery, afterwards applied by Dr. Brown-Séquard) all along the inside of the sole of the right foot. He went home, and for a day or two was better; but still, for five months, he remained in bed, unable, except with help, to get up. The face then began to be drawn on the left side, and this drawing was preceded by pain and numbness in the side drawn. There was, at the same time, slight difference of speech, but no difficulty of swallowing, nor in breathing, and no frequent gaping. The gaping was for a good while incomplete. His mind has never been affected.

He has now (January, 1863) pain in the left infra-orbital and frontal region, extending, however, to the right a little. The left side of the face is drawn. It is important to note that this drawing is from spasm of the left side, and not paralysis of the right. At first glance at this patient's face one would say that it was paralysed on the same side as the arm and leg, the right; but when the patient talks, it is seen that he moves the right side perfectly, and not the other; whereas, in ordinary hemiplegia, it is the side to which the face is drawn that moves. At a previous visit the spasm of the face could be increased by touching the cheek. The face on the affected side is also redder than the other. The tongue is straight. The feeling on the left side of the face and head is diminished. He feels cold and heat as well on one side of the face as the other. The face and head are often warm, but hardly more so on the left than on the right. The sense of taste is not affected. The pupil on this side is smaller than the other. There is no double vision, and the eyes move well. His hearing is good and equal on both sides.

The right arm and leg are weaker than the other, and he has constant pain, "tingling," "pricking," and aching in them. The fingers of the hand keep moving. This patient has improved very much since his admission. He has less pain, and can use his limbs much better. He has been treated by iodide of potassium, blisters, and the actual cautery.

This patient has, when he coughs, involuntary starting of the paralysed limbs.

These cases of hemiplegia from disease of the pons are in remarkable contrast to ordinary cases depending on disease higher up, as in the crus cerebri, or in the corpus striatum, or in the thalamus opticus. The two latter are the parts affected in the vast majority of cases of hemiplegia; but hemiplegia depending on disease of the pons is rare. The most obvious difference is, that the paralysis of the face is frequently on the opposite side to that of the limbs; but there are often also important differences as to the nature and extent of the paralysis of the face, which must be taken into consideration; for, as we shall see by the table at page 212, the paralysis may be on the same side when the lesion in the pons is above the decussation of the facial nerve.

It may be well to speak first of ordinary hemiplegia, in order that the difference may be seen more readily. In these cases, very little of the face is paralysed, and that nearly altogether as regards motion. The arm and leg on the same side are paralysed, also as regards motion. Dr. Watson ("Principles and Practice of Physic," vol. i., p. 593) writes:—"I have known many persons who have thought that the muscles of the *face* in hemiplegia, when they were affected at all, were affected on the opposite side of the body from that to which the palsied *limbs* belong. But they never could have examined actual cases of hemiplegia with any attention. How the error arose I cannot tell; but I have known professed anatomists make it." He says that he has only seen two cases of hemiplegia in which the paralysis of the face was on the side opposite to that of the paralysis of the arm and leg. The parts of the face affected are

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muscles about the angle of the mouth. Dr. Todd, in his "Clinical Lectures," stated that the muscles of the face paralysed in hemiplegia were those supplied by the motor branch of the fifth, chiefly the buccinator. He believed that the muscles supplied by the portio dura escaped altogether. He says, "The muscles of mastication, on the paralysed side, act with less power, although it seldom happens in hemiplegia that their power is completely destroyed. Doubtless, much of this action is reflex, and this explains the fact, that whilst the buccinator is very much paralysed, and even wasted, the masseter and other masticatory muscles retain a considerable amount of power." Dr. Todd, in a previous lecture, alluded to the paralysis of the buccinator muscle in disease of the portio dura. He said that this muscle received a branch from the portio dura, and one also from the motor root of the fifth. It is now stated, however, that the branch from the fifth is not a motor one. Dr. Brown-Séquard says that few fibres of the portio dura nerve pass higher than the pons, and hence there is little paralysis of the face in affection of the corpus striatum or thalamus optici. What does exist, however, is due to the implication of these, and not to an affection of the motor branches of the fifth.

Romberg says:—"A peculiar feature in the central paralysis of the facial nerve in disorganisation of the brain, is, that, with few exceptions, the entire distribution is not affected, but those fibres only are implicated which supply the muscles of the alæ nasi and the upper lip, and are the agents of the respiratory functions of the facial."

The degree of paralysis of the face in hemiplegia depends on the part in which the lesion occurs. In the case of Chas. R., the whole of the nerve is affected, as the lesion is situated just at its entry into the pons. In the case of Joseph B. a considerable part of the face has escaped; the orbicularis has never been affected. In both these cases there is also anæsthesia. In ordinary hemiplegia, as above mentioned, there is rarely defect of sensation, and little paralysis of the face.

Dr. Brown-Séquard says that of the fifth nerve also but very few fibres go higher than the pons. It is clear, then, that it is only in disease of the pons that there can be any marked alteration of sensibility or great paralysis of the face. It has been long observed that the orbicularis has rarely been paralysed in cases of hemiplegia. It has, of course, been affected in cases of tumour when the tumour has pressed on the trunk of the nerve; excepting in such cases, the nerve can only be affected in all its extent by lesion in the pons Varolii.

This is well shown in the first case, Chas. R. The orbicularis and the whole of the muscle supplied by the portio dura are paralysed. The sensibility of the face also is diminished, but equally on both sides.

The fact that sensation is affected on both sides of the face is interesting.

The motor fibres coming from the limbs decussate just below the pyramids; the sensitive fibres, as Dr. Brown-Séquard was the first to demonstrate, decussate in the cord. So that both motor and sensory fibres from the *right* side of the body pass in the *left* side of the pons. But the fifth, sixth, the portio dura of the seventh, cranial nerves, enter and decussate in the pons itself. Hence, a lesion which damages the fibres which have come from the right side of the trunk, *i.e.*, after they have decussated, may injure one of these nerves before it has decussated, and thus produce paralysis on the side of the face opposite to that of the limbs, as is well shown in the first case (Chas. R.) It is clear, too, that if the lesion is extensive, and yet on the same side, it may also affect the other facial nerve after its decussation, and then both sides of the face may be paralysed. This has occurred, as regards sensation, in the first case (Chas. R.'s). Both fifth nerves have been somewhat injured, one before it has decussated, and the other after. The sixth nerve is not affected to any great extent in either of these cases, as it arises and crosses in another part of the pons; but if the lesion had extended, or if it should unfortunately extend, then this nerve will be affected on one or even on both sides, according to the extent of the lesion. Yet both of these patients had double vision at first; and even now, in Chas. R., there is slight defect in the left external rectus.

The following table, taken from one of Dr. Brown-Séquard's Lectures (*Lancet*, August 7, 1861) will enable the reader to see at a glance the relation of the various kinds of facial paralysis in hemiplegia and disease of certain parts of the pons:

Seat of Paralysis.	*Seat of Disease in the Pons.*
1. Trunk and limbs, *left side*. Face, *right side*.	1. *Right side:* Pons, below decussation of the facial nerves.
2. Trunk and limbs, *left side*. Face, both *right* and *left sides*.	2. *Right side:* Pons, level of decussation of facial nerves.
3. Trunk and limbs, *left side*. Face, *left side*.	3. *Right side:* Pons, above decussation of facial nerves.

In this Journal for April 26, 1862, we reported a most remarkable case of extensive apoplexy of the pons Varolii. The lesion in that case affected both sides of the pons. Both sixth nerves and both sides of the face were paralysed, as regards sensation and motion. This, as we have shown, might have been produced by disease of one side of the pons, injuring the nerves before and after they had decussated. But both sides of the trunk also were paralysed, so that both sides of the pons must have been affected. A case of hæmorrhage into the spinal cord, in which, therefore, the cranial nerves were not affected, is reported in this Journal for January 10. It is an interesting contrast to the above.

In reference to pains in the limbs in these cases, and also in other cases of hemiplegia, Dr. Brown-Séquard remarked that care should be taken to distinguish them from true rheumatism. The joints are often chiefly affected and tender on movement, but are not swollen and reddened. They frequently (he said) simulate rheumatism so closely, that the history the patient gives might mislead us into thinking that he really had had rheumatic fever. Yet inquiry would often show that the pains were limited to the joints of one side, the side which afterwards was paralysed. In the second case (Joseph B.), the pains in the right shoulder preceded the paralysis for some time. It will be noticed that it began suddenly and left suddenly. We referred to this and several other points in connexion with rheumatism, in a report of a case of "Disease of the Cervical Region of the Spine after Rheumatic Fever," November 1, 1862. The following quotation from Dr. Copland will be read with interest:—

"Palsy is sometimes associated with rheumatism, but not so frequently as might appear on a superficial view of the matter. The pains, whether dull, gravative, or gnawing, sometimes complained of both before and during paralytic affections, are often mistaken for rheumatism, or for neuralgia, although they are not unfrequent attendants of that change of structure at the origins of the nerves supplying the pained parts that ultimately produce palsy."

One of our most eminent Hospital Physicians considers that rheumatic fever itself should be regarded as mainly an affection of the nervous system.

In the following case an instance of paralysis succeeding to supposed rheumatic pains in the joints. Although both sides of the body are affected, it will be observed that the *left* side of the face and the *right* side of the body suffer most.

"RHEUMATISM" FOLLOWED BY PARALYSIS OF ONE SIDE OF THE BODY, AND SUBSEQUENTLY OF THE OTHER—LOSS OF MOTION AND SENSATION ON BOTH SIDES; CHIEFLY OF THE LEFT SIDE OF THE FACE, AND OF THE RIGHT SIDE OF THE BODY.

Richard G., aged 40, a tailor. He is a feeble-looking man, and has, having been unable to work, lived badly. Nine years ago he had what he fancied were rheumatic pains in his joints, but in a few days these were succeeded by paralysis of the left side of the body. This occurred in a fit, in which he lost consciousness. A few years later he lost power in the other side, but this time he had no loss of consciousness. Three years ago his hearing became impaired, and is now much affected, but chiefly on the left side. He has loss of sensation and motion on both sides, but especially on the right. He can walk with difficulty, and feeling is entirely lost in the right hand. On both sides of the face feeling is much diminished, but most on the left side, being just the reverse of what exists as regards the limbs. The loss of feeling in the tongue is so great that he does not feel two points of the compasses, however far they are apart. There is a want of parallelism in the eyes, but there is no apparent loss of power of eversion. He used to have double vision, but has not now. The left pupil is smaller than the right, and this eye

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does not invert so well as the other. Dr. Brown-Séquard finds that there is great difference in his power of dilating the sides of the chest. He hardly dilates the right at all, and the left but little.

We next relate a few cases of apoplexy of the pons Varolii. In all these cases the patients died. Apoplexy of the pons Varolii is not necessarily fatal, even when very extensive, as is shown by the case to which we have already alluded at page 212.

For the following case the writer is indebted to his friend, Mr. Pritchett, of Huddersfield. Although it did not occur in Hospital practice, it illustrates the subject so well that we insert it here:—

APOPLEXY-CONVULSIONS-DEATH FROM APNŒA —AUTOPSY — EFFUSION OF BLOOD IN THE PONS VAROLII AND INTO THE FOURTH VENTRICLE.

John L., aged 75, eight years ago fell out of a barn window ten feet from the ground, pitching upon his head a little to the left of the sagittal suture. The scalp was cut to the bone for a length of four or five inches, and he remained in a state of coma for several hours. During the healing of the wound several pieces of bone came away, and he was unable to do anything for three months, after which time, however, he was able to follow any light occupation that did not require him to stoop much: he has, however, lately complained occasionally of much dizziness, and at times, also, of pain over the region of the heart, and did so especially the day before his fatal attack. On Saturday, at 10 a.m., he went up several steps to a workshop, chatted cheerfully with the workmen some minutes, and came down. When within two steps of the bottom of the ladder, his son, who was below, saw him stagger, and went to assist him, when the deceased said he was sick and giddy, and asked his son to help him to walk. After a step or two, however, his legs failed, and his son had to carry him into the house, when he could no longer speak; and, he becoming stupid, the family sent for me. I arrived in about fifteen minutes, and found him perfectly insensible, pale, the features shrunk, the mouth gaping, and the breathing was in inspiration a loud, laborious snore, and in expiration a rough, hurried sigh. Both pupils were immovably and completely contracted, and the eye itself and eyelids were totally insensible. His whole frame was powerfully convulsed, his knees drawn up, his hands clenched, and his cervical muscles rigidly contracted, till he seemed as though he would choke, his attempts to breathe being more like an inspiration in laryngismus stridulus than anything else. These convulsions continued at intervals for four hours and a-half, when he died at last from apnœa.

Autopsy, Thirty-nine Hours after Death.—Head.—On the scalp there was an old scar commencing about two inches above the left orbit, and proceeding backwards over the left parietal to the articulation with the occipital bone. The calvaria being removed, the external surface of the dura mater was found very rough; it was also firm and tough all over. A considerable quantity of blood and serum escaped at the time when the spinal cord was cut through. The arachnoid was lifted up everywhere by fluid, which oozed out on its being pricked. The large arteries at the base of the brain were tough, and cut gritty. The brain being removed, a piece of dura mater was found firmly attached to the sides of the middle third of the superior longitudinal fissure. In the falx cerebri, in this position, an irregular piece of bone was found about the size of a small almond. The hemispheres were not softer or more injected than usual. The lateral ventricles being laid open, the corpora striata and thalami optici were found soft, and the surface of the left corpus striatum was flocculent. The choroid plexuses contained gritty matter in larger quantity than usual. The septum lucidum was very transparent. The corpus callosum and fornix were very soft. A quantity of black blood was found in the pons Varolii, filling up the whole of the fourth ventricle, and extending into the crus cerebri of each side, especially on the right. A small old cavity was found at the middle of the line of junction of the right corpus striatum and thalamus opticus.

In Dr. Brown-Séquard's work on the "Physiology of the Nervous System," are some interesting observations on the parts of the nervous system having to do with respiration. He writes:—

"In man, hæmorrhage in the various parts of the base of the encephalon, near the median line or upon it, produces trouble in respiration, which is more and more marked the greater the amount of effused blood and the nearer it is to the medulla oblongata. Certainly, in many cases, the trouble of respiration may be partly attributed to pressure on the medulla oblongata, but it is not always so; and, at any rate, in several cases of softening of the pons Varolii, in which it cannot be said that there was a pressure on the oblong medulla, there has been a trouble of respiration. From the examination of a great many cases, I have been led to the conclusion that the whole base of the encephalon is employed in respiration."

Hence we understand why the patients whose cases have just been related (Chas. R. and Joseph B.) should suffer from certain defects of respiration referred to in the narration of their cases—the gaping in one and the coughing in the other, attended by involuntary throwing out of the paralysed arm and leg, so that they became quite stiff on that side. The patient, Joseph B., said that ever since the attack he has suffered from what he calls asthma, and before the actual attack he had had considerable respiratory trouble.

A case is recorded by Dr. J. W. Ogle in the ninth volume of the Pathological Society's *Transactions*, in which there were similar symptoms. It was not, however, a case of disease of the pons, but hemiplegia from cancerous disease on the surface of the opposite hemisphere. The case altogether is full of interest, but the following quotation from Dr. Ogle's record bears most on our present subject:—

"A very remarkable phenomenon during life was the forcible clenching of the paralysed hand during yawning, which would immediately drop after the yawning; as also the involuntary muscular motion of the paralysed arm observed when the patient was about to come to the Hospital, and was thereby agitated in mind. The former of these facts is comparable to that first mentioned by Abercrombie, of a raising up of the paralytic arm in hemiplegia at each time of yawning. In a letter to the late Mr. Shaw, that Physician describes the case of a man who had not the least power of motion of the left side, except under the following circumstances:—

"He was very much affected by yawning, and every time he yawned the paralytic arm was raised up, with a firm, steady motion, until it was at right angles with his body, as he lay in bed. The arm was raised steadily during inspiration, and, when the expirations began, seemed to drop by its own weight, with considerable force. He continued liable to this affection for a considerable time, and it ceased gradually, and he began to recover the natural motion of the limb."

"This case," Dr. Ogle continues, "Bell adduces, as showing that independent the automatic respiratory acts are of volitional nature, and as coinciding with the movements of the muscles of the face, shoulders, sterno-mastoid, trapezius, etc., which occur in hemiplegia, through the agency of those nerves which control and combine the muscles in respiration. It is interesting to notice the coincidence of the arm movements in inspiration." Dr. Ogle adds in a note,—"Since the above was written, we have had, in St. George's Hospital, a man affected with incomplete hemiplegia, whose paralysed arm shook vehemently on any emotion being experienced, and whose flexed and paralysed fingers were extended involuntarily whenever he yawned."

Dr. Billing, in his work on the "Principles of Medicine," speaks of an affection of the respiration simulating spasmodic asthma, which he believes to depend on disease of the nervous centres.

In Mr. Pritchett's case there was, no doubt, pressure on the medulla oblongata, and hence the great trouble of respiration. As Mr. Pritchett said, the patient died of apnœa. There are cases, however, related, as one by Dr. Bristowe, in vol. ix. of the Pathological Society's *Transactions*, in which the breathing is described as being explosive, in which the effusion was quite limited to the pons.

GUY'S HOSPITAL.

SYMPTOMS LIKE THOSE OF POISONING BY OPIUM — PUPILS CONTRACTED — DEATH — AUTOPSY: APOPLEXY OF THE PONS VAROLII.

(Under the care of Dr. WILKS.)

Jane R. was admitted into Lydia ward, under the care of Dr. Wilks, on January 4; she died next day. She was a widow, but had never had any children. Whilst riding in an omnibus, about four o'clock on the afternoon of the 4th, she suddenly fell insensible, and was immediately brought to the

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Hospital. She was perfectly insensible and quite motionless, except occasional twitchings, and appeared quite unconscious of everything. The pupils were much contracted. The breathing was stertorous, and irregular and catching. She died at eight o'clock on the following morning.

Body stout, with rather a mass of fat in the abdomen. The brain was healthy with the exception of the pons Varolii, which appeared rather bulky and soft on touching it. On cutting into it, a small effusion of blood was found in it. The blood-vessels at the base of the brain were hard and rigid. The pericardium was closely adherent. The walls of the left ventricle were more thick than usual.

SYMPTOMS LIKE THOSE OF POISONING BY OPIUM — PUPILS CONTRACTED — AUTOPSY: APOPLEXY OF THE PONS VAROLII—BRIGHT'S DISEASE.

(Under the care of Dr. WILKS.)

Margaret B., aged 44, was admitted into Guy's Hospital on May 3, at one o'clock in the afternoon: she died at ten o'clock the same evening. She had ridden to Newington Causeway in an omnibus with her daughter. Whilst on the road she complained of pain in the head, but alighted, and went into a shop, where she soon fell down in a state of insensibility. She was at once brought to the Hospital and put to bed; she was then in a perfectly helpless and unconscious condition—in fact, in deep coma. When the limbs were lifted they fell lifeless at the sides, and there was no rigidity. The pupils were minutely contracted. The breathing was deep, but not stertorous, and the number of respirations were more numerous than natural. The pulse, at first feeble, became, after two hours, throbbing and rather hard; but the artery itself was rigid. As at first the daughter was not present to relate the history, the exact nature of the case was not apparent. Poisoning by opium was negatived by the frequency of the respiration. The urine was drawn off, and found to be highly albuminous, which suggested uræmic intoxication; but when it was subsequently found that the symptoms had come on suddenly, it was clear that some lesion of the brain had taken place, the Bright's disease and accompanying disease of the arteries favouring this view. As it could not be positively ascertained that a part of the body had not been paralysed before the whole was affected, it was thought that the blood had been poured out in the most usual place, the corpus striatum or thalamus opticus, and had subsequently escaped into the ventricles, and diffused itself over the base of the brain.

Autopsy.—All the brain was healthy except the pons Varolii, which appeared soft and swollen; and on cutting it through it was found to contain a large clot of blood. The cerebral vessels were much diseased. The kidneys granular and atrophied.

In nearly all the cases of apoplexy of the pons Varolii recorded, the pupils were contracted. Dr. Brown-Séquard stated, in his lecture on the cases of Charles R. and Joseph B., that this occurred probably from lesion of the fifth nerve in the pons, as it was found that section of this nerve trunk produced contraction. Contraction of the pupils occurs also in poisoning by opium, and is one of the most important symptoms (a). It is not always easy to distinguish, when a patient is brought to a Hospital without a history, whether the case be one of poisoning by opium or apoplexy of the pons Varolii. At all events, errors of diagnosis have occurred in the hands of the most skilful. Dr. Taylor ("on Poison") writes:—"Dr. Birt Davies has published the following cases:—'A person died in what was considered by the Physician and Surgeon attending to be a fit; but opium was found in the stomach. A person was attended by a Physician and Surgeon for some hours. The illness and death were ascribed to, and treated by them for, apoplexy, but it was proved beyond doubt that the deceased had died from laudanum. Such cases, I am convinced, are frequent.'" It is of great importance to make a correct diagnosis, as it is clear that if, ultimately, by examination or analysis, the case is cleared up, still, the mistaking apoplexy for poisoning by opium may be the cause of considerable annoyance and distress by giving rise to false charges of poisoning. Taylor, in the work referred to, writes:—"In apoplexy from disease, it is usually observed that coma (complete insensibility) is at once induced; but in poisoning, this symptom comes on slowly, and is generally preceded by giddiness and stupor." Still, persons may be found insensible and motionless with contracted pupils, or the Medical man may doubt the history given of the suddenness of the attack, and thus the diagnosis may present considerable difficulties. Besides, in fatal cases of apoplexy of the pons Varolii, there is, as in Mr. Prichett's case, sometimes an interval from the first symptom to the stage of unconsciousness, although a short one. In cases in which the patient recovers, as in the case of Charles R. (Case 1 of this series), the interval is sometimes considerable. Nor is the interval between taking the poison and the onset of symptoms from poisoning by opium always long. The symptoms usually *commence* (Dr. Taylor says) in from half an hour to an hour; but in "a case related by Dr. Skae, the person was found *totally insensible in fifteen minutes.*" If a patient falls down at once, and becomes immediately unconscious, his pupils being contracted, the diagnosis might be considered easy. Yet, in Medical practice we so often meet with exceptional cases, that it is difficult to rely on past experience in a case occurring suddenly.

In the following instance, a Surgeon of some experience was led to use the stomach-pump in a case of apoplexy of the pons Varolii, under the idea that, possibly, the symptoms might be due to opium.

A man, away from home, at an inn, called for a glass of ale. As soon as he had tasted it, he cried out, "I am poisoned," and fell down in a fit. He became quite insensible, and one pupil was contracted to a point; the other was lost by old disease. The Surgeon who was called thought it right to use the stomach-pump. The patient never rallied, and died a few hours later. A large clot was found in the pons, and it extended into the fourth ventricle. He had had an attack of paralysis some years before.

In the eighth volume of the Pathological Society's *Transactions* is a report of a case of apoplexy of the pons Varolii, in which this mistake was made. The patient, a woman, was under the care of Dr. Hare, at University College Hospital. He at once diagnosed apoplexy, but he adds, in remarks on the case: "The frequent twitchings of the muscles, almost equal in amount on the two sides, the extreme contraction of the pupils, the absence of distortion of the face, the character of the breathing [laborious, not stertorous], were such as to make three intelligent Medical men very strongly suspect that the case was one of poisoning by opium." The stomach pump was, therefore, used in Dr. Hare's absence, and the contents examined chemically for opium; none was found. There is (as Dr. Hare remarks) also a Medico-legal interest attached to this case. The patient was able to knock at a door and say she was dying before unconsciousness supervened. How long she had been confused and ill is of course not known. In the tenth volume of the Pathological Society's *Transactions* is recorded a case by Mr. Nunneley, of Leeds, in which symptoms very like those of poisoning by opium were found to be due to apoplexy of the pons Varolii.

Although the following case is not one of apoplexy of the pons Varolii, it will be read with interest as regards the difficulty of diagnosing between cerebral affections and poisoning by opium. The case was one of apoplexy, although the cause was not disease but violence. Blood from the cavernous sinus was effused at the base of the brain. There was fracture of the sphenoid, and no doubt the patient had had some injury to the head. It is of course possible that she may have taken opium, and may then have attempted suicide in some other way, as by throwing herself from a great height; or she may have been struck after attempts to poison her. We allude to this as being barely possible. Dr. Taylor relates an instance in which a man swallowed a large dose of laudanum, and then hanged himself.

SYMPTOMS LIKE THOSE PRODUCED BY LARGE DOSES OF OPIUM—DEATH—FRACTURE OF THE BASE OF THE SKULL.

The following case occurred in 1846, but has not yet been published. Unfortunately, the record cannot be found, but the following facts are supplied to us from memory by Dr. Braxton Hicks, who was dresser at the time:

A young woman was brought to the Hospital by two policemen, who said that she had taken opium. The pupils were contracted as in poisoning by opium. Her manner was sullen, and when asked questions she answered by swearing. There was torpor, drowsiness, and altogether everything seemed to favour the policemen's statement. The stomach-

(a) Dr. Taylor writes:—"The pupils [in poisoning by opium] are sometimes contracted, at others, dilated. From cases I have been able to collect, contraction of the pupils is much more frequent than dilatation. In a case referred to me in 1846, one pupil was contracted and the other dilated."

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pump was used; but, after a time, having misgivings as to the diagnosis, inquiries were made as to the reasons for the suspicion of poisoning. The policeman replied that the Medical man had said it was so; and it appeared that he had formed his opinion from the symptoms only. The patient was then put to bed. About six hours afterwards, the pupils began to dilate, and remained so until death. The extremities became livid and cold. She became perfectly comatose, and died about twelve hours after she was brought to the Hospital.

At the *autopsy*, a fracture of the base of the skull was found. It extended through the ala of the sphenoid on one side, and through the cavernous sinus, causing effusion to about three or four ounces.

A record of two interesting cases of injury to the head, in which the symptoms were such as to lead at first to the diagnosis of apoplexy, are recorded in this Journal for August 10, 1861. In both the mistake was corrected, and one of the patients was saved by trephining. In the other, there was an injury to the base of the skull.

Several interesting cases of disease of the pons Varolii will be found in this Journal for May 25, 1861. Many cases are recorded in the *Transactions of the Pathological Society*, one of which, by Dr. Broadbent, is of very great interest.

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Medical Times and Gazette.

SATURDAY, FEBRUARY 28.

RUSSELL v. ADAMS.

It was our opinion, and that of many of our friends, that any further proceedings to vindicate Mr. Adams' character were simply unnecessary. Not only our Medical brethren, but the lawyers and the whole of the thinking part of society, felt that he had been the victim of an atrocious attempt at extortion, and that, beyond the unavoidable annoyance of the suit, and its expenses, he would suffer no damage. Some of the most active members of our Profession, however, thought that it would be a good plan to summon a public meeting, not only to show sympathy with Mr. Adams, but to call public attention to the frequency and facility with which infamous charges can be trumped up against Medical men, clergymen, and all other persons whose vocations bring them into private personal relations with women—charges which there is often no possibility of rebutting save by simple denial—which too often leave an undeserved stain on persons of unblemished rectitude—and to avoid which many a man of small moral courage is tempted to buy off the accuser, and so to encourage the crime by making it profitable. Accordingly, a public meeting has been held; authentic copies have been circulated of Chief Baron Pollock's charge to the jury, of which a most garbled and unfair version had appeared in the *Times*; and the whole history of the case has been freely ventilated, the result showing that Mr. Adams was even more free from the charge of indiscretion or incautiousness than many of his own friends at first were disposed to admit. We will set before our readers a few remarks on some of the critical points of the case; and it gives us the sincerest pleasure to be able to say, that the fuller the scrutiny which we institute, the more does Mr. Adams' case come under the category of simple misfortune, and not of misfortune provoked by misconduct of any kind.

In the first place, the question has been fairly asked, what right had Mr. Adams to receive a hospital out-patient at his own house?—a thing clearly contrary to the etiquette and interests of the Profession.

The answer is, that when Mrs. Russell came to the Orthopædic Hospital in July, 1860, with the child Crump, it was not as a patient, but simply to inquire for the name of an Orthopædic Surgeon; and when the list of Surgeons to that Hospital was shown her, she chose Mr. Adams by mere accident, saying that "Adam was the first man," and that she might as well take Surgeon Adams as any other.

In the next place, it has been stated in evidence that, although Mr. Adams' visits to the Russells were, with two exceptions, in the afternoon, and of short duration—about a quarter of an hour—yet that, on two occasions, he took coffee with them at half-past nine o'clock, and remained till between eleven and twelve o'clock; on these occasions music was offered as the attraction.

It has, therefore, been asked, why did Mr. Adams admit *low* people to such familiarity as to visit them—to sing with them? The answer is—and we request particular attention to this point—that they were not *low* people, but that they possessed the education, manners, and *status* of the professional circle to which they claimed to belong. Mrs. Russell claimed relationship with the noble family of that name, and likewise with the Dean of Down. She professed that "never in her life had she been in the habit of being in so public a conveyance" as an omnibus. All who have come in contact with her describe her as an educated, well-mannered woman—a musical professor, living on "the accomplishments of happier days," able to wheedle most men, pushing, artful, and capable of imposing upon the most wary. Mr. Propert describes her in nearly the same terms, and so do the clergy of Holyhead, with whom she attempted to enact the same farce, and so do half a dozen other persons who have met with her. Clearly, then, there is nothing wonderful or degrading in the idea, that Mr. Adams should show civility to such a woman, who represented herself as a Surgeon's widow in distress. But, on the other hand, it is most wonderful that such a woman should have acted as she did, if, as she pretends, her daughter informed her in October, 1860, that Mr. Adams had offered marriage. There is nothing that distinguishes the upper educated from the lower uneducated classes of society more than extreme sensitiveness on the subject of a daughter's honour. It is perfectly incredible—and we put it to the common sense of the whole community—that any *lady* should have let a proposal of marriage to her daughter pass unnoticed for a whole month—that she then should write a letter to the proposed husband, and so carelessly that she should not keep a copy—that she should not consult her brother about it, nor the Dean of Down—that she should make no inquiries about the suitor, nor ask to be introduced to his family, nor see his solicitor, nor know what his circumstances were, nor what provision he could make for his wife! All such proceedings are characteristic of a she-adventurer, who would poke her daughter into matrimony anyhow if she could, but they are abhorrent to the character of a lady of birth, family, virtue, or even common sense or common respectability.

Again, whoever would desire to know the value of Mrs. Russell's testimony—on which alone her daughter's case rested—may consider in how many respects it was so directly contradicted by that of others, that it follows either that the Russells were perjured, or that, as the learned Baron put it, "Mr. Crump is perjured, Mr. Blaise is perjured, Mr. and Mrs. Lama, the girl Clamp, and three or four witnesses besides, are perjured." She said that she left Mr. Crump's house in order that her daughter might not ride in omni-

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He swore that he compelled her to leave because she got into debt. She detailed certain incidents during an interview with Mr. Adams and Mr. Blaise;—Mr. Blaise swore the direct contrary. But we do not think it worth while to revive the particulars of this wretched conspiracy.

Let us come to matters of rather more consequence to the public; let us scan the conduct of the legal advisers of this miserable woman, without whom she never could have made her appearance in a court of justice, nor could this grievous injury have been inflicted on Mr. Adams. It is a necessity for society that attorneys should exist, and that they should listen to the tale of every person who conceives that he has a wrong. They may often be compelled to institute proceedings of which they disapprove; still, every one who has had the good fortune to be concerned with attorneys who are gentlemen and men of honour will know, that even as antagonists they need not trespass the bounds of fairness or even of courtesy. Since, too, any attorney may bring any conceivable action against anybody, at the suit of anybody, life would be a nuisance, were it not that respectable attorneys will seldom bring actions unless their client be solvent, or unless he have a real grievance, and a reasonable chance of success. To bring a speculative action against a man at the suit of an adventurer, and harass him with anxiety and costs, is a thing which no sane man would do without inquiring into the facts beforehand, lest he might be inflicting a grievous injury on the defendant without the chance of benefiting himself or any one else. Will it be believed, then, not only that Mrs. Russell swore at the trial that she did not know and did not believe that Mr. Adams was a married man, but that her counsel and attorney affected ignorance of the same fact? Let us see what the learned judge says on this point:—

"Mrs. Russell said she did not believe he was married. She does not believe it now. Serjeant Shee said he had inquired for instructions, and he could not learn whether he was married or not. I *think great blame attaches somewhere;* for I must tell you, gentlemen, freely and plainly, I give my brother Shee no credit in point of fairness for the mode in which he opened this case. *It would have been far better, for the purpose of a truthful inquiry,* to have at once blurted out what the accusation was, and not to let you hear the whole case of the plaintiff without your understanding that the defendant really was a married man."

So also with regard to Mrs. Russell's unsupported testimony as to her relatives:—

"It is not my office," said Chief Baron Pollock, "to throw any doubt whatever on her statements; but I think Mr. Pike, if that is the name of her attorney, did not do his duty by her if he did not say to her, 'It will be folly to bring this action if you are the only witness in the case whatever; their case may seem bad, but who will come forward and connect you with the people whom you say are your relatives?'

"I own," continued the judge, "I am astonished that the attorney did not before the trial of the case know he was a married man, and he ought to have known it at the earliest possible moment. I agree with the remark made by Mr. Lush, that it was not right to keep you in ignorance of that fact until all the circumstances came out. It may be part of the tact of the advocate, but it was not part of the duty of Mr. Pike—not that I say that my brother Shee was not ignorant of it, but it was impossible for the attorney not to know if he had made any inquiry. How came she not to be making inquiry? According to the evidence on the one side, she did not appear to have made a great secret of it; at least, how came Mr. Pike not to know that Mr. Adams was married, and let you know it, and let you know the whole extent, and infamy, and baseness of the charge that was made against him?"

Thus far, then, the learned judge gives his opinion as to the manner—the merciless and unfair manner—as we call it, in which the case against Mr. Adams was brought into Court. We do not condemn Mr. Pike, who is said to have a high character in his Profession, for we do not know what he has to say, nor by what instructions—what promises of pecuniary aid he was induced to bring this action. But now let us deal openly with a bit of scandal, which has caused the greatest possible excitement and wonder in the Profession, and has, likewise, done Mr. Adams the most enormous injury. It is said that Mr. Pike, the plaintiff's attorney, is also the private attorney of Mr. Propert, the well known founder of the Epsom College, and it has further been said that the action has been carried on at Mr. Propert's instigation and cost; and the observation has followed, that there must have been "something" in the charges, else so benevolent and sagacious a man would never have sanctioned them. The facts that we have been able to ascertain are these:—

The Russells appealed to Mr. Propert in the latter part of the year 1861; for, in December of that year, he supported their application to the Medical Benevolent Fund. Hereupon ensued that remarkable correspondence which was read at the public meeting, and which will be found at pages 221 and 222. The only comment we will trust ourselves to make upon this correspondence is, how little of common justice, to say nothing of charity, or of regard for Professional honour, appears in Mr. Propert's conduct, who could thus not only assume the guilt of a friend, but coolly deny him all means of explanation; and how thoroughly his whole conduct shows him to have been beguiled by these sirens, and his better judgment and better feelings perverted, for a time, by their machinations! The first solicitor who threatened Mr. Adams was a Mr. Hill, in July, 1861. He let the matter drop. The next was a Mr. Johnson, of Doughty-street, who served a second notice of action in March, 1862. The trial was to have come off at Kingston, but Mrs. Russell was said to be taken ill, and the trial postponed in consequence of a certificate of her illness from Mr. Propert! Miss Russell was arrested for the costs of this abortive action on May 7, 1862. Again Mr. Propert appears on the scene; he is sent for, and tenders his cheque in payment. The cheque was refused, but the cash was shortly found by some one, and the young lady set free. The next move is, the serving a notice on Mr. Adams on January 29, 1863, by a clerk of Mr. Pike, who is well known to be the private solicitor to Mr. Propert.

Can it be wondered at, then, that Mr. Adams' friends should believe that Mr. Propert was the instigator of these proceedings?

Considering how serious this charge is, the writer of this article thought it his duty to ask Mr. Propert frankly what his share in the affair had been, and received from that gentleman, under the sanction of an oath, a most solemn affirmation that he never instigated these proceedings, nor paid, nor promised to pay, one farthing of the costs. It seems that the Russells applied to him, in distress, as hundreds of Medical widows do; and that hearing their case, which at that time was in the hands of another attorney, he gave them permission to consult his own attorney thereon; but that afterwards, so far from sanctioning the bringing of the action by Mr. Pike, he protested against it, and "split" with him in consequence.

Of course, we accept Mr. Propert's assurance, so far as the late action is concerned; but there is clearly a mystery somewhere. It is quite certain that the credit of Mr. Propert's encouragement and patronage procured for these ladies assistance from the Rev. W. Cadman and his curates. We cannot conceive how such a case could be taken up by a respectable solicitor, unless at the direction of some client more solid than the Russells; and, we repeat, if such an action can be brought by a respectable solicitor, who is safe? But we take the liberty of telling Mr. Propert that it would best be consistent with the character of the Founder of a Benevolent College if he were to extend to Mr. Adams a little of that charity and justice which he claims for the "hard working Welshman," and if the Founder of that noble and perennial monument of benevolence on the Epsom Downs were to write Mr. Adams a handsome letter of retractation and apology for having fostered those base and groundless charges, and to enclose in it a cheque for Mr. Adams' costs.

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THE WEEK.

THE ARMY MEDICAL SERVICE IN INDIA.

We reprint the following letter from the *Delhi Gazette* of December 30, 1862. At home and abroad the same deep-rooted feeling of discontent prevails amongst Army Medical officers. A different mood will never be in the ascendant until the department receives the full privileges and benefits granted to it by the royal warrant. Government will find sooner or later the necessity of yielding. It is a pity that the present opportunity is not seized, and the event of the royal marriage marked by concessions which might now be gracefully made, but can only be unjustly delayed at the risk of irreparable mischief to the service:—

"*Statement of the Case of the Senior Assistant-Surgeons of her Majesty's Home Army Quartered in India.*

"1. Whereas the above officers have patiently waited four years for the Indian Government to comply with the royal warrant, that her Majesty was graciously pleased to issue for their benefit, and there being no certain sign of any inclination on the part of the Indian Government to carry out our Sovereign's commands, the following statement of the case has been drawn up, so that the grievances so keenly felt by them may be more generally known.

"2. The following is an extract from her Majesty's royal warrant regulating the rank, pay, promotion, and retirement of army Medical officers:—

"Victoria R.

"Whereas we have taken into our consideration the recommendations of the commissioners appointed by our authority to inquire into the regulations affecting the sanitary condition of our military forces, and the Medical treatment of the sick and wounded of our army, our will and pleasure is, that, from and after the date of this warrant, the following rules shall be established for the future admission, promotion, and retirement, and the pay, half-pay, relative rank, and allowances of the Medical officers of our army; and that by these rules our commander-in-chief shall govern himself in recommending officers for admission, promotion, and retirement.

"8. The rates of pay of the Medical officers of our army shall be in accordance with the following schedule:—

—	After 10 years' Service on Full Pay.	After 5 years' Service on Full Pay.	Under 5 years' Service on Full Pay.
Assistant-Surgeon	13s.	11s. 6d.	10s.

"16. The relative rank of the Medical officers of our army shall be as follows:—

"Staff or regimental Assistant-Surgeon as a lieutenant, according to the date of his commission; and after six years' full pay service as captain, according to the date of the completion of such service.

"17. Such relative rank shall carry with it all precedence and advantages attached to the rank with which it corresponds (except as regards the presidency of courts-martial, where our will and pleasure is, that the senior combatant officer be always president), and shall regulate the choice of quarters, rates of lodging money, servants, forage, fuel and lights, or allowances in their stead, detention and prize money.

"Given at our Court of St. James', this 1st day of October, 1858, in the twenty-second year of our reign.

"By her Majesty's command. J. Peel.

"3. The general order of the Indian Government annulling the Queen's royal warrant:—

"*General Order.*

"Adjutant General's Office, H.M.'s British Forces in India.

"Simla, April 16, 1860.

"The following Government general order is published for information:—

"Fort William, January 31, 1860.

"Pay of Medical Officers.

"No. 112 of 1860—With reference to such portion of her Majesty's warrant, dated October 1, 1858, as relates to the pay and allowances of Medical officers of her Majesty's army, it is notified that, in accordance with the instructions received from her Majesty's Government, all claims to pay authorised by that warrant will be adjusted on the principle invariably observed under similar circumstances, viz., by increasing the amount of pay proper, and making a corresponding deduction from the amount of the allowances.

"2. The pay proper of Medical officers of her Majesty's army, as payable in Indian currency, is—

—	Per mensem for any month.		
	Rs.	As.	Pie.
Assistant-Surgeon under 5 years . .	149	1	4
" " above 5 " . .	171	7	1
" " " 10 " . .	193	12	11

"4. An Assistant-Surgeon of seven years' standing applied to the Pay Office for a detailed statement of his monthly pay. It is here placed, with another column by its side, showing what he ought to receive, according to his relative rank of captain:—

—	As an Assistant-Surgeon.		As a Captain.		Loss.	
	Rs.	As.	Rs.	As.	Rs.	As.
Pay and Indian Allowances	145	12	249	1	103	5
Extra Batta . .	60	14	91	5	30	7
Tentage . .	50	0	75	0	25	0
Palkee Allowance .	30	0	30(a)	0	0	0
Total . .	286	10	445	6	158	12

"5. It will thus be seen that an Assistant-Surgeon loses 158 rupees 12 annas monthly; and the longer he serves in India the more he will lose.

"6. Medical officers in India are paid according to the appointments that they hold; and as these are given from interest rather than ability, the nomination being generally in the hands of an officer of the civil service, it naturally follows that the old Company's Assistant-Surgeons obtain nearly all such emoluments, although home Medical officers senior to them may reside in the same stations.

"7. Notwithstanding the Government statement to the effect that—'We will give you your English pay (because we are obliged to do so), but we will cut your Indian allowances, (which we can do if we like),' the English pay intact is not given, the same English pay being reckoned at half-a-crown for a rupee, whereas it is only worth two shillings; so that an Assistant-Surgeon, who receives ten shillings a-day in England, is paid four rupees, as its equivalent, in this country.

"8. If words mean anything, and a royal warrant carries any authority, it cannot be denied that the Indian Government is committing the greatest injustice in not allowing home Assistant-Surgeons the pay and allowances of their rank. If the royal warrant states that an Assistant-Surgeon shall have the rank of captain after six years' service, and that such rank shall give him choice of quarters, etc., how is it, then, that the Indian Government grants such a Medical officer only 50 rupees a-month for tentage, whilst it allows a captain 75 rupees? Surely the 'tentage' in India is a convertible term for 'quarters' in England.

"9. The injustice of charging an Assistant-Surgeon of six years' service, a captain's subscriptions when he is only receiving a lieutenant's pay, is self-evident.

"10. The warrant was issued October 1, 1858, and it is in force everywhere but in India. The injustice of the present treatment of Assistant-Surgeons being once admitted—and, I think, I have clearly proved such to be the case—it necessarily follows that what is injustice now was injustice in 1858, 1859, 1860, 1861, and that the whole of the back pay which has been so unfairly withheld must be repaid to the sufferers. This is not a question whether the operation of payment will be pleasant to the Government or not; it is whether the charge be just or not; is the money really due to us? The Queen engaged us at a certain salary, signed the contract, and

(a) A captain saves about 30 rupees monthly out of his contingent which is more than equivalent to the palkee allowance, as the Sr. must keep a palkee, or horse, for his duties.

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the Government must pay. Her Majesty drew a bill, and her servants must honour it. It is as dishonourable for the Indian Government to proceed in the way they are doing, as it would be to a private individual. What would be the opinion of counsel in such a case? Supposing a contractor had agreed to give a certain salary and position to an *employé*, and the conditions were not fulfilled by the agent, would not the advice be, 'Bring the case into court at once, and you may be sure of a verdict in your favour?' Is it to be thought that the defendant would be let off by pleading lapse of time without payment? Time makes no difference. Injustice is injustice, regardless of the hour or the man. What was unjust on October 1, 1858, has been unjust daily and hourly since. Restitution must come. Reimbursement must be made.

"11. It is strange it should be so, but it is nevertheless true, that it will be difficult to obtain this justice from the Indian Government. A corporate body will often perform acts mean and dishonourable, which any individual member would be ashamed of ordering on his own responsibility. The senior Assistant-Surgeons in this country, over six years' service, are very few, and their personal influence is not, therefore, great; so that they have but little more than the prosaic justice of their cause to attract attention to their grievances. Their juniors, ranking only with lieutenants, have nothing to gain by mooting the question, and Surgeons would probably lose by any alteration; so that the senior home Assistant-Surgeons are left to be unjustly treated without any holding out a hand to help them. 'God helps those that help themselves'; so we must each put our shoulder to the wheel, and, if we do not obtain redress, it shall not be from want of being heard.

"12. To the hundreds of Medical students now studying in the English colleges the present statement will be sent; and, perhaps, when the Government finds that the commissions are going a-begging—as was the case during the Crimean war—they will render us that justice for which we have waited so long.

"13. Members of Parliament will be communicated with, and it will be seen whether the House of Commons approve of the Indian Government breaking the promise made by her Majesty.

"14. The bitterness of feeling, and the disgust at the unfair treatment they receive, is making a valuable set of the Queen's servants loathe the service that they belong to, and such a feeling must be the source of much evil.

"15. It must be remembered, that for every year a European spends in this country, at least one year and a-half of his life has gone (an unpleasant fact for others besides doctors); and when it is considered that a senior Assistant-Surgeon receives about the same absolute pay at home, in a healthy climate, as he does in this unhealthy one, the injustice of the case will be more clearly seen. An Assistant-Surgeon in England receives 11s. 6d. a-day, or 172½ rupees a-month; in India he is paid 286 rupees, leaving him only 113½ rupees to pay for his bungalow, servants, horses, palkee, extra messing, extra subscriptions, etc., which sum barely covers his expenses, so that, in a pecuniary point of view, he is absolutely better off when he is serving in civilised England.

"16. That the Government of India may see the justice of our cause, and of their own accord grant what is not only morally but legally just, without placing us to the disagreeable necessity of 'fighting for our rights,' is the sincere wish of

"Yours truly,

"Un Pauvre Diable."

ARCHBISHOP WHATELY AND THE IRISH COLLEGE OF SURGEONS.

Our readers are doubtless aware of the homœopathic tendencies of the Archbishop of Dublin. Every man has a right to his own opinion, but Dr. Whately has certainly displayed neither good sense nor good taste in allowing to be published in the Dublin papers a letter signed by himself, condemnatory of the conduct of the Irish College of Surgeons, in reference to homœopathy—a letter in which he stigmatises that conduct as "a detestable act of tyranny." In the *Freeman's Journal*, of February 19, appears a trenchant answer to his Grace, from which we extract the following:—

"With regard to the 'system of education' which he says the Medical student may 'keep clear of,' we must say a word. There is no school, and no licensing body, professing homœopathic doctrines in these kingdoms. A man can acquire a license to practise only by his going through a certain curriculum. If found in an examination efficient, he signs the rules and regulations, takes in some instances a solemn oath, and then receives a diploma. Suppose he subsequently becomes convinced by 'reason and experience' of the fallacy of his teachers, or for any other good reason sees fit to turn atom doctor, a practice which his college denounces as a 'deception,' and 'derogatory and dishonourable,' the law does not in its present state enable the college to withdraw its license, and even if it did its action might not be attended with the wished-for result. But surely the college may with reason preclude its members from consulting with, &c., without being branded as tyrannous and detestable. Let us see how the Church, of which Archbishop Whately is a pillar, treats heterodoxy. An educational course is laid down for the aspirant for holy orders, in which he is instructed in divinity, church history, and certain doctrines supposed to be founded on Scripture. He gets a nomination, is strictly examined by the archbishop, or some one appointed by him, takes the oath of allegiance and supremacy, accepts the Thirty-nine Articles and the rubric, is ordained, and gets a license. Let him change his views, and alter his tone a note too high or too low, either from the generally accepted doctrines and practices of the Church, or the peculiar interpretation of his archbishop—let him but decorate the cloth, light candles in his church, wear a surplice in the pulpit, or read portions of the service with his back to the people, and we know what will follow. Let him even rise to be a dignitary, and have his faith shaken by a Zulu, and he must either throw up the Thirty-nine Articles, bishopric and all, or be dragged before the Court of Arches. The doctors look on, but they do not designate the proceeding an act of 'detestable tyranny.' The logic may not be so good as that of 'one of the best logicians of the day,' but I think analogy is reasonable."

EVIDENCE AS TO MAN'S PLACE IN NATURE.

Under this title, Professor Huxley has published a work, which will be read by thousands both in and outside the circles of science. Descriptions, for the most part admirable—zoological, physiological, and anatomical—and a style always transparently clear, at times rising to eloquence, make his book a most fascinating evening's reading. As a scientific work—using the word "science" to embrace all branches of knowledge, and not merely anatomy and physiology—it is eminently suggestive, but as eminently inconclusive. At present, it could not be otherwise, for the facts known are far too few to warrant conclusion. But, whilst acknowledging the high merits of Professor Huxley's book, it seems to us to fulfil only partially the promise of its title. Evidence as to man's place in nature we think it is not, although it is admirable evidence as to man's place in the animal kingdom deduced from his anatomical structure. Man's place in nature, we hold, is to be decided on psychical equally with physical grounds. Admitting that Professor Huxley has proved that, in many points of physical structure, the gorilla and other anthropoid apes make a nearer approach to man than the lemurs do to them, we still must wait for evidence that intellectual and moral faculties undergo the same ascensive development in the *Simiæ*, advance *pari passu*, and finally approximate as closely as do the plan of the cerebral lobes and cavities, and the mechanism of the limbs. Until this is proved, we may fairly withhold assent to the doctrine, that, "if man be separated by no greater structural barrier from the brutes than they are from one another—then it seems to follow, that if any process of physical causation can be discovered by which the genera and families of ordinary animals have been produced, that process of causation is amply sufficient to account for the origin of man." It is unfair, however, to criticise separate passages in a book which must be read as a whole to be justly appreciated. We commend it to individual study, but, at the same time, we feel bound to insist upon the gaps which occur in Mr. Huxley's chain of facts and argu-

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ments, and which he himself most unreservedly admits. First, the anatomical differences between man and the gorilla are so great, that it is utterly impossible to suppose that man can have been derived from it or any other existing or known extinct ape. To speculate, therefore, on the probability of a discovery of some anthropoid ape or pithecoid man which shall bridge over the chasm, may be a pleasant exercise of the imagination, but it certainly is not a scientific occupation. Science deals only with facts, and her conclusions are founded only on facts; but here the sole fact that can be of real importance, that of the past or present existence of an ape sufficiently like man to allow of the probability of any law of development from the lower to the higher being brought into play, is entirely wanting. To assume the fact, and then to argue on the assumption, is simply to quit the arena of scientific controversy. But even supposing that a future palæontologist, deep down in the miocene, or yet older formations, should find evidence of an ape which, in length of limb, structure of foot, pelvis, cranial capacity, and dental characters, approached far nearer to man than do the disgusting brutes of Borneo and the Gaboon, the proposition of a serial relationship must then wait until satisfactory evidence is produced in proof of the origin of species by natural selection, or by development. Mr. Huxley acknowledges that "the question of the relation of man to the lower animals resolves itself in the end into the larger question of the tenability or untenability of Mr. Darwin's view." But as the crucial evidence is wanting of any physiological species having been yet produced by selective breeding, we must again wait for facts. On this point we will quote Mr. Huxley:—"But, for all this, our acceptance of the Darwinian hypothesis must be provisional so long as one link in the chain of evidence is wanting; and so long as all the animals and plants certainly produced by selective breeding from a common stock are fertile with one another, that link will be wanting. For so long, selective breeding will not be proved to be competent to do all that is required of it to produce natural species." These two most necessary links in the chain of evidence being entirely missing, whilst we advise our readers to give themselves the pleasure they will surely derive from Mr. Huxley's book, we do not advise them to accept unreservedly what we may call the "Yahoo hypothesis,"—an hypothesis which at present is unsupported by observed facts, and, we may add, is at variance with the inmost convictions of the human mind.

SANITARY LAWS AND SEWAGE IRRIGATION AMONGST THE ANCIENT JEWS.

It is well known that most of the ceremonial laws of the Jews have a profound philosophical and sanitary import, apart from their religious significance. The rite of circumcision, which was adopted not only by the Jews, but by the Arabians, Egyptians, and many of the tribes which migrated along the eastern coast of Africa, is so important as a means of cleanliness, of preventing certain sexual impurities, and of averting disease, that many of us wish it had never been abolished amongst Christians; and though it may be said that it is unnecessary for a cleanly and moral people, yet, alas! Christians are far from being cleanly and moral yet. The prohibition of pork, and of the flesh of animals which had died of themselves, was well calculated to prevent the spread of disease arising from the parasitic animalcules with which filthily kept pigs are infested; but as it is possible to keep those useful creatures in a cleanly and wholesome manner, so we may claim the privilege of eating pork. The absolute prohibition of blood is a thing more difficult to understand. We can conceive of the expediency of a law against eating "flesh with the life,"—*i.e.*, the flesh of animals cut from them whilst living, after the disgustingly cruel fashion described by Bruce in his Abyssinian travels; but we feel that there is something yet to be learned of the reasons for that primeval law against eating blood, which was given to Noah, confirmed by Moses, and singularly enough sanctioned by the council of the Apostles at Jerusalem. In the Eastern Church, this law is, we believe, observed to the present day; and neither blood, nor the flesh of animals which have died of disease or by strangulation, is permitted to be eaten. In the Western Church, it fell into disuse about the sixth century, and blood became not only a common but a popular article of food, and continued so over Western Europe until a more delicate style of eating was introduced in the present century. We have a cookery-book of the year 1780, by C. Carter, cook to George III., and amongst the bills of fare for a grand dinner, in October, we find—"a Beef-Pye in Blood;" and that "a Haunch of Venison, Roast in Blood," figured on his Majesty's table, on December 20, in some year not mentioned. The blood was that of sheep, calf, lamb, or deer, mixed with a little salt, stirred to hinder "clodding," and rendered savory by spices and herbs. The meat was immersed in this all night; and in the case of a pie, the dish was filled up with the blood, and in the case of a roast, the meat, blood, and all were done up in a veal caul, and so roasted altogether. There is evidently room for a revival of archæological cookery, if any one is tired of modern dinners. But to return to the sanitary customs of the Jews. We were not aware, until Mr. Williams gave his lecture on Jerusalem, last Friday, at the Royal Institution, that the practice of sewage irrigation was known to them. But so it was.

"Recent discoveries (said Mr. Williams) fix beyond all question the position of the temple of Solomon and its successors. No one could read the accounts of the sacrifices without being convinced that there must have been some great system of water-works for the purpose of clearing away the blood and other impurities resulting from them. There is a hole in the rock which Professor Willis was the first to identify with its real purpose; and underneath the 'dome of the rock' Signor Pierotti discovered a cave. The hole was the drain, and the cave in the rock the cesspool of the Jewish altar. This confirms the position of the altar of burnt offering.

"The water came from the Pools of Solomon, which exist to this day, and passing in an easterly direction turned northwards, and flowed under the dome of the rock. But, we are told in the Mishna that the place of slaughter was on the north; and, accordingly, we find two cisterns, one at the north, and the other on the west, from which aqueducts led eastwards and southwards to carry away the blood and offal from the altar. A further dilution was made by the accession of water from the Pool of Bethesda on the north, whence the mixture passed on to the valley of the Kedron, where it was sold to the gardeners, and the lands manured with it were remarkable for their fertility."

If we understand the subjoined notes from the Mishna aright, the sin offerings were held not to have been duly performed till the blood reached the brook Kedron—*i.e.*, the extremity of the outfall sewer, and was delivered to the gardeners. Our Metropolitan Board of Works may take a lesson in this matter from the wisdom of the ancient Jews.

"Super locum mundum altaris spargebat septies, reliquiasque sanguinis in lembum occidentalem altaris exterioris fundebat, reliquias vero sanguinis altaris exterioris fundebat in lembum ejus meridionalem. In fossa autem miscebantur, et currebant in torrentem Cedron, et stercorandis hortis oliteribus vendebantur, et oblationem transgressionis persolvere tenebantur in illis.

"*Note.*—Isti et isti in fossa miscebantur et currebant in torrentem Kedron. Isti et isti, id est, sanguines interiores et exteriores miscebantur. Duo enim foramina erant in basi altaris, instar duarum naribus exilium, ut in '*Middoth*' traditur, ex quibus utrinque sanguines in fossam subterraneam cadantes, simul in torrentem Kedron ferebantur.

"*Note.*—(*Ad Stercorandis*——*in illis.*) Sanguis autem iste là Tribunis emaris et rei quæstuariæ præpositis vendebatur, nec oblationem transgressionis persolvere tenebatur, antequam sanguis esset in torrentem Kedron devolutus."

The following announcement appeared in the *London Gazette* of February 21:—His Royal Highness the Prince of Wales has been pleased to appoint Claudius F. Du Pasquier, Esq., F.R.C.S., M.S.A., to be Surgeon-Apothecary to his Household.

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RUSSELL v. ADAMS.

REPORT OF MEETING AT FREEMASONS' TAVERN, ON TUESDAY, FEBRUARY 24, 1863.

On Tuesday last, a public meeting of members of the Medical Profession and others took place at the Freemasons' Tavern, Queen-street, Lincoln's-inn-fields.

The chair was taken by W. R. Foster, Esq., M.P., who said that the number of gentlemen then gathered together, the majority of whom were very busy men, showed how much they felt the object of the meeting. What were the facts the meeting had before it? A few days ago a charge was brought, in a civil court, against a man of eminence in his Profession, whose character stood to that time without stain. The charge which was brought in a civil court was, in fact, a criminal charge of the most serious character. If a Medical man made use of his position to gratify his passion, it was as much a criminal charge as was possible to be brought. That trial went on for three days, and he ventured to say that, of the vast number of persons who read the reports of the trial in the papers, almost every one, or ninety-nine out of a hundred, wondered that it had lasted so long, and felt certain as to the nature of the verdict. Well, the trial lasted this time, and the conclusion come to was a very extraordinary one. He did not mean to find fault with a British jury, but, though British jurymen sometimes protected our liberties, they sometimes gave rather eccentric verdicts. The verdict was a compromise. This was one of the results of the British jury system. This compromise legally acquitted Mr. Adams and gave him costs, but it did not clear him before the public as he and his friends thought he ought to have been cleared. Then there was a sifting of the case by public opinion, by the press, and especially by the Medical press, the result of which would be still more conclusive than that before a jury. They all agreed that this second trial of Mr. Adams before the press and public opinion had been a conclusive acquittal. Crime was, as they all knew, infectious, and there would be danger of this case being followed by similar cases.

Dr. Lankester moved the first resolution—"That all classes of society are interested in supporting those who incur great trouble, annoyance, and expense by resisting and exposing any attempt to injure their character by false charges,"—in an able and eloquent speech, in the course of which he said, that a similar attack might be made against any one of them by the distortion or falsification of facts. The clerical, legal, and artistic professions should equally sympathise in this movement. Perhaps the legal profession knew better how to take care of themselves. (Laughter). Instances were constantly occurring where men who were ministering to spiritual wants had their confidence betrayed, and were brought before a court of law in this way. It was only the other day he was called upon to arbitrate in the case of an artist, who had a young lady sitting to him for her portrait. She went at first in company with her mamma and sister, but after some sittings she came alone. During one of these sittings she dropped a book, which was picked up, and, in answer to an observation of the young lady, that the book belonged to the artist, he gallantly replied, "Oh! every thing I have is yours," and this was construed into a declaration of marriage. (Laughter.)

Mr. Edward Parker, who had been named as the seconder of this resolution, not being present,

Dr. Joseph Rogers rose and said that he had attended there that day with a view to sympathise with Mr. Adams. He advocated the establishment of some associations to uphold the humbler members of the Profession in defending themselves against charges of this nature. The magnates of the Profession might look upon even £1000 as nothing; but there were struggling members to whom the outlay even of a £5 note would be a serious inconvenience. He was ready to admit that, on two several occasions, patients who had contracted a debt to him threatened to prefer charges against him of immorality with their wives. (Loud laughter.) The first man charged him in his own surgery, so he took the man by his collar, and turned him into the street with considerable violence, then proceeded against him in the county court, and recovered the debt; and against the second man he took legal proceedings, and smashed him at once. It was rather singular two such occurrences should take place in the practice of one individual. There was no doubt but that that gentleman (Mr. Adams) had fallen into the hands of a designing Irish woman. He (Dr. Rogers) had had to do with some in a large metropolitan union, and he believed that they were the most artful, cunning, and scheming people on this earth. There was also among them the spirit of clanship, so that wherever they were Irishmen would support each other. They had been told there were Irishmen on the jury—perhaps, purposely put there. (Here confusion ensued, for the meeting disapproved of Dr. Rogers' attack on the Irish, and the speaker was called to order by the chairman.) He referred to the case of Rich v. Pierpoint, in which the defendant had suffered heavily. His object was to have some central committee to which a charge of this nature could be referred.

Dr. O'Connor said he was there to support Mr. Adams, who, he thought, had vindicated his character; but he thought that, as it was currently reported that a Medical man belonging to a portion of the United Kingdom had been base enough to find means to prosecute this inquiry, and as he was sure that Mr. Adams would receive the hearty sympathy and support of the Medical Practitioners of Ireland, he deprecated the sneer against the people of this country thrown out by the foregoing speaker, and had yet to learn that they were so wanting in virtue, and sunk so low in social and moral degradation. He could not hear the people of his country aspersed in that room, in which had been heard the voice of O'Connell, Grattan, and Shiel. (Hear, hear, cheers, and great confusion, in the first interval of which the chairman informed Dr. O'Connor that the allusion had been repudiated by the meeting; had it been made with a personal application, he would at once have called the speaker to order.)

The resolution was then put to the meeting by the chairman, and carried unanimously.

H. H. Cannan, Esq., in moving the next resolution on the list—"That a careful consideration of the charge of the judge, and of the evidence adduced in the case of Russell v. Adams, should have led to an unqualified verdict for the defendant,"—said that he was a relative of Mr. Adams, and had known him for twenty-five years, and during the whole of that period Mr. Adams' conduct had been that of an amiable and virtuous member of society, untiringly devoted to his studies and the duties of his Profession, most exemplary as a husband and father. He questioned the policy of the law which required that a jury should be unanimous.

Dr. Richardson seconded the motion in a brilliant and effective speech. He had been in the court during the whole of this trial, and not only heard the evidence, but seen the way in which that evidence was given. The play of feature often expressed more than words. There was not in the evidence adduced against Mr. Adams one tittle that amounted to an iota of proof of the charge brought against him. A case might be supposed of a Medical man visiting people, and receiving from them modest little favours as the only return they could make for his services; but here there was not one such that could be brought against Mr. Adams. But, even supposing Mr. Adams had on any occasion assumed any other character than that of a Medical man, there was no acknowledgment on his part that could be construed into the act of a lover,—no attempt to misrepresent facts into what would constitute an assault. Therefore, he thought Mr. Adams had passed through the ordeal entirely unscathed. It should be borne in mind that the trial commenced on the assumption that Mr. Adams was a single man, and during the first few hours the decision of the jury was being formed on that. When the defence began, it was shown that he was a married man; so that the counsel for the plaintiff made two distinct charges against the defendant, who, in fact, went through two trials. It had also been stated that Mr. Adams saw Mrs. Russell at the Orthopædic Hospital. He never saw her there at all. She went there and asked for a list of Medical officers. She looked at the list, which Mr. Adams' name headed, and said, "Ah! Adam was the first man; let's go to Adams." (Loud laughter.) When Mr. Adams commenced his acquaintance with Mrs. Russell, he knew nothing of her daughter; her introduction was a long time after. He had treated Mrs. Russell most kindly before the daughter appeared upon the scene. There was also another fact which did not come out in evidence—namely, that there was a gentleman in court during the whole time who had been a "lover" of this young lady, and with whom matters had progressed so far, that the Russells got the wedding dress made up, to persuade the poor old woman they lodged with that the marriage

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must come off, for the dress was made. (Laughter.) The charge of the judge, he thought, showed that he was strongly in favour of Mr. Adams; and he had pretty evident proof of that in the fact, that Mr. Lush had been so kind as to write a letter to himself, in which he stated his lordship's opinion, and, by inference, his direction:—

"60, Avenue-road, February 20.

"My dear Sir,—Pardon my delay in answering your kind favour, for which I thank you heartily. I can truly say that I never was engaged in a case which gave me more anxiety, because I felt convinced that you were the victim of a foul conspiracy. It is a great comfort to me to know that my client is satisfied that I did my best.

"There is, as far as I can learn, but one opinion, in and out of court, as to the injustice done to you. Notwithstanding the inaccuracy and clumsiness of the report in the *Times*, the case, as reported, has impressed every one whom I have heard express an opinion on the subject with the conviction that the verdict ought to have been entirely in your favour. I wished to know from the Chief Baron, before I advised you what to do, what his views were. I saw him yesterday; he complains, as I do, of the report of his summing up, and of the great injustice done to yourself by it; and when I told him that I meant to advise your publishing a shorthand authentic report of it *in extenso*, he at once said he hoped you would do so, and that he would revise it, if I wished, before going to press. This, I think, you should do at once; send it to me, and I will hand it to the Chief Baron. I am rejoiced to find that the Medical body are taking up the case. I have told more than one of that body that they ought to do so. I hope you will not—I do not think you will—suffer permanently from this unaccountable verdict.

"Believe me, my dear sir, yours very truly,

"R. M. LUSH."

The resolution was passed by acclamation; and the Chairman then called upon W. W. LEAF, Esq., to move the following resolution:—"I that this meeting offers to Mr. Adams a vote of thanks for his manly conduct in courting the fullest public investigation into his conduct, expressing deep regret at the annoyance to which he has been subjected, and firm conviction that there was nothing in his behaviour which gave the slightest ground for any charge against him." Mr. Leaf's speech was a glowing eulogy on Mr. Adams.

SPENCER WELLS, Esq., said: In the first place there was a vote of thanks to Mr. Adams for his manly conduct. It would have been much easier for him to have put £100 down to have compromised the matter than to have exposed himself to the very heavy annoyance of a lawsuit, the uncertainty of a verdict, and the manner in which he was exposed to attacks from unscrupulous counsel. The case for the plaintiff was opened in a manner that well merited the severe censure passed upon it by the Chief Baron. When counsel, in representing a case to a jury, allowed them to draw unfair inferences, he exceeded the power he should have. The charge of the late Mr. Justice Coleridge—"never to do as an advocate that which he would be ashamed of as a gentleman"—should have been applied in this case to the counsel for the plaintiff. A low and mercenary tone of the bar of England would be a national misfortune, because the dangerous classes would then feel they could hire counsel to take up any vile action which a man would compromise sooner than let his character be blackened. With regard to the second part of the resolution, he would only say that there was not a Medical man who did not give as full, and perhaps fuller, opportunities of making a charge against him than Mr. Adams did.

Mr. WILLIAM JONES, a member of the legal profession, in reference to an observation made by Mr. Spencer Wells upon Mr. Serjeant Shee, said that there was no more honourable an advocate, and he would not have misled the jury and the judge, but he had been misled himself upon the point. In reference to the evidence, he could not understand how it was that a verdict was not unanimously returned in favour of the defendant: the evidence was all one-sided. He might say that Mrs. Russell had not only been practising at Holyhead, but also at Conway, and she had been making a similar charge, by trumping up a matrimonial alliance for her daughter. At that place her exigencies obliged her to have credit, which she procured by representing her daughter as about to be married to a D.D.

Dr. WOOD (of St. Luke's Hospital) said that a good many years ago, he supposed now nearly twenty, he knew Mrs. Russell, who at that time represented herself as the widow of a Medical man, and who had an only child, then about four years old. This child was a prodigy, and certainly he never knew a child so young play so well on the piano. Being a lover of music, and then a very young man, he took an interest in the widow, and he did what he could to relieve their present necessities; but, after a time, found Mrs. Russell was very well able to keep herself. He thought the Mrs. Russell he referred to was the one Mr. Adams had unfortunately known.

Dr. O'CONNOR said it was a serious point as to how far these persons were independent of any encouragement. There was a general rumour which ought to be cleared up, that some person connected with the Medical Profession had lent himself to this dastardly attack upon Mr. Adams. No one doubted for an instant that it was a conspiracy, but, if it was one, the real root of the evil should be discovered. It was ridiculous to suppose these two adventurers could come forward and prosecute a respectable man like Mr. Adams, without some aid; and the Medical Profession generally would want to know what Medical man was at the bottom of this? He he high or low, rich or poor, great or small, noble or ignoble, they should unearth him, and—

"Exalt his carcass
Sublimely on a gibbet, that miles around
It would be a sign and monument
Of infamy."

The CHAIRMAN said that he would be guided by the wishes of the meeting in reference to letters which had been put into his hands. He then put it to the vote if the letters should be read, and, there being but three dissentients, read the following communications:—

(1.)

"5, Henrietta-street, Cavendish-square, December 23, 1861.

"My dear Mr. Propert,—I have had a letter forwarded to me by Mr. Toynbee from a Mrs. Russell, who has for the third time applied to the Med. Benev. Fund for assistance, and your name is made use of as a referee.

"Fearing that, like myself, you may have been deceived by the plausible tales and touching appeals made up by these people, the Russells, I send you a few lines to say that beyond all doubt they are thorough impostors, and I enclose a copy of the letter to Mr. Toynbee in which your name is made use of, and also a copy of my reply to Mr. Toynbee's note to me requesting information respecting this case. When I believed in the tales told by Mrs. Russell and her daughter and heard of their distress I not only assisted them with money, but sent them to Mr. Toynbee who obtained one grant of £5 for them. Very judiciously, however, the Secretary of the Fund made independent inquiries—and if I had only known the results of these inquiries, it would have saved me both money and annoyance, but in the last report, recently issued, case 42, you will see the statement, 'Visited, and believed to be a begging letter-writer and deemed unworthy of credit.' This refers to Mrs. Russell, whose name is abbreviated.

"The Russells constantly speak of their friend Dr. Hawkins, whom they represented to me as Dr. F. Hawkins of London, and indeed it was very much through seeing a letter signed 'Hawkins,' that I was induced to place any confidence in Mrs. Russell. It now seems that this was Dr. J. V. Hawkins of Lynn, to whom I intended to write. I shall be happy to give you further information respecting these Russells if you require it.

"J. Propert, Esq." "Very faithfully yours, "WM. ADAMS.

(2.)

"6, New Cavendish-street, December 24, 1861.

"Dear Sir,—I have perus'd your letter and enclosures, which have rather surpris'd me, more especially as a tale of a very different character has very recently been plac'd before me, which I cannot conceal from you made my hair stand on end; and as from a sort of common consent I am in some measure look'd upon as the friend and protector of Medical men's widows I was on the point of placing the whole of the case for investigation in the hands of my solicitor, but intended to-day (previous to calling upon him) to see you and learn something respecting your acquaintance with the widow Russell and her lovely daughter!—and I must confess that the numeasur'd terms you have pour'd out your wrathful indignation against them, has (pardon me for saying so) rous'd my suspicion greatly. Glad indeed shall I feel to find that the tale is unfounded when it has been properly investigated.

"I remain, dear sir, very truly yours,

"Wm. Adams, Esq." "JOHN PROPERT.

(3.)

"34, Cannon-street West, December 30, 1861.

"Sir,—My client Mr. W. Adams has forwarded te me your letter to him and instructed me to afford you any information in my power which may assist you or your solicitor in the investigation which you state is to be your intention to make—I may perhaps be permitted to say that so far as I am acquainted with any charge advanced against him by either Mrs. or Mis Russell it is wholly without foundation and that I have no doubt of being able to substantiate what I say should the necessity arise. "I am, your obedt. servt.

"John Propert, Esq." "JOHN MACKRELL.

(4.)

"6, New Cavendish street, January 1, 1862.

"Sir,—In answer to your communnication I beg to say, that I feel oblig'd to you and your client for your generous and disinterested offer! —I have every confidence in my solicitor that he will be able to conduct matters satisfactorily—Glad, indeed, shall I feel, for the honour of our noble Profession, should a jury coincide with you in opinion.

"I remain, sir, obedt. servt.

"J. Mackrell, Esq." "JOHN PROPERT.

(5.)

"34, Cannon-street West, January 18, 1862.

"*Re Mrs. Emily Russell.*

"Sir,—I shall be obliged by your giving me an appointment to see you to lay before you information which has been furnished me herein, and I shall be happy to meet your solicitor also if you wish it.

"I am, yours faithfully,

"Jno. Propert, Esq." "JNO. MACKRELL.

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(6.)

"6, New Cavendish-street, January 18, 1862.

"Sir,—I hasten to acknowledge your letter this morning receiv'd, and to say, that I am compell'd reluctantly to decline the honour of a visit from you, as, whatever you may have to say against Miss Russell, will have better effect, if before a jury—and for the honor of our Profession I do earnestly hope your client will be able to clear himself, or more plainly speaking, *and guilty*—at the same time as a lover of my honor'd Profession, I should MUCH prefer that such an action were never allow'd to appear in the Court of Queen's Bench, against an honor'd member—but matters now must take their course.

"I remain, sir, your obedient servt.

"John Mackrell, Esq." "Jno. Propert.

(7.)

"34, Cannon-street West, January 22, 1862.

"Sir,—I have no wish for an interview with you in opposition to the views expressed in your letter of the 18th inst.

"I consider however that you ought not to have made such use of my letter to you as to entail upon me this scurrilous communication I have received to day and of which I think it right to send you a copy.

"I am, your obedt. servt.

"John Propert, Esq." "Jno. Mackrell.

[*** This seems to refer to some communication from the Russells, of which we have no copy.—Ed.]

(8.)

"6, New Cavendish-street, February 24, 1863.

"My dear Churchill,—I think after the many years of uninterrupted friendship that has existed between us—you might strain a point to defend the hard-working Waltsman, that is, *provided* you should hear it said to-day at the meeting 'that I had brought the action Russell v. Adams'—when I say 'so help me God' I had nothing to do with it; proceedings had been begun MONTHS before I ever knew that such people existed in the world as Mrs. Russell and her beautiful daughter, *and that I never contributed or ever promis'd to contribute one farthing towards the expense of the trial!!*

Ever most truly yours,

"J. Churchill, Esq." "John Propert.

The Chairman said he would not make any comment upon the letters, but let them speak for themselves, and gentlemen could then form their own opinion upon them.

Dr. O'Connor asked the name of Mr. Propert's solicitor?

Mr. Cannan said he believed it to be Pike. The gentleman who conducted the prosecution was not Mr. Propert's solicitor.

The Chairman: I understand that, before this case was brought forward, Mr. Adams entered into a correspondence with Mr. Propert. One or two solicitors had before taken the matter up, but had given it up. (Hear, hear.)

Mr. Dangerfield, in moving the last resolution—"That a petition be presented to Parliament, praying that a committee may be appointed to inquire into the reforms necessary in the present legal procedure, and praying especially that greater facilities may be given for prosecuting persons who make unfounded attacks upon character"—said, the meeting had not only a sympathetic but also a practical character. There were, at present, several anomalies in the law, some of which he could point out. It was a curious thing, that threatening to make a charge against any one, to extort money, or with the appearance of an intention to extort money, was criminal; but, if the charge itself was brought, that was not criminal. With regard to the law of conspiracy, however artful a person might be, yet, unless two persons combined, an indictment would not lie. In the law of perjury, when a witness was sworn to facts totally inconsistent with the truth, and capable of being contradicted, an indictment will not lie against that individual unless evidence can be contradicted by two witnesses. There was also another matter to which he would draw their attention. In this case of Mr. Adams, evidence could have been given, in favour of Mr. Adams, of charges of this nature having been previously made in Wales. The judge would not receive that evidence, because it was an immaterial issue, on which, too, an indictment for perjury cannot lie (?) A thing Lord Brougham had given various reasons in the House of Lords for was, that there should be a public prosecutor. He thought the law should be altered, for the purpose of giving persons attacked as Mr. Adams had been greater facilities for redress.

J. Churchill, Esq., supported the resolution. It was felt that a great injustice had been perpetrated upon Mr. Adams, and it was to the law that this resolution addressed itself. Mr. Adams had been the victim in this action; in the next, perhaps, some gentleman in the room who least expected it. (Laughter.)

The resolution was then proposed, and carried unanimously; and a vote of thanks to the chairman concluded the proceedings.

Messrs. Savory and Moore have been appointed chemists to H.R.H. the Prince of Wales.

REVIEWS.

Travels in Peru and India while Superintending the Collection of Chinchona Plants and Seeds in South America, and their Introduction into India. By Clements R. Markham, F.S.A., F.R.G.S., etc. With Maps and Illustrations. London: John Murray. 1862. Pp. 572.

Why, it will be asked, is the word spelt "Chinchona," instead of the usual "Cinchona"? Be it remembered, that the nomenclature of a plant forms one of the most delicate of compliments and the most enduring of monuments. As Linnæus well observed, the name of the physician Euphorbus will be handed down to remotest posterity as the godfather of the genus *Euphorbia*, whilst a patent of nobility or a marble statue would long have been mouldering in dust and oblivion. In 1638, as Mr. Markham tells us, the wife of Luis Geronimo Fernandez de Cabrera Bobadilla y Mendoza, fourth Count of Chinchon, lay sick of intermittent fever in the palace at Lima. She was a remarkable woman, and had been wife to two viceroys of Peru—once at 16, and now, a second time, in her 63rd year. The Corregidor of Loxa, Don Juan Lopez de Canizares, sent a parcel of powdered quinquina bark to her Physician, Juan de Vego, who administered it, and effected a complete cure. She returned to Europe in 1640, bringing a quantity of the bark with her. Hence it was originally called Countess's bark, or *Pulvis Comitissæ*, and hence the great Linnæus named the genus *Chinchona;* and Mr. Markham, with Mr. Howard and the Spanish botanists, restores the correct spelling in honour of the Countess's memory. The noble family of Chinchon holds, besides, so conspicuous a place in Spanish history—(in 1623, the Count of Chinchon received Prince Charles, of England, and gave him a supper of "trouts of extraordinary greatnesse")—that there is no more excuse for the mis-spelling than there would be if the Spaniards spelt Buckingham as Buckingam.

It seems that the Chinchona bark was very imperfectly known to the natives of Peru, many of whom are to this day prejudiced against it. Even now, in Guayaquil, according to Mr. Spruce, the prejudice against it is so great, that the Physicians who prescribe it are obliged to call it by another name. Yet its name, *quina quina*, or bark of barks, indicates some belief in its virtues. In what way and at what date the Spaniards first became acquainted with it seems uncertain; but after the conspicuous cure of the Countess, its popularity rapidly spread amongst Europeans, and parcels of the bark were widely distributed in Europe by the Jesuit missionaries. Hence its second name of "Jesuits' bark," or "Cardinals' bark;" and it was, says Mr. Markham, a ludicrous result of its patronage by the Jesuits that it was for a long time opposed by Protestants. It became the subject of as much controversy afterwards as the use of chloroform or ovariotomy at the present day. As the second Lord Shaftesbury, writing in the seventeenth century, observes, the "tribe of inferior Physicians" made a bugbear of it, and the world has not altered much in this respect.

Readers of the *Medical Times and Gazette* have been kept well posted up, as the Yankees say, in the history of that great and beneficent experiment, the transplantation of the Chinchona from Peru to India, in which Mr. Markham was the chief agent, and of which his book contains a detailed account. It is just the kind of book which our Medical friends should order in their book club, because it contains a vast amount of information about one of our most important remedies, and a very large mass besides of adventure and travel, which renders it as fit for the ladies in the drawing-room as it is for the professional man in his study. The first part of it contains a history of the Chinchona; of the gradual progress of knowledge and discovery; of the *habitat* of the different species and varieties, their chemical constituents; of the rapid destruction of Chinchona trees in their native forests; the increasing price and scarcity of their bark; and the attempts which had been made by the Dutch to introduce them into Java. It may be mentioned, as an unfortunate result of the Dutch experiment, that they have filled the forests of Java with a species, the *C. Pahudiana*, which appears most barren in febrifuge alkaloids. The second part of the work contains an account of Mr. Markham's journey from England to Peru, and of the adventures of himself and his agents in that country. He does full justice to the foresight of the East India Company,

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and of the late Dr. Royle, who drew up two memoirs, ten years ago, urging the Government to undertake this great work. Mr. Markham had the good sense to arrange that the search for plants and seeds in the various Chinchona regions of South America should be conducted quickly and simultaneously, so that the deed might be done before the jealous and narrow-minded inhabitants of the South American Republics should be able to obstruct it. He employed Mr. Spruce, an excellent botanist and most intrepid explorer, to undertake the red-bark districts of Ecuador. Mr. Pritchett was employed for the grey-bark districts in the Peruvian forest of Huanooko; whilst Mr. Markham himself undertook to explore the forests of Bolivia. He left England on December 17, 1859, accompanied by gardeners, provided with thirty Wardian cases, and on June 23 following despatched fifteen of these cases from the port of Islay to England. As our readers know, many of the plants perished in the Red Sea, through the intense heat; for the Secretary of State, who had done so much to promote this great experiment, would not give that which was wanting for its completion,—viz., the means of direct transhipment from Peru to India; so that the plants which travelled from the slopes of the Andes to the Pacific were afterwards subjected to the risks of crossing the Isthmus of Panama, of changing steamers at the Island of St. Thomas, at Southampton, at Suez, and at Bombay, and of the journey through Egypt.

As a proof of the author's wisdom in executing his task rapidly, it may be mentioned, that on May 1, 1861, the Legislature of Ecuador passed a decree forbidding all persons from making collections of plants, cuttings, or seeds of the quina tree, and imposing a fine upon every person who should attempt to export them; but by May 1, 1861, the plants and seeds were safe on the Neilgherry Hills, in Southern India.

The third part of the book describes the author's travels in India, with a view to the fixing on sites which should combine conditions of temperature, of moisture, and elevation similar to those of the native Chinchona forests. How sagaciously these sites were chosen, and how well the culture has been attended to by Mr. M'Ivor, the Government gardener, may be gathered from the success which we have already chronicled: in March last, 25,000 Chinchona plants were flourishing on the Neilgherry Hills.

But our readers must not imagine that this work is of a dull Medical cast, or that it is suited to those persons only who care for the Chinchonaceæ. On the contrary, the writer, who seems the model of a scientific traveller, gives us not only his personal adventures, which are interesting in themselves, but a graphic account of the *mores multorum hominum*, the language, costume, social condition, and political history of the people amongst whom his wanderings led him. He seems to have good hope of the ultimate reconstruction of government and society in Peru, and records the history of the civil wars which have followed their independence. He gives a most painfully interesting account of the native inhabitants, or "Indians," as they are called; of their treatment by the Spaniards, and the fate of the last of the unhappy Incas. Here is a little ethnographical bit. Speaking of the Nairs, one of the tribes of Malabar, he says:—

"The Nairs live under the remarkable institution called *murroo-muka-tayum*. Sisters never leave their homes, but receive visits from male acquaintances, and the brothers go out to other houses to their lady loves, but live with their sisters. If a younger brother settles in a new house, he takes his favourite sister with him, and not the woman who, according to the custom in all other countries, should keep house for him. The man's mother manages the house, and after her death the eldest sister takes her place; but no man has any idea who his father is, and the children of his sister are his heirs. Movable property is divided amongst the children of the sisters of the deceased equally, and the land is managed by the eldest male of the family, but each individual has a right to a share in the income. This strange custom gives the women an important position; and as they are pretty, and take pains with their personal appearance, their influence is very great."

Our friends of the Ethnological and Anthropological Societies will find in Mr. Markham's pages many interesting notices of aboriginal tribes, and the order of their invasion of India. The geological formation, the flora, the plants cultivated, and the temperature of every place, are recorded. The account of the coca plant, derived from personal observation, fully bears out what is said of its soothing properties, and power of enabling abstinence and fatigue to be borne with comfort. Here we may learn the different plants used as febrifuges in India, as well as those employed in the confection of a curry. The Medical Practitioner, if he take the hint that Mr. Markham gives, will not confine himself to the use of *quinine*, but will try the effects of cinchonine, quinidine, and the other cheaper alkaloids yielded by the Chinchonaceæ, which may serve all the purposes of quinine as a tonic and stomachic, though not so powerful as febrifuges. It seems that our author not only transplanted the Chinchonæ, but the Aji pepper, the Schinus molle, and the Chirimoya, of which last Dr. Seeman says that it is the finest fruit in creation. Lastly, considering that the valuable Chinchona trees were perishing in their native forests under the barbarous treatment to which they were subjected, it is a matter of gratulation for humanity that they have been rescued in good time, and that the New World, which has been supplied with wheat, barley, apples, peaches, sugar-cane, wine, rice, olives, sheep, oxen, and horses, may fairly be called upon to contribute the tree which heals the malarious fevers of the Old World, and the alpacas, which we hope will furnish food and clothing for ages to come to Australia.

Ueber die Behandlung der Lungenschwindsucht durch die Brusterweiterung und den Gebrauch der Scrophularia Nodosa. Basel und Genf. 1862.

On the Treatment of Pulmonary Consumption by the Expansion of the Chest and the Use of the Scrophularia Nodosa. By Dr. J. Seiler. Basle and Geneva.

In the preface to this book, Dr. Seiler states that his observations are not intended for the Medical Profession alone, but also for the educated portion of the public, and he, therefore, writes in a somewhat popular style. He describes, in the early chapters, the causes of pulmonary consumption, with the nature and progress of the disease, and its principal symptoms; but his chief objects are to point out the necessity of expanding the chest as a remedy for phthisis, and, in the second place, to recommend the use of the *Scrophularia nodosa*, a common weed in Europe, both as an internal medicine and as an agent to be used in inhalation. In reference to the first subject, Dr. Seiler describes the flattening and compression of the chest, which are so characteristic of pulmonary consumption, and he argues that an expansion of the chest not only allows the diseased lungs a larger sphere for the performance of their functions, but actually cures the disease. In order to effect this object, Dr. Seiler has recourse to galvanism, and he has invented an apparatus, the application of which to the muscles of the chest causes their contraction, and thence induces a greater capacity of the thoracic cavity. He adduces a number of cases in proof of the position he assumes, and he gives results showing that, under the course of treatment which he recommends, the capacity of the chest is really increased to a perceptible degree; and he also relates that he has observed a corresponding diminution of the tubercular cachexia. Dr. Seiler appears to have been induced to employ the *Scrophularia nodosa* in the treatment of consumption, by the accidental circumstance of his being asked the name of the plant by a non-botanical friend; its application to scrofulous diseases occurred to his mind, and he, therefore, employed it in the treatment of pulmonary consumption, and, afterwards, of other diseases of the chest. He gives no chemical analysis of this plant, which, we believe, possesses no well-marked properties, and has hitherto been considered as a useless and innocuous weed. He employs it in the dose of five minims of the juice every two hours, and, according to his observations, with the most favourable results; but we fear that Dr. Seiler often mistakes the *post hoc* for the *propter hoc*. We are by no means convinced that the *Scrophularia* possesses the powers which Dr. Seiler assigns to it, and we rather incline to believe that it must belong to the class of expectant medicines, especially in the doses recommended.

Eine Neue Milchprobe. Von Dr. Alfred Vogel. (*A New Test for Milk.* By Dr. Alfred Vogel.) Erlangen. 1862.

Dr. Vogel, after alluding to the different methods which have hitherto been adopted for testing the purity of milk, describes an apparatus devised by himself, and which is founded upon optical principles. The chief adulteration of

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milk is water, and the quality of pure milk depends upon the greater or less abundance of oil globules which it contains. The principle on which Dr. Vogel's test is founded is the impermeability of milk to the rays of light, and his first experiment was made with a flat bottle, such as is sometimes used for keeping scents. A taper was placed behind the bottle, and a certain quantity of water was poured into it, the flame of the taper being, of course, seen through the water and the glass sides of the bottle. Milk was now gradually added to the water, until the flame of the taper became invisible, and a repetition of the experiments proved, that invariably at the moment of the addition of the same drop of milk, the last ray of the light from the taper disappeared. Hence it was shown, that a measured layer of water between two parallel glasses always becomes, by the addition of a measured quantity of milk, so opaque that a light can no longer be seen through it. The same milk was then diluted with water, and it was found that a greater quantity of this diluted milk must be added, in order to render the mixture opaque. Dr. Vogel's apparatus consists of the following materials, namely:—1. A glass for mixing the water and the milk, having a graduated scale marking exactly 100 centimètres; 2. A test-glass, with parallel glass sides separated exactly half a centimètre from each other; and, 3. A fine, graduated pipette. Dr. Vogel gives minute directions for using this apparatus; but the principal operations consist in first pouring water into the mixing-glass, and gradually adding milk from the pipette. The mixture is then shaken and poured into the test-glass, behind which a lighted taper is placed. If the light is still visible, the mixture of water and milk is poured back into the mixing-glass, and a measured quantity of milk is added, and then the mixture is again poured into the test-glass. By a little practice, the exact time is soon ascertained when the light is on the point of disappearing, and when it has quite disappeared the experiment is at an end. It is thus ascertained how much per cent. of milk is necessary to cause the complete opacity of a layer of water half a centimètre in thickness.

This very simple, and, at the same time, ingenious, contrivance of Dr. Vogel is well worthy of attention, considering the great importance of milk as an article of diet for all classes of the community, especially children, and considering, also, that the most common adulteration of milk, namely, water, is the most difficult of detection.

PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

ON THE CONTAGION OF SECONDARY SYPHILIS.

By Dr. Amédée Paris.

The contagion of secondary syphilitic accidents, demonstrated by numerous clinical observations, is now admitted by most writers on syphilis. But while the principle is thus generally acknowledged, a difference of opinion exists as to the mode of infection. Some believe that the initial occurrence resulting from the contagion of secondary syphilis is entirely distinct from true chancre—*i.e.*, from the primary and infecting chancre. The majority, however, agree with M. Langlebert, that constitutional syphilis has constantly a chancre, and especially an indurated chancre, as its point of departure, even when it has been communicated by the product of a secondary accident. It is the object of M. Paris to fortify this latter proposition by the relation of three cases, in showing the regeneration of indurated and infecting chancre by secondary syphilitic accidents of the most common and dangerous kind—condylomata (*plaques muqueuses*):—

1. *F.* applied to the author on August 3, having three hard chancres on the glans, and two large bubos. The chancres had appeared within a week. He had had frequent intercourse during a month with a female, who, upon examination, exhibited numerous vaginal condylomata, sympathetic glandular swellings, psoriasis of the hand and forehead, and impetiginous crusts on the scalp. We need not follow the detail of F.'s case, it sufficing to say, that he was treated with the proto-iodide of mercury, the bubos being opened by means of filiform sutures. By August 15 the chancres were entirely healed, some induration remaining awhile longer, and by September 5 the bubos had entirely ceased discharging. No other symptom showed itself until October 20, when the hair began falling, and buccal and anal condylomata appeared. He continued the mercury until the end of December, all symptoms having for some time disappeared, forty-four drachms of the proto-iodide in all having been taken. 2. M. X. applied, with a soft, freely suppurating chancre, he not having touched the vagina of the woman, her mouth, probably affected with buccal condylomata, alone coming in contact with the penis, and that two months since. The sore was cauterised with the nitrate of silver, and soon completely healed, no consecutive symptoms appearing. 3. M. Z., after repeated connexion with the same woman, a subject of condylomata, applied to the author on account of two bubos which had appeared without any previous sore having existed. The most minute examination failed to detect any trace of such. The patient, not believing in the existence of syphilis, refused for more than a month to take any remedies. The bubos, however, were opened, and at the end of the time mentioned the hair began to rapidly fall, while condylomata of the anus, impetigo of the scalp, and psoriasis of the forehead were visible. He got well after prolonged mercurial treatment. The author believes that in this case a primary sore had existed, but was overlooked by the patient. —*Gazette des Hôp.*, No. 22.

EXCERPTA MINORA.

Sesquichloride of Iron in Hæmoptysis.—During a recent discussion at the Berlin Medical Society, the question of the utility of the inhalation of the *Liquor ferri sesquichlorati*, in the hæmoptysis of phthisis, was entered into. Dr. Lewin stated that he had employed it with good effect in thirteen cases; and he referred to a case occurring in Frerich's Clinic, in which the abundant sputa were rendered colourless by the inhalation, while, after death, free iron was discovered in the large cavity which existed. Dr. Zidekauer, of St. Petersburg, also found, in five cases, a larger proportion of iron in the blood than normally exists. Dr. Waldenburg stated that, in several cases, he had met with great success from the employment of a five-grain solution of alum; and Dr. Schlesinger also warmly advocated the inhalation of this substance. Dr. Lewin had derived similar benefit from a solution of tannin (one scruple to eight ounces). Dr. Tobold stated that he had employed alum inhalation, in ten-grain doses of alum (by means of Mathieu's apparatus), in twenty-one cases, within eight months, the hæmoptysis ceasing after from one to three inhalations.—*Deutsche Klinik*, No. 34.

Fatal Stenosis of the Larynx.—Dr. Lewin related the following case to the Berlin Medical Society, as a warning against delay in performing tracheotomy:—An officer, thirty-two years of age, acquired a syphilitic ulcer in 1856, which was followed by an obstinate cutaneous eruption. The disease of the throat, which brought him under Dr. Lewin's notice, commenced, only in 1860, with a slight hoarseness, which, however, gradually increased, and became accompanied by difficulty in swallowing, and cough. At a later period, severe and increasing dyspnœa set in. The partly snoring, partly saw-like inspiration could be heard at a considerable distance. The laryngoscope exhibited the cordæ of the larynx swollen, reddened, and superficially ulcerated, and only slightly separating from contact with each other during inspiration. Tracheotomy was proposed to be performed the next day, but a short time prior to the appointed time, the patient, soon after having drunk a glass of beer, suddenly expired. At the autopsy, the walls of the larynx were found so swollen as to leave a mere slit between them, which was further encroached upon by thickening of the mucous membrane. The cordæ were infiltrated and superficially ulcerated. The operation was here culpably delayed, especially when it is remembered that almost all cases of fatal stenosis of the larynx on record have terminated in a sudden and unexpected manner.—*Ibid.*, No. 34.

Action by an Apprentice for Breach of Covenant.—A foolish youth, who did not know when he was well off, brought an action against a Practitioner, near Dublin, to whom he had been apprenticed, on the plea that the Practitioner had closed an open dispensing establishment and converted it into a private surgery, and thus had deprived him of the privilege of seeing a greater number of prescriptions. There evidently appeared to be some private causes of *pique* in the plaintiff's mind; and the jury very properly found for the defendant.

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FOREIGN CORRESPONDENCE.

FRANCE.

PARIS, February 2.

THE psychologists of France are applying themselves with great industry to the statistics of insanity, and they are procuring, as far as they are able, information from all quarters. One of the great objects is to ascertain the truth of the idea that is generally prevalent of the increase of insanity within the last few years. It would appear that dæmonosophy, with its rappings, its mediums, its table-turnings, and its spiritualisms, has had a most pernicious influence on the understandings of the predisposed to insanity and the susceptible. M. Philibert Barlet has furnished the Medical world with an interesting memoir on this subject founded upon his experience at the Hôpital de l'Antiquaille at Lyons. He narrates the circumstances attendant upon six cases of mental alienation which were under his care, and shows the intimate connexion that existed in all of them with spiritualism in its different forms.

Dr. Carrier has, within a very short period, had under his care three females, whose insanity has been produced by similar causes. These have been cases of decided mental alienation; but, besides such instances, most Medical men in large practice have presented to them cases of hallucinations, of delusions, of illusions, of high mental excitement, produced by the machinations of pretenders to preternatural communications. In some of the departments an actual epidemic exists, which threatens to extend widely, and to be productive of much mischief.

Those who are thus rendered insane are generally incurable: they are fully impressed with the idea that they are in actual communication with supernatural beings, and treat the science that could relieve them with ineffable contempt. These victims to a deplorable hallucination will listen to no attempt at reasoning them out of their folly: the attention of their families, the advice of their friends, are totally disregarded by them, and they are so wrapt up in the information given to them by the spirit whom they fancy deigns to watch over them, that there is no folly, no crime even, of which they would not be guilty, if they believed that they were suggested by the demon in attendance. All sorts of moral means have been proposed for the cure of the malady in its various forms, but with little success.

The great object of those who have written on the subject of these aberrations is, to point out to parents and to friends the necessity of preventing the exhibitions which are made by charlatans, and which seem to have a marvellous seductive power over those of weak intellect, who are incapable of examining carefully into causes and effects, and drawing sound inferences from what they see and hear.

The endemic disease of the north of Italy, known under the name of "pellagra," which some Physicians have considered as the remains of the old leprosy of Asia and of Europe, has been the subject of much discussion amongst psychologists, from the observations of Dr. Baillcarger, the Physician to the Salpetrière, and to the Lunatic Asylum at Ivry. The striking feature of the mental alienation which accompanies the disease is the belief that the individual entertains, that he has become either enormously wealthy, or that he has obtained a high elevation amongst his fellow-men. This monomania is carried to its fullest extent, and most exaggerated ideas take possession of the mind that nothing can efface. Some persons have attributed the disease to the prevalent food of the country, consisting of Indian corn, grown there; but this idea does not seem to be borne out by anything approaching to observation or experience.

The difficulties attendant upon the study of the disease hydrophobia have lately been the subject of much discussion in the scientific world in France. The Academie des Sciences has had it under its consideration within the last month, but, notwithstanding the cautious investigations that have been pursued, little certainty has been arrived at. M. Renaut has been exceedingly active in his inquiries into the length of time for which the disease may lay dormant in the dog without giving rise to the suspicion of its ulterior development. M. Renaut has tried a series of experiments at the veterinary establishment of Alfort, and has arrived at the conclusion, that at least four months ought to elapse before a dog that has once been bitten should be set at liberty. During twenty-four years' experience, he has had 131 dogs bitten before his eyes, and kept apart for the space of four months; sixty-three of these exhibited no symptoms of hydrophobia, thirty-one were seized after the fortieth day, seven after the seventieth, three after the eightieth, seven after the seventeenth, eighteen after the sixtieth, and one after the one hundred and eighteenth day.

The discussions have hitherto thrown little or no light upon the many interesting points which were investigated. It is, however, ascertained, beyond any doubt, that many of the horrors with which popular belief have invested hydrophobia are greatly exaggerated. The symptoms, though painful to the eye of the bystander, are by no means so distressing to the sufferer as might be imagined. It is muscular motion rather than nervous sensation that is excited by the virus. The tremors and the convulsions which are induced even by a breath of air, are unattended with pain. As for the barkings and howlings that have been said to have been heard, they are, for the most part, imaginary: the death occurring generally within three days after the development of the disease leaves little time for long or acute suffering; and as for the necessity, which has been said to exist, of terminating life for fear of other individuals becoming infected by the rabid bite of the sufferer, no such instances are upon record.

Nothing new has been elicited as to the length of time in which the virus may be incubating in the human frame before its full development; but the stories that are afloat of years having elapsed before any symptoms have appeared are without anything amounting to authenticity. Certain it is that no premonitory symptoms have given notice of the outburst of hydrophobia in its worst form; and there are instances in which there could be no apparent cause—no tracing of communication from a diseased animal. That hysteria in an aggravated form has assumed the appearance of the disease Medical records fully establish. Notwithstanding the varied accumulation of histories of hydrophobia, with the attempts made to arrest its progress, it is fairly acknowledged by those who have expressed their opinion, that still the field is to be explored, and, doubtless, some great truths will be arrived at. Excision and the actual cautery to the part that has been bitten are all that can be, in the present state of science, recommended.

The most prevalent disease throughout the Continent during the winter season has been that to which the School of Broussais attached the name of bronchitis, from the idea that an inflammatory action existed, confined to the membrane entering into the air-cells, but which was formerly called by the classic Physicians "peripneumonia," they believing that the membrane investing all the respiratory organs was more or less in a state of disease. This view still exists very largely, and many Medical men attribute the increased mortality to the discontinuance of the use of the lancet, in conformity with the opinions of some writers, who have loudly condemned, in all cases, blood-letting, notwithstanding the certainty that it is the most valuable remedial agent which the experienced Practitioner possesses to combat the progress of inflammation.

The sanitary state of the Medical Military School is most unsatisfactory. A fever of an alarming character has appeared amongst the students; three deaths have occurred, and there are seventeen individuals under treatment. The Minister of War has appointed a member of the Council of Health to inquire into the causes, and take such measures as may be required.

The wood of the campeche in form of extract has been employed in Mexico with very good effect by the military Surgeons accompanying the French army in the disinfection of gangreneous wounds.

Some operations have been performed here for the cure of hydrocele by means of electricity, with complete success. Two acupuncture needles are passed into the scrotum at its inferior part, taking care to avoid the testicle; a current of electricity from a battery is applied to the needles externally, the positive pole on one and the negative pole on the other; some pain is produced at the moment, but in about twenty-five minutes the swelling is evidently diminished. Sometimes in three days the liquid entirely disappears, in other instances the electricity has to be repeated.

The opinion that secondary syphilis is not contagious has been demonstrated to be incorrect by a curious circumstance that has occurred at a glass manufactory at Lyons. Glass-blowers are in the habit of blowing firmly into a tube of iron;

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three workmen follow each other, and it is ascertained that if one of them has chancre or secondary symptoms about the mouth, he communicates the virus to his comrades.

Nux vomica, so much employed by the hydropathic Doctors, is avoided by the scientific Physician, generally from the knowledge of the bad effects which frequently accompany its use. Professor Brugnoli has lately employed it in small doses with considerable success in Bright's disease; but where there is organic disorder of the kidney it is to be avoided.

A singular controversy is now carrying on between two scientific men, MM. Baly and Bayard. The former of these disputants attributes to vaccination a diminution of the population. He thinks that many of the epidemics are owing to employment, and even supposes that it exerts an influence upon the production of cholera. The arguments on both sides are supported by quotations from learned authors; but the one essential point is by no means proved, that there has been a decrease in the population. M. Bayard denies that such is the case.

At length, Professor Sperino's system of evacuating the aqueous humour in diseases of the eye, may be fully investigated. M. Raymond, his clinical assistant, has published a memoir of his observations, which are evidently drawn from the best sources, and may be relied on as correct and truthful.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, FEBRUARY 3.

Mr. PRESCOTT HEWETT, President, in the Chair.

Dr. BRISTOWE exhibited a specimen, in which was shown a

COMMUNICATION BETWEEN A SMALL OVARIAN CYST AND THE RECTUM.

The case from which the specimen was taken, was that of a woman 40 years of age, who was suffering from phthisis, and also from extensive ulceration of the intestines, especially of the rectum. Around the rectum were numerous small fæcal abscesses communicating with the rectum; and it was into one of the largest of these that the ovarian cyst opened. The cyst was a simple one, about as large as a chesnut; it had thick, dense walls, and contained fæcal matter. A cyst of similar size existed in the opposite ovary (the left), but this was thin-walled, and contained the usual kind of contents. There was nothing in the history of the case to throw light on the point which the specimen was exhibited to illustrate.

Dr. MURCHISON exhibited specimens of

TYROSINE AND LEUCINE,

from the urine of a patient who had jaundice with typhus. Jaundice in typhus fever was so rare (he said) that some observers doubted whether it ever occurred. He had seen three cases in three months; in all, the urine was jaundiced, but there was no reaction on testing for the bile acids. In two of the cases he had found tyrosine and leucine. In one of these the urine was almost devoid of urea. At the autopsies of two of the cases there was no derangement of the biliary ducts. He (Dr. Murchison) considered that the pathology of the jaundice in these cases was similar to that of jaundice due to blood-poisoning, as pyæmia, snake-bites, etc.

A report, by Mr. NUNN and Mr. HOLMES, was then read on Mr. Nunn's specimen of

UTERINE TUMOUR.

The report concludes as follows:—"From a careful examination, we incline to the belief that the disease is a specimen of fibro-cystic tumour, attached to, and incorporated with, the fundus uteri, but probably originating in the sub-peritoneal tissue in its neighbourhood; and that the adhesions which it had formed to the parietes of the abdomen were a secondary effect of the pressure of the mass, by which it had been made to project into the peritoneal cavity. We do not feel prepared to give suggestions for the diagnosis of such a tumour from ovarian disease."

In reply to Dr. Graily Hewitt, Mr. HOLMES said that the cavities mentioned in the report were true cysts.

The PRESIDENT said that, at the last meeting of the Society, he had ventured the opinion that the disease was fibro-cystic. He referred to two similar cases; one, of which the specimen is now in the College of Surgeons' museum, occurred in the practice of Sir Everard Home; the other was under the care of Mr. Cæsar Hawkins. In the latter case the patient was tapped, and sixteen pints of fluid were drawn off.

Dr. GRAILY HEWITT had been informed of a similar case, which occurred in the practice of Mr. Fletcher, of Liverpool. An abdominal tumour was diagnosed to be ovarian, and an operation for its removal was successfully performed. It turned out to be a fibro-cystic tumour of the uterus. As to the origin of such tumours, Dr. Hewitt suggested that they might be due to detachments from the ovary, as it were, transplanted to the external surface of the uterus. There were (he said) more facts in favour of this hypothesis than might be supposed. Dr. Turner, of Edinburgh, had pointed out that pedunculated tumours of the ovary might be detached and become fixed to the abdominal wall. It was well known (Dr. Hewitt said) that the tissue of the ovary consisted of a stroma, in which were the elements of cysts; hence, when transplanted, cysts might be developed.

Dr. DICKINSON then showed a piece of skin from, and a drawing of, a patient who had had

MALIGNANT DISEASE OF THE SKIN.

The patient was an agricultural labourer, 70 years of age, who had kept at work until three months before his death. At first he noticed an ulcer on the inner side of the right thigh, and soon after enlargement of the glands in the groin. When he came to the Hospital, the whole surface was dotted over with very hard lumps, red on the surface, varying in size from that of a nut to a walnut. There was an epithelial cancer of the glans penis, and almost all the glands in the body were affected. There was a nodule of encephaloid cancer in the heart, spleen, and liver.

Dr. BRISTOWE showed two or three specimens of

OLD STANDING CLOTS IN THE HEART CAVITIES,

and brought forward statistics of 42 cases which had come under his observation between November 22, 1855, and October, 1860. He stated that these cases confirmed the views which he had already expressed in a paper published in the *Transactions* of the Society, which were founded on an analysis of 23 or 24 cases. The gist of the views referred to is, that the clots are formed, for the most part, in persons who are dying slowly; that they are formed some time prior to death, and that the softening which takes place in their interior is a process of disintegration, which is common to those with clots in other situations; that they are most frequent in the left ventricle and least frequent in the left auricle; and, further, that age and sex seem to exert little influence upon their production. The following is a tabular analysis of the 42 cases:—29 were males, 13 females—1 occurred between the ages of 10 and 15; 3 between 15 and 20; 4 between 20 and 30; 10 between 30 and 40; 9 between 40 and 50; 11 between 50 and 60; 3 between 60 and 70; and 1 between 70 and 80. In 9 cases the cause of death was phthisis; in 6, bronchitis; in 5, renal disease; in 19, heart disease; in 1, ascites; in 1, tubercular pericarditis; in 1, scarlet fever. In 27 cases they were found in the left ventricle; in 16, in the right ventricle; in 6, in the left auricle; in 19, in the right auricle. In 17 cases they were found in more than one cavity. The clots in the case of scarlet fever were peculiar; they contained fluid in all respects resembling pus, and were associated with sloughing of the tonsils. There was no further evidence of pyæmia in this case, and, unless this is to be regarded as a case of pyæmia, Dr. Bristowe had never met with these clots in cases of that disease.

Mr. MAUNDER exhibited a specimen of

WOUND OF THE POPLITEAL ARTERY AND VEIN,

which came into his possession under the following circumstances:—J. M., aged 16, was accidentally wounded in the left thigh with a knife, which entered the limb from before, at the junction of its middle and lower third. Copious hæmorrhage followed, but was readily controlled by a bystander, until the arrival of Mr. Leach, of the Borough, by whom a compress and bandage were applied; bleeding did not recur. The limb below the wound began to swell, and, after forty-eight hours, the bandage was removed. On the seventh day Mr. Maunder saw the case, with Mr. Leach; the limb had become very œdematous and a pulsating tumour, the area of which was extensive and on the increase, existed. A wound, about half an inch in length, through

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which a portion of cellular tissue projected, occupied the centre of the swelling; and a little external to the above was a small vesication, caused, probably, by the bandage. The dorsalis pedis artery pulsated; and pressure upon the femoral in the groin checked the pulse both in the above vessel and in the tumour. The posterior tibial artery could not be recognised. The patient was at once removed to the London Hospital, when, after consultation with his colleague, and with Mr. Leach, Mr. Maunder enlarged the wound in the thigh upwards and downwards with a view to find the wounded vessel, and to ligature it above and below the wound. The aneurismal tumour being laid open, its contents, fluid blood, gushed forth, and the forefinger of the left hand quickly inserted, followed the original track of the knife, and entered a wounded vessel, the tip of the finger being then bathed in warmer blood. With great difficulty, by reason of the depth of the wound, and constant oozing of dark blood whenever the finger was moved in the least degree, a ligature was applied to an artery above and below the wound, in it. The finger was now removed, when, quite unexpectedly, dark blood gushed up as before, and, believing that the main vein was also wounded, amputation was at once performed at the seat of injury. The popliteal artery and vein proved to be both wounded—the former to the extent of one-half its circumference; the latter was transfixed and nearly severed. The boy died exhausted on the sixth day.

Mr. Gay then brought forward a specimen from a case of

EXTENSIVE SLOUGHING OF THE SKIN.

A man, 21 years of age. He complained of pain in the region of the liver, which in three weeks was followed by fluctuation. The swelling was punctured on October 11, and some pus evacuated. The wound sloughed, and, after awhile, there was one large ulcer from the umbilicus to the ribs. The principal part of the external oblique had been removed, and the sheath of the rectus opened. He died on January 21. At the time of death, the sloughing had extended, in front, to the umbilicus, and, behind, to within an inch of the vertical column, above to the nipple, below to three inches below the spine of the ilium. It had destroyed a great part of the external oblique, transversalis, internal oblique, and rectus muscles. It had penetrated the abdominal cavity by a large opening just below the borders of the ribs, and there exposed the edge of the liver. At the junction of the ascending with the arch of the colon, the bowel had been perforated, but the peritoneum had become adherent to the opening, and no perforation had taken place. Mr. Savory, who saw the case, thought that the disease commenced by an abscess in the liver.

Mr. Holmes exhibited a specimen of

CANCER OF THE FEMALE BLADDER.

The patient died of simple atrophic softening of the brain. There was no cancer of the genital organs. This was (Mr. Holmes said) the only case of cancer of the female bladder which had been brought before the Society.

Mr. Teevan exhibited a specimen showing

FAT IN THE PLEURA.

The fat was between the pleura costalis and pleura pulmonalis. He believed that the "fringes of fat," described by Sir Astley Cooper as having been found at the autopsy of George IV., were really fat, and not, as Dr. Watson supposed, emphysematous appendices.

MEDICAL NEWS.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, February 19, 1863:—

Frederick Wright, Stamford-bridge, Yorkshire; John Berry Mulock, London; George John Blasson, Guy's Hospital; John Robinson, Winterton, Lincolnshire; Arthur Wigleswortb, Liverpool.

The following gentlemen also on the same day passed their First Examination:—

Chaveney Fuzey, Guy's Hospital; Edward Ashwell Burnham, Guy's Hospital.

APPOINTMENTS.

Bradshaw, John T., M.R.C.S. Eng., has been appointed Consulting Surgeon to the Huddersfield Infirmary.

Clarke, Wm Fairlie, M. A. (Oxon.), M.R.C.S. Eng., has been appointed Surgical Registrar to King's College Hospital.

Colem, Alfred, M.R.C.S. Eng., has been appointed an Assistant Dental Surgeon to the Dental Hospital, Soho-square.

Forsyth, W. F., L.D.S., R.C.S.E., has been appointed an Assistant Dental Surgeon to the Dental Hospital, Soho-square.

Gregson, D., L.D.S., R.C.S.E., has been appointed an Assistant Dental Surgeon to the Dental Hospital, Soho-square.

Hayward, Henry H., M.R.C.S. Eng., has been appointed an Assistant Dental Surgeon to the Dental Hospital, Soho-square.

Heath, Christopher, F.R.C.S. Eng., has been elected Surgeon to the West London Hospital and Dispensary, Hammersmith.

Hill, A., L.D.S., R.C.S.E., has been appointed an Assistant Dental Surgeon to the Dental Hospital, Soho-square.

Hunt, William J., L.R.C.P. Edin., has been appointed Medical Superintendent and Manager of the Hoxton House Lunatic Asylum.

Simpson, Thomas, M.D. Edin., has been elected Consulting Physician to the York County Hospital.

Swaine, William E., F.R.C.P. Lond., has been elected Physician to the York County Hospital.

Walker, J., M.D., has been appointed an Assistant Dental Surgeon to the Dental Hospital, Soho-square.

DEATHS.

Atkin, John, Surgeon, at Billesdon, Leicester, on January 31.

Bull, Frank, M.D., at Toronto, Upper Canada, on January 20, aged 31.

Campbell, Archibald, M.D. Glasg., at Cawdor-place, Oban, Argyleshire, on February 10, aged 51.

Douglas, J. A., at Sowby, Lincolnshire, on January 5, aged 82.

James, Job, J.P., in practice prior to 1815, at Pontmorlais, Merthyr Tydvil, on February 11, aged 75, formerly Surgeon R N.

Jones, William Henry, M.D. Edin., Staff Assistant-Surgeon Army, at 2, Waterloo-cottages, Torquay, on February 11, aged 24.

Lovett, Samuel, M.R.C.S. Eng., at 23, Clare street, Lincoln's-inn-fields, on February 19, age 1 58, for twenty-two years one of the Medical Officers to the Strand Union.

Martin, George White, L.R.C.P. Ed., at Rochester, Kent, on February 19, aged 26.

Montgomery, Andrew, late Inspector-General of Hospitals, Bombay Army, at 19, Marlborough-buildings, Bath, on February 16, aged 69.

Professor Purkinye.—This Nestor of German physiologists, has just celebrated with great *éclat* his seventy-fifth birthday, all the Medical bodies uniting in the ovation.

Royal College of Surgeons.—The introductory portion of the course of lectures now being delivered in the theatre of the above Institution, will be concluded on Tuesday next, when Professor Huxley will give a review of the "Classification of the Mammalia;" on Thursday he will give the "Structure and Development of the Vertebrate Skeleton." The sixth lecture will be given this day (Saturday). Amongst the celebrities who honour the Professor with their company, we observe, on every occasion, Bishop Colenso, who appears to take, with the public generally, a great interest in these lectures.

St. Bartholomew's Hospital.—A large meeting of the governors of this charity took place on Wednesday last, in the great hall, for the purpose of electing a president in the room of Mr. Cubitt, who, it may be remembered, held office, but resigned it when he dissolved his connection with the City, and at the same time intimating that his resignation was owing to the objections started by others, rather than the free exercise of his own will. The Lord Mayor was put in nomination, whereupon Mr. Cubitt was then proposed for re-election, and, on the votes being taken, was declared to be elected by a majority of 87 votes over 44.

London Institution.—Mr. Carter Blake's lecture on Tuesday last was devoted to the *Aves Altrices*. The order *Insessores* was divided into the *Dentirostres*, *Conirostres*, *Tenuirostres*, and *Fissirostres*, examples of each order being given. The orders *Volitores* and *Scansores* were likewise described in detail. Examples of the geographical distribution of the Raptorial order were adduced, and the lecturer concluded that portion of his course which relates to the class of birds by a concise summary of the geological facts known, respecting their range in time. The description of the Mammalian class will be commenced on the 4th of March.

Royal Society of Edinburgh.—Dr. J. G. Wilson, F.R.C.S.E., of this city, and Dr. Matthews Duncan, F.R.C.P.E., of Edinburgh, were, on Monday last, elected Fellows of the Royal Society of Edinburgh.

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PREVALENCE OF EPIDEMIC PURULENT OPHTHALMIA IN GERMANY.—For a considerable time past purulent ophthalmia has extensively prevailed at Frankfort and on the Lower Rhine; and while the military have suffered less from this scourge than in former years, schools and various other civil establishments have presented subjects of its attack in large numbers.

DR. FRIEDRICH JAGER.—This well-known Vienna oculist has recently celebrated his jubilee consequent upon attaining the fiftieth year of his doctorate, being in excellent health and spirits. All the Medical corporations complimented him, and the College of Doctors presented him with a new diploma, and represented to the Minister of State the desirableness of some recognition of his merits. His influence on the progress of ophthalmic medicine is too well known to require more than adverting to. The most faithful apostle of his master Beer, the founder of ophthalmology in Austria, his reputation has spread throughout Europe as teacher and Practitioner, and foreign orders of merit have been freely accorded to him.

THE LEVÉE.—The following members of the Medical Profession attended the levée of H.R.H. the Prince of Wales on Wednesday, viz., Sir Rutherford Alcock, K.C.B., her Majesty's Envoy Extraordinary and Minister Plenipotentiary in Japan; Sir Henry Holland, Physician in Ordinary to the Queen; William Lawrence, Esq., Serjeant Surgeon to the Queen; William Fergusson, Esq., Surgeon Extraordinary to the Queen. Doctors Lavies, Pickford, Dalton, Arthur Faire, Cape, Jeaffreson, J. Stevenson Bushnan, T. De Meschier, E. A. Parkes, G. T. D. Evans, F. G. Read, Breslin, E. Meryon, Robert Ferguson, Farr, Watson, Granville, Ramsbotham, Alexander Bryson, Goolden, Smith, Waller Lewis, Forbes Winslow, Gideon Dolmage, T. G. Balfour, Alexander Marsden, McCann, Ashley, Kirkman, Fraser, Routh, Professor Owen, Deputy Inspector-General Thomas Longmore; and Messrs. Wakley, Reeves Traer, White Cooper, R. W. Templin, Dendy, W. Sands Cox, Propert, Thomas Fitzgerald, B. E. Brodhurst, S. S. Seriven, G. B. Childs, Erasmus Wilson, R. McCormick, R.N. The presentations will appear next week.

UNIVERSAL distrust and anticipation of evil are the present distinguishing features of the Army Surgeon's physiognomy. We cannot blame them. There are no men to whom the Government owes more—there are none to whom it has paid so little. From the earliest days of British connexion with the affairs of India, her Medical servants have been conspicuous in smoothing the way for the acquisition of permanent rights. At the time when all other Europeans were looked on with suspicion, the skill of the western Physician was a passport to the eastern palace. The gratitude called forth by his efforts was used, not for the furtherance of his own personal avarice, but in securing an advantageous footing for his countrymen in the land now called British India. These services are, however, now forgotten; and, in place of gratitude, the Home Government have, for some time past, being using such endeavours as they could to lower the *status* and ignore the claims of the Army Medical Department.—*The Madras Times*, January 14, 1863.

THE RIBERI PRIZE.—Professor Riberi left by his will a valuable bequest to the Turin Royal Academy of Medicine and Surgery, in the foundation of which he took a leading part. It consists in a sufficient sum of money to constitute seven prizes of 20,000 francs each, one to be decreed every third year. The Academy, in fulfilling the wishes of its late President and Professor, has determined that the first period shall comprise from January 1, 1862, to December 31, 1864. All works, whether published or written, upon any subject relating to Medicine or Surgery, will be admitted to the *concours*, the Academy deciding in favour of such of them as exhibit a true and important progress in Medical science. The printed works should be sent in duplicate, and, whether printed or written, they must be in the Italian, Latin, or French language. The author of a manuscript work is at liberty either to make his name known or to send it in a sealed packet. All works must be forwarded free any time before, but not after December 31, 1864. All works sent will be retained by the Academy, but the author of a manuscript can have a copy made at his own expense. It is requested that, in the letters accompanying their works, authors will indicate the most important portions or arguments of these to which they think the attention of the judges should be especially directed.

LIBEL ON A MEDICAL MAN.—At the Southwark Police-court, on Monday last, John Finch, a teacher and private tutor, residing at No. 11, Walgrave-place, Earl's-court-road, Kensington, was summoned before Mr. Burcham for publishing a libel, containing defamatory statements concerning Dr. John Shea, of 84, Blackfriars-road. The evidence completely proved the publication of a series of attacks on the character of the prosecutor and his family of the most atrocious description. Dr. John Shea, the complainant, said he resided at 84, Blackfriars-road. The defendant had been tutor to four of his sons, and left about autumn, 1861. He was always treated kindly and with the greatest respect, and he had very lately recommended him as a tutor to several respectable families. He could not account for his writing and distributing such productions. They had been sent about in all directions. The rector of the parish had received one, and several of his neighbours had been supplied with them. About a year ago the prisoner circulated some scurrilous papers among his friends, but he took no notice of them, thinking that he would discontinue to do so. Mr. Burcham told the prisoner that Dr. Shea had acted with great forbearance in not proceeding against him when he circulated the first libels. He committed him for trial at the next Central Criminal Court sessions, but would accept bail for his appearance, himself in £50 and two sureties in £25 each. Bail not being forthcoming, he was committed to prison.

THE TWICKENHAM ECONOMIC MUSEUM.—In a letter to the Rev. J. B. Owen, read at the National Club on January 20, Mr. T. Twining has announced that a collection, in the formation of which he has been for many years engaged, and to which he gives the name of Economic Museum, is now thrown open to the public. This collection contains designs for town and country dwellings for the labouring classes, hospitals, asylums, schools, cooking establishments, baths, and washhouses; models of the most remarkable British and continental designs; specimens of building materials of every description; an assortment of building ironmongery; a collection of British and foreign stoves; estimates, illustrated by specimens, of furniture and clothing required by the poor; popular illustrations of food economy and domestic hygiene; special requirements of cottagers, emigrants, etc.; also indications of every kind for facilitating the formation of museums for the instruction and benefit of the working classes. The use of a collection so valuable is a real boon to those who are devoting time and attention to the subjects of social science, and Mr. Twining, by placing it within their reach, has proved himself a public benefactor. The museum building is very near the Twickenham railway-station, accessible in half an hour by fast trains from the Waterloo terminus, and Mr. Twining's curator is always in attendance to give the required explanations, on Wednesdays and Saturdays, between two and five p.m. In reference to admission, Mr. Twining wishes it to be known that, "as the collection has been formed purely for purposes of social improvement and Christian benevolence, all admissions are gratuitous, and any persons engaged in raising the condition of their poorer brethren will always be welcome visitors. Any number of cards of admission may be obtained at the Society of Arts, together with programmes and other printed information."

EPPS *v.* MORRIS.—COURT OF QUEEN'S BENCH, GUILDHALL, FEBRUARY 24.—This was an action by a Practitioner of Medicine to recover from the defendant for attendances upon a lady to whom he had been married. The defence was, that at the time he married her she was married to another person then still living, so that her second marriage was bigamous and void. To this it was replied that the defendant had held her out as his wife to the world, and that, therefore, he was as much liable for her necessary debts as if she was really his wife. In 1841, the lady, at the early age of 17, was married to her first husband, from whom, a few years afterwards, she was divorced *à mensâ et thoro*. In 1846 she went through the ceremony of marriage with the defendant, who knew of the fact of the former marriage, but supposed that the divorce dissolved the marriage and made her free to marry again. They lived together as man and wife until the year 1854. They then separated, and she has since lived by herself in lodgings, bearing his name, and having an allowance from him—first of not less than £1000, then of £500, and ultimately of £250 a-year. This money was sent to her down to the present time by the defendant's attorney under the name of Mrs. Morris. The plaintiff's bill was £127 for

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attendances during the years 1861 and 1862. The fact that the former, or rather the true, husband was alive at the time of the second marriage was proved. It did not appear that the plaintiff knew of the defendant's marriage with the lady, but he said he knew her as Mrs. Morris. The Lord Chief Justice, in summing up the case to the jury, said the sole question for them was, whether at the time of the attendances the defendant allowed the lady to hold herself out as his wife. No doubt, so long as they were living together, that would be so. But so soon as a man separated himself from a mistress, and ceased to live with her, of course that implied holding her out as his wife was put an end to. The question was whether, when a tradesman or a Medical man found a woman living by herself, and chose to trust her without making any inquiry, he could make liable for her debts any one with whom she had formerly lived as his mistress. It had not appeared that the plaintiff knew, as a fact, the actual marriage between the parties. The jury at once found for the defendant.

Anthropological Society of London.—The first meeting of this Society took place on Tuesday last, when an introductory address was delivered by the President, Dr. Hunt, on the "Study of Anthropology." He observed that his position in the chair had been caused more by the interest he took in the objects of the Society, than by any special qualification for the office he held. He defined Anthropology to mean the science of man and mankind, and said it had no right to be confined within such narrow limits as simply the distinction of man from the inferior animals. Before advance could be made, it was necessary to settle what was the distinction of man from the Mammalia; and man's place in nature was at the very root and foundation of the science of mankind. Man, hitherto, had been looked upon as a link in the chain of creation totally disconnected with every other link, and inquirers had sought for some fresh laws applicable to this isolated being. It was necessary to give up such notions, and study man scientifically; the bugbear to the science of man had been *à priori* assumptions. They must take a lesson from the geologist, and found a science on facts, and there could never be a science of man until they adopted a scientific method of investigation. Nor were they to confine the question to physical Anthropology, which Blumenbach first introduced; but must study the mental and moral characters of mankind generally. The negro differed far more from the European, mentally and morally, than he did physically. The science of Anthropology was not only in its infancy, but, as a science, hardly yet had any existence. There were plenty of good reliable facts respecting every animal but man. No progress had been made for the last fifty years; but the geologists during that time had founded their science on a sure basis. It was necessary for them to begin *de novo*, and widen and deepen their sphere of observation, and collect a wider and more systematic range of facts. They must reform the terms in use, many of which were founded on vague historical statements, and the use of them implied a theory. The hypothesis of unity or plurality of the origins of mankind could not be discussed on scientific grounds at all. Everything relating to mankind seemed to be in a state of chaos, and we ought to confess our ignorance, and say

"All we know is,
Nothing yet is known,"

either respecting the origin of mankind, or of the laws by which he is governed. Anthropology had wonders as great as any other branch of study to reveal, and what was now wanted were earnest workers and real lovers of truth. The secretary, Mr. Carter Blake, spoke at great length respecting the various subjects which would be brought before the society. A discussion ensued, which was joined in by Messrs. Burke, Blackstone, Chambers, Blake, Mackie, Dr. Gibb, Avery, Bouverie, Pusey, Collingwood, Prideaux, and the President. The next meeting will take place on March 24.

BOOKS RECEIVED.

Evidence as to Man's Place in Nature. By Thomas Henry Huxley, Fellow of the Royal Society. London and Edinburgh: Williams and Norgate. 1863. Pp. 159.

The Principles and Practice of Obstetrics. By Gunning S. Bedford, A.M., M.D., Professor of Obstetrics in the University of New York, etc., etc. With 4 coloured Lithographic Plates and 99 Wood Engravings. Third Edition, carefully revised and enlarged. New York: William Wood and Co. 1863. Pp. 742.

Stammering and Stuttering: their Nature and Treatment. By James Hunt, Ph.D., F.S.A., etc. Fifth Edition. London: Longmans. 1863.

Researches on the Nature, Pathology, and Treatment of Emphysema of the Lungs, and its Relations with other Diseases of the Chest. By A. T. H. Waters, M.D., Member of the Royal College of Physicians, London, Physician to the Northern Hospital, and Lecturer on Anatomy and Physiology in the Royal Infirmary School of Medicine, Liverpool. London: John Churchill and Sons, New Burlington-street. Liverpool: Adam Holden, Church street. 1862. Pp. 114.

A Systematic Handbook of Volumetric Analysis; or, the Quantitative Estimation of Chemical Substances by Measure. Adapted to the Requirements of Pure Chemical Research, Pathological Chemistry, Pharmacy, Metallurgy, Manufacturing Chemistry, Photography, etc., and for the Valuation of Substances used in Commerce, Agriculture, and the Arts. By Francis Sutton, F.C.S., Professor of Practical Chemistry, Norwich. London: John Churchill and Sons, New Burlington-street. 1863. Pp. 282.

Anatomy of the Parts concerned in Femoral Rupture. By George W. Callender, Assistant-Surgeon to, and Demonstrator of Anatomy at, St. Bartholomew's Hospital. London: John Churchill and Sons, New Burlington-street. 1863. Pp. 51.

A Manual of Animal Physiology, for the Use of non-Medical Students; with an Appendix of Questions from various Examination Papers, including those for the B.A. Lond. for the last Ten Years. By John Shea, M.D., Bachelor of Arts of the University of London, Member of the Royal College of Surgeons, etc., etc. London: John Churchill and Sons, New Burlington-street. 1863. Pp. 240.

Clinique Chirurgicale. Par J. G. Maisonneuve, Chirurgien, de l'Hotel-Dieu de Paris, Membre Fondateur et Honoraire de la Société de Chirurgie, etc., etc. Tome Premier. Paris: F. Savy, Libraire-Editeur, 24, Rue Hautefeuille. 1863. Pp 640.

Illustrations of the Surgery of the Female Pelvic Organs, in a Series of Plates taken from Nature; with Physiological and Pathological References. By Henry Savage, M.D. Lond., F.R.C.S., Physician to the Samaritan Hospital for Women. London: Churchill and Sons. 1863. 4to. 12 Plates.

Proceedings of the International Temperance and Prohibition Convention, held in London, September, 1862. London: Job Caudwell. 1862.

PAMPHLETS.

Contribution to the Normal and Pathological Histology of the Kidneys. By V. Rasmussen, Candidate in Medicine and Surgery. Translated from *Bibliothek for Laeger*, for April, 1862, by William Daniel Moore, M.D., etc.

The Minute Anatomy and Physiology of the Nervous System in the Lobster. By T. S. Clouston, M.D. Reprinted from the *Edinburgh New Philosophical Journal* for January, 1863. Pp. 34.

On Special Hospitals. By Mr. W. Martin, F.R.C.S.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Reports of Dr. Brown-Séquard's and Dr. Pavy's lectures are unavoidably postponed until next week.

The Midland Society of Chemists and Druggists.—An association bearing the above name has been formed at Nottingham for the protection of the interests of chemists and druggists, and for the interchange of opinion on matters of trade and chemical science. The president of the society is Mr. Charles V. Wilcockson. Their first annual festival was held on the 12th inst., at the Exchange. Dr. Robertson, in returning thanks for the Medical men of Nottingham, made a racy address, from which we take the following extract:—

"On an occasion like this, compliments were not what were required—they had met to hear the truth. (Hear, hear.) Well then, in former times, a youth, just come from school, was put to the Medical Profession. He was at once appointed to dispense medicine, notwithstanding that he might be doing so in cases involving the life of a father of a family. This was a mistake (hear, hear); and seeing that there was no knowing at the present day what new discoveries in Medicine might be made, he trusted very sincerely that the day was not far distant when dispensing would be totally dissociated from the Medical Profession. (Applause.) He remembered the song that was popular in his younger days—the song of a young student, which exactly described the state of things which might be supposed to exist now:—

"Now endless scrapes Master Harry got in
By sending out physic in phials unclean;
He nearly killed a nabob sent home diabetic,
Through ne'er weighing calomel or tartar emetic.
But the worst mixture of all was a label one morn
Prescribing prussic acid for a baby just born.
Harry swore that the gov'nor the case had mistook—
He'd be hang'd if *pro re natâ* wasn't writ in the book."

(Cheers and laughter.) This (he said) was the sort of thing that was likely to occur. At present they knew that calomel and black draughts were good things; but what they were likely to have neither the Medical men nor the druggists could tell. Not at all unlikely that they would be recommended one of these days to try the saccharated carbonate of quinine lime-treacle, iron, tartaric acid, and tobacco—(loud laughter);—and, under these circumstances, he contended that it was material that the dispensing should be dissociated from the Medical Profession. He was sure that the Medical men and the druggists also would be gainers by the change. He agreed with the programme as read by Mr. Atherton in every thing but that relating to Medicine, and he thought that druggists should not interfere with that, because it belonged exclusively to the Profession, for this reason: if our watch is out of order, we take it to the watchmaker, simply because he understands the internal mechanism. Now, complicated as that machinery was, that of the human frame, internally, was more so. The chemist understood all the external, but he had not been trained to the internal. To give an illustration:—The other day he became acquainted with the case of man who went to a Medical Practitioner and described his ailment. He was prescribed for, paid his fee, put the prescription into one of his breeches' pockets and went away.

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He went to another Medical man, told his tale, was examined, prescribed for, paid his fee, and, placing that prescription in his other pocket, went away. He proceeded to a chemist's shop not a hundred miles from Longtown to consult the celebrated proprietor of that establishment. "I shall be obliged," said he to the chemist (telling him also his complaint), "if you can tell me which of these prescriptions is the right one!" (Laughter.) Said the chemist, "I could not recommend either of them; but I'll tell you what, I'll give you something that will do you more good, my said." (Roars of laughter.) Well now, he submitted there should be some limit to this sort of thing. He could understand a chemist prescribing for a man who should come into his shop suffering from a pain in the stomach; but with such cases he contended the province of chemists should be abridged."

QUALIFICATIONS FOR POOR-LAW MEDICAL OFFICERS.

The subjoined replies have been given by the Law Officers of the Crown in Ireland, in answer to queries submitted to them by the Poor-law Commissioners, relative to the interpretation of their recent warrant respecting the qualifications of Medical Officers of workhouses and dispensaries:—

ROYAL COLLEGE OF SURGEONS IN IRELAND.

Queries submitted by the Poor-law Commissioners to the Attorney-General and the Solicitor-General for Ireland, with their opinions thereon:—

Queries.	*Opinions.*
1. Whether the Royal College of Surgeons in Ireland has power and is competent to grant letters testimonial and diplomas, testifying that the person to whom same may be granted is qualified to practise Medicine as well as Surgery?	1. After perusing and considering the Charters of the College of Surgeons, we are of opinion that it has not power, and is not competent to grant a diploma or degree in Medicine.
2 Whether, if the General Council of Medical Education shall register, under the provisions of the statutes 21 and 22 Vic., cap. 90, the letters testimonial or diploma to practise Medicine, so granted by the College of Surgeons, the person so registered is to be considered in all respects as holding the qualifications required in that behalf by the order of the Commissioners above stated [in the case]; or would it be competent, notwithstanding such register, for the Commissioners to question the power of the College of Surgeons to grant such diploma in Medicine?	2. We do not think that the registration of such letters testimonial or diploma to practise Medicine can be held to qualify the person registered within the meaning of the order of the Poor-law Commissioners. That order requires the possession of a diploma to practise Surgery granted by a body competent to give it, and a degree in Medicine, granted by a body having power to give it also; and, if we are right in our opinion, that the College of Surgeons is not authorised by its charters to give a degree in Medicine, the giving of such a degree, even though it were subsequently registered by that College, would not supply the necessary qualification.

THOMAS O'HAGAN.
JAMES A. LAWSON.

December 24, 1862.

APOTHECARIES' HALL, IRELAND.

Queries submitted by the Poor-law Commissioners to the Attorney General and Solicitor-General, with their opinions thereon:—

Queries.	*Opinions.*
1. Whether Apothecaries' Hall, Ireland, has power and is competent, either under its charter or by usage or any common law right, or otherwise, to grant a diploma or licence to practise Medicine?	We think that the Apothecaries' Hall, Ireland, has no power to grant a diploma or licence to practise Medicine.
2. Whether, if the General Council of Medical Education shall register under the provisions of the statute 21st and 22nd Vict., cap. 90, the certificate granted by the Apothecaries' Hall, the person holding such certificate, and being so registered, but having no qualification, licence, or diploma from any other body or university competent to grant the same, is to be considered in all respects as holding the several qualifications required in that behalf by the Poor-law Order of October 16, 1862, or can the Commissioners legally object to confirm the appointment of such a person as a Medical Officer under the Poor-law or Medical Charities' Act, and give such general advice for the guidance of querists as you may consider necessary?	We are of opinion that he cannot be considered to be qualified within the Order of October 10, 1862.

THOMAS O'HAGAN.
JAMES A. LAWSON.

—*Dublin Evening Mail.* February 11, 1863.

A FRUIT OF THE FEMALE PHYSICIAN MOVEMENT.

The following paragraph appears in a Nottingham paper. Quackery in crinoline is not new, but the diploma is a novel feature in such a manifesto:

"*Novelty in English Medical Practice.*—Our friends who reside on the other side of the Atlantic have now for some years availed themselves of the services of female practitioners of medicine, one excellent consequence of which, at least, has been that many of the weaker sex, who would silently have endured years of suffering from a dislike to consult a male practitioner, have unveiled their miseries to one of their own sex, and been spared years of wretched suffering. The female practitioners of Medicine are a great boon to society, and an inestimable safeguard to the feelings of delicacy. In England, we believe, only one female practitioner holding a diploma is at present practising, Mille. Cavasia, Hospital, Lordsmill-street, Chesterfield, and 2, Station-street, Nottingham, and 4, King-street, Derby, who is certainly effecting a revolution in Medical practice, as evinced by the immense number of cures which she has performed in Chesterfield, Nottingham, and the surrounding townships, and the daily increasing number of patients, particularly females, who are wisely availing themselves of her professional knowledge and skill, of which report speaks as being of a very high order. The press bears testimony of her great success in the treatment of disease:—In what town, village, or hamlet in the Midland Counties has not her fame widely spread? Hundreds of persons have tendered their thanks, and requested their cures to be published in the local newspapers, for the benefit of others. Mille. Cavasia's days of attendance at 2, Station-street, Nottingham, are every Monday, Wednesday, and Saturday."

PYTHOGENIC FEVER.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—On what principle of etymology is this word "pythogenic" formed? and what does it mean? "I derived from *πυθω* πυθεσθαι, it would signify—"belonging to the race of Pytho"; and this latter word, in combination, might either imply a native of Pytho, or one of the great serpents named after the Pythian one slain by Apollo.

"Genetic" (γενετικος) means—"possessing generative power," while "genic" (γενικος) is equivalent to the Latin *gentilis*. Why are we not to rest contented with "enteric,"—a word which everybody who has the slightest knowledge of Greek can understand, instead of coining one so puzzling and uncouth as "pythogenic"? I am, &c.

February 18. QUERENS.

MERCURY IN SYPHILIS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—With reference to Mr. Solly's remark (*Medical Times and Gazette*, February 21, 1863, page 199), will you kindly permit me, through your valuable columns, as an old regimental Surgeon, to say, I never, even as assistant, considered myself restricted to any peculiar mode of treatment in syphilis; that I frequently used mercury; and can bear testimony also to the excellent effects, even in extreme cases of tertiary, of alternating mild mercurial courses judiciously conducted with those of iodide of potass and sarsa, the patients being restricted to the milk diet of the military hospitals? Mr. Solly may have been misled by the lectures of the late Dr. Thomson, of Edinburgh, and the late Mr. Guthrie, both military Surgeons; but there is every variety in the army as well as in civil life, though I am not sure but there was some little restriction or understanding when first I entered the service, thirty-five years ago—at all events, non-mercurial was then in its heyday in the army. I am, &c.

R. H. A. HUNTER, Staff Surgeon, H.P.

Moffat, February 23.

GRADUATION AT ST. ANDREWS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—One of the "individuals" to whom I referred in my note, contained in your Journal of February 14, having kindly come forward as a fellow graduate to disabuse my perturbed mind and allay its excitement, has, I think, conferred a favour, not upon me alone, but upon the graduates of St. Andrews at large.

Your correspondent, "ALEX," says:—"If the Senatus academicus have, through force of circumstances, deviated from its usual track, and allowed a select number of gentlemen to examination before the completion of their entire curriculum, I could show your correspondent that such procedure is by no means without precedent with other examining boards, and that, in this case, the Senatus have been especially careful in withholding the parchment until such curriculum in its entirety is fulfilled."

Now "ALEX," in the face of the published list of calendars of the University, mean to assert that he has not been capped, and that his name is not inserted in the calendar as a Doctor of Medicine? Will he inform your readers upon what conditions men were entitled to gain admission amongst the select number, and how far those conditions were made known to students generally of the British Medical schools?

Your correspondent then condemns my language, and seems to have forewarning that the Senatus will severely punish me for my deprecation of the performance of their duty. My reply is, if the Senatus is not prepared to give a full explanation, in the *Medical Times and Gazette*, of the performance of so unique a duty, it is little, very little, I shall value any censure they may please to favour me with.

Lastly, "ALEX" says, "Perhaps the time is not far distant when, in Medicine as in kindred sciences, a more stringent examination will gain the meed of honour, even though the prescribed onerous formulæ of classes should remain unfulfilled." Hitherto, I have had every reason to believe that Medicine has for years past stood far above other sciences. My belief is not in the least degree shaken, and I sincerely hope the time is very far distant when, from lack of a regular and complete academical education, the Medical Profession shall sink below her compeers.

In concluding this note, I cannot, in fairness, "Alex" reply to Dr. Kealy without remarking that I am prepared to sub-tantiate, in its main points, the article to which Dr. Day refers as containing mis-statements. I am, &c.

MATURE GRADUATE.

[The old theologians, when baptism had been improperly performed, said, *Factum valet; fieri non debebat.* With the same words we may wind up the controversy respecting the admission of improper candidates to the highest honours of their Profession at St. Andrews.—ED.]

PERVIN v. THE BRIGHTON RAILWAY COMPANY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your editorial remarks of last week upon the above case you do me a great injustice, and I hope, therefore, you will permit me to make a few observations in reply. In the first place, I never stepped out of my Professional line in settling with the sufferers. As the Medical adviser of the company, well acquainted with the nature of the injury which the party had sustained, I was better qualified than a lawyer or one of the company's clerks to determine what was the amount of compensation claimed was reasonable and just; and, therefore, when the patient was convalescent, and had arranged with his private Medical attendant what sum he was from the company's treasury entitled to, I did not hesitate, when the amount was within a certain sum—and, in my judgment, not beyond what the party was entitled to—at once to accede to it; and, in thus acting, I felt that I was the friend of the patient and the protector of the company from imposition.

Where the demands of the injured party were unreasonably or extortionately large, I submitted them to the traffic manager or the directors, with what explanation I deemed called for, and was guided by their decision in the matter.

Surely this was a preferable proceeding, in ninety-nine cases out of a hundred, to allowing the party to fall into the hands of an attorney, whose costs and expenses would have deprived him of a large portion of the compensation money.

If I had time, and you could afford me space in your able Journal, I could relate some of the greatest cases of attempted imposition, arising

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out of that melancholy accident, which would go far to alter the public mind, and modify the excessive damages which juries are accustomed to give to sufferers from railway accidents. One fact I may, however, state, that the parties who applied for compensation after the accident in question, exceeded in number the tickets issued for the two trains.

Permit me, in conclusion, to relate the leading points in the case of Pervin—the one which, on trial, called forth the harsh and unjustifiable observations of the judge and your editorial comments. Pervin, after the accident, went to London, returning to his home, in Brighton, the following evening. Within an hour or so of his arrival, the Surgeon of the company, Mr. Verrall, visited him, and, after a careful examination, came to the conclusion that his injuries were very slight. The following day, the father sent for his private Medical attendant, Mr. Taaffe, who continued to visit him until September 9—about a fortnight—when he left him quite convalescent. On September 2, I saw the young man with Mr. Taaffe, examined him very carefully, and arrived at the same conclusion as Mr. Verrall and Mr. Taaffe, viz., that the injuries were very slight. That the father thought so, too, as well as the patient, may be inferred from the fact mentioned by Mr. Taaffe—that they had spoken to him about the compensation some days before I was called in. At this meeting, the amount of compensation was arranged in another room by the father and Mr. Taaffe: the latter submitted it to me, and I agreed to pay it on behalf of the railway company.

The young man soon afterwards went into the country, and neither Mr. Taaffe, I, nor the railway company, heard anything more of him for the period of twelve months, when a London solicitor wrote to the company, demanding the sum of £2000 for compensation for the injuries his client had sustained in the Clayton-tunnel accident. On inquiry we ascertained that in February, 1862, nearly six months after the accident, this young man entered a benefit society, was examined carefully by the Surgeon, and stated, in answer to certain questions, that he was then in excellent health, that he had never been ill nor attended by a Doctor in his life, never had spitting of blood, etc. To these questions and replies he signed his name, and was admitted a member of the society as a sound man.

In the following month (March) he came to the Surgeon with a deep-seated whitlow of the finger, which he refused to have operated on, and the consequence was suppuration and sloughing, followed by a second whitlow and a low, typhoid condition of system, which lasted for more than two months. During the whole of this time he was attended by the club Surgeon, Mr. Passmore, to whom, for many weeks after the commencement of his illness, he never mentioned that he had been in the Clayton tunnel accident.

In June—still in low health from blood poisoning (?) owing to the sloughing whitlows—he went to London, where he was introduced to Mr. Bridgman, a Surgeon, who, early in the following August, took him to Dr. Hawkesly. This gentleman found evidence of enlarged liver, which, as he was informed of the accident, he concluded arose from concussion in the railway train producing rupture of the liver. He also diagnosed some injury in the region of the right hip and the lower part of the spine.

The trial took place on the 11th inst. On the 9th, four Medical men, including myself, made a most careful examination of the plaintiff, stripped. He stood with his right knee flexed, his heel raised, and the toe pointing inwards. The leg was straightened, and the foot placed level on the ground without any difficulty; the thigh was not shortened, and there was no perceptible swelling about the hip. The calves of the legs were of equal circumference; so were the thighs. The boots which he had used two months were equally worn on the soles and the sides of the heels. The region of the liver was examined, and we could not discover any enlargement. The young man was undersized for his age; had a dyspeptic, unhealthy look, such as you constantly observe in those born (as he was) in the densely-peopled districts of the metropolis, and brought up to the trade of a shoemaker.

Such are, as briefly as I can give them, the leading points in this case, which a jury awarded £500 damages to, though settled eighteen months previously for £15. In my opinion a more unjust verdict was never delivered by a British jury. But it is the usual fate of railway companies when they go into court to resist extortion, and there is no chance of justice being done them except through a jury of competent Medical men as assessors. Apologising for thus intruding on your valuable space,

I am, &c.

Brighton, February 23. ALFRED HALL, M.D.

[Our remarks were not directed so much to this individual case as to the principle involved. We need scarcely say that on this our opinion remains unchanged.—ED.]

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—May I claim a small space in your Journal to correct what I deem an error in your remarks on the "Duty of Medical Men to Railway Companies." Dr. Hall called on me with an official letter from Mr. Hawkins, traffic manager to the company, accrediting him, from which the following is an extract:—

"To put himself in communication with the various Medical men who are attending to cases of injury sustained in the accident at Clayton Tunnel, with a view of rendering any additional professional aid that may be required, and affording, on our behalf, any pecuniary assistance that may be needed."

I accordingly went with Dr. Hall and examined the patient, which we did together. On retiring to consult, we agreed that the case was a trivial one—this was a week after the accident. Dr. Hall requested me to ascertain from the patient and his father what sum of money they deemed to be an adequate compensation. This I consented to do, the father having already some days previously spoken to me on this point, but no sum had been named. I now suggested £10, the father said £15, which sum I named to Dr. Hall, to which he acceded, and immediately wrote a cheque, and received an acknowledgment in full of all demands. The case improved, and a week afterwards, the young man being convalescent, I discontinued my visits. Five months subsequently he was passed by the examining Surgeon of a benefit society, and he himself (the patient) certified to his belief in his own feelings of perfect health.

I stated distinctly in evidence that I was not acting in any way as an agent of or for the railway company, and I believe that this statement bears me out. If acting in any way, it must have been for my patient, being his own private Medical attendant; and any leaning that I might have had would necessarily have been towards him, and not in favour of the railway company, with which I had no communication whatever.

I am, &c. R. P. B. TAAFFE.

Brighton, February 23.

P.S.—I can see no error in having acted for the patient as I did.

COMMUNICATIONS have been received from—

MR. R. BRUDENELL CARTER; MR. J. H. MONKS; DR. WILDE; MR. A. Z. LAURENCE; TRAVERS' WEEKLY CIRCULAR; MR. C. D. DOIG; THE SECRETARY OF THE EPIDEMIOLOGICAL SOCIETY; THE SECRETARY OF THE GREAT NORTHERN HOSPITAL; THE SECRETARY OF THE HARVEIAN SOCIETY; DR. A. HALL; DR. FRANKLAND; DR. BRAXTON HICKS; MR. J. B. CURGENVEN; MR. TAAFFE; GOSPORT; MR. HUNTER; A MATURE GRADUATE; MR. R. B. CARTER; THE SECRETARY OF THE ANTHROPOLOGICAL SOCIETY; REGISTRAR OF ROYAL SCHOOL OF MINES; FIAT JUSTITIA RUAT CŒLUM.

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 21, 1863.

BIRTHS.

Births of Boys, 1012; Girls, 896; Total, 1908.
Average of 10 corresponding weeks, 1853-62, 1845·6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	701	676	1377
Average of the ten years 1853-62	662·8	667·9	1330·7
Average corrected to increased population..	..	..	1464
Deaths of people above 90	..	..	4

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	6	12	9	2	14	12	2
North ..	618,210	4	3	14	8	13	13	..
Central ..	378,058	1	4	8	3	2	6	1
East	571,158	9	1	10	1	12	10	2
South ..	773,175	5	11	18	..	19	14	7
Total.. ..	2,803,989	25	31	60	13	60	55	12

APPOINTMENTS FOR THE WEEK.

February 28. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Max Müller, "On the Science of Language."

March 2. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

EPIDEMIOLOGICAL SOCIETY, 8 p.m. Deputy-Inspector Dr. Smart, R.N., "On the Successive Epidemics of Malignant Fever in Bermuda."

MEDICAL SOCIETY OF LONDON (General Meeting for Election of Officers and Council, 7 p.m.) 8½ p.m., Dr. Routh, "On Some Points in the Treatment of Prolapsus Uteri."

ODONTOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8 p.m. Anniversary.

ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

3. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ETHNOLOGICAL SOCIETY, 8 p.m. L. J. Beale, Esq., "On the Brain and the Skull in some of the Families of Man."

PATHOLOGICAL SOCIETY, 8 p.m. Meeting.

ROYAL INSTITUTION, 3 p.m. Professor Marshall, "On Animal Mechanics."

4. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

OBSTETRICAL SOCIETY OF LONDON, 8 p.m. Dr. Shortt, "On Woman's Life in Southern India." Dr. Clay, "Observations on Ovariotomy, Statistical and Practical; also, a Successful Case of Entire Removal of the Uterus and Appendages." Dr. Broadbent, "On Displacement of the Bladder as a Cause of Tedious Labour."

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 p.m. Croonian Lectures—Dr. Risdon Bennett, "On Some Points Connected with Bronchitis, and its Results."

5. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

HARVEIAN SOCIETY, 8 p.m. Clinical Discussion.

ROYAL INSTITUTION, 3 p.m. Dr. E. Frankland, "On Chemical Affinity."

6. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

MEDICAL SOCIETY OF LONDON, 8 p.m. Meeting of Council.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 p.m. Croonian Lectures—Dr. Risdon Bennett, "On Some Points Connected with Bronchitis, and its Results."

ROYAL INSTITUTION, 8 p.m. Dr. W. A. Miller, "On the most Recent Spectrum Discoveries."

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON, 8 p.m. Practical Evening, for the Narration of Cases and the Exhibition of Specimens

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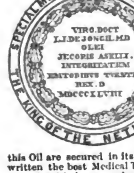

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ORIGINAL LECTURES.

INAUGURAL LECTURE ON THE SKELETON OF A GLYPTODON,

RECENTLY PRESENTED TO THE MUSEUM OF THE ROYAL COLLEGE OF SURGEONS.

DELIVERED AT

The Royal College of Surgeons,

By PROFESSOR HUXLEY.

(Continued from page 207.)

By working in this manner we determine not only that this *Glyptodon* was a placental mammal, but we further establish the fact that it belonged to that great division of the placental Mammalia which is known by the name of the *Edentata* or *Bruta*. If you look at the front part of the snout of this animal you find that there are no median incisor-teeth either in its upper or its lower jaw, which is one of the characteristics of the Edentata. If you look again you will observe that the ungual phalanges are much produced, and were sheathed in long claws, like, though proportionally shorter than, those of the armadillo. This is a second characteristic of the Edentata. Thirdly, the teeth are all long, with well-defined sockets, but form no root at their base. In man, we all know that, after a tooth has grown for a certain time, it finishes itself off below in one or more fangs. But if you examine one of the teeth of this *Glyptodon*, you find that the straight shaft runs down in it grooved fashion, and ends below as broad as it is at the top, and that the great pulp cavity extends far up into the tooth, which grows continually from below. It has no enamel, but merely consists of dentine and cement. Teeth of this kind, again, are characteristic of the same order; and finding all these characters combined, we may make sure that the *Glyptodon* was one of this great order of Edentata, which contains such creatures as the Sloths, the *Manis*, the *Myrmecophaga*, and, among the rest, those singular armadillos, of which several specimens are on the table. Having determined this point, we may next consider the structure of the feet of the *Glyptodon*, as shown in these diagrams, Figs. 2 and 3. When they are contrasted with those of an armadillo, the principle of structure of the two will be found to be similar, though there are some remarkable differences in detail—as in the articulation of the cuneiform of the carpus with the fourth and fifth metacarpals in the *Glyptodon* (Fig. 2). Indeed, Laurillard, many years ago, argued, from this part of its organisation, that the *Glyptodon* must be a close ally of the armadillo. And this conclusion is fully borne out by a comparison of the bony shield which covers some existing armadillos with the carapace of the *Glyptodon*. If I strip off the horny outer covering off this carapace of this armadillo, the pattern of the separate bony elements which it presents is as nearly like that in the *Glyptodon* as possible. There is the central facet and a number of other facets, that form together a sort of rosette in each case. And looking at the carapace as a whole, the differences are merely differences in detail, in arrangement, and in relative mobility of parts, and in no respect is there any difference of principle. So that, at length, we come to the conclusion, that this *Glyptodon* was an animal closely allied to the existing armadillo, though differing from them in certain respects, just as armadillos differ one from another, but differing more largely, and in size vastly surpassing anything we know at present. The extreme length of the specimen, without the tail, is about seven feet, and the height is about four feet.

Thus, by the application of our empirical laws, without the intervention of physiological principles or physiological reasoning in any way, we are enabled to settle and decide the place of this extinct animal in the scale of nature. But I trust you will not imagine from this phraseology that I in any way undervalue the importance of physiological reasoning, or that I suppose it may not be made—when we have once determined the morphological relations of an animal—the instrument of most important researches, explaining what would be otherwise mysteries of structure. Indeed, if I had been guilty of this assumption, this skeleton alone would be sufficient to confute me, for it contains within itself one of the most singular physiological adaptations in existence. You

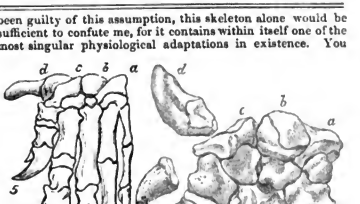

Fig. 2.—Right fore-feet of *Dasypus sexcinctus* and of *Glyptodon*. *a*, scaphoid: *b*, semilunare; *c*, cuneiforme; *d*, pisiforme. 1, 2, 3, 4, 5, digits.

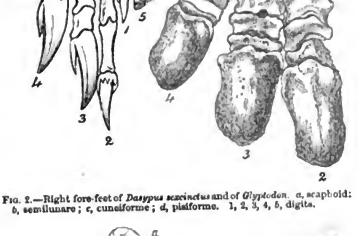

Fig. 3.—Right hind feet of the same, on a somewhat larger scale. *a*, calcaneum; *b*, astragalus; *c*, scapholdes; *d*, cuboides; *e*, cuneiformia. 1, 2, 3, 4, 5, digits.

will observe that the trivertebral bone, which I spoke of just now, is free to move, as I said, on a vertical plane, upon the anchylosed vertebræ which succeed it, and that the whole dorso-lumbar region of the vertebral column is perfectly immovable except in that particular joint (Fig. 4).

On each side of the trivertebral bone are great fossæ of a very irregular shape, into which the heads of the anterior ribs fix themselves, and the fossa for the first rib is of such a form, that it is quite impossible for the head of that rib to rotate; it can neither turn outwards or inwards, or on its axis, or backwards and forwards. Furthermore, the specimen of *Schistopleuron*, an animal closely allied to this, which has been described by M. Nodot in the *Transactions of the Dijon Academy*, fortunately shows that this first rib is fixed to the sides of the sternum. The arrangement of the parts is, therefore, such as is sketched in the following diagram.

Here we have the trivertebral bone (*a*), with the first rib (*c*) and sternum (*d*) immovably fixed to it, and it is obvious that if the trivertebral bone is caused to move upwards and down-

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wards between the positions *a* and *a'*, as it might have been by the muscles attached to its "handle," the first rib and sternum will be compelled to travel between the positions *c d* and *c' d'*.

Fig. 4.—Diagram of part of the vertebral column of the *Glyptodon*, designed to show, on an exaggerated scale, the effects of the movements of the trivertebral bone, *a*, upon the anchylosed dorso-lumbar column, *b*: *c*, first rib; *d*, line of the sternum.

I confess, that when the knowledge of this structure first came to my mind, I found it very difficult to believe in it, although it was there before my eyes. I could not conceive what was the object of this joint in the front part of the back, while the other vertebræ were so closely anchylosed. But I bethought me of this question—How did this animal breathe? We know that in the mammalian series respiration is effected by a double mechanism. In the first place, there is the piston-like motion of the diaphragm backwards and forwards, which is amply competent to give rise to a certain amount of working respiration, but apparently not all the change of space that is requisite; so that the motion of the diaphragm in every kind of mammal is accompanied by a certain amount of movement of the ribs, which play backwards and forwards, carrying the sternum with them, and so enlarging and diminishing the cavity of the chest. But this motion by which, in conjunction with the movement of the diaphragm, the dimensions of the thorax are increased in inspiration and diminished in expiration—this movement, so long as the vertebral column is fixed, depends entirely upon the mobility of the ribs, and upon the power of their turning on their heads, as axes. If the ribs were fixed to the sides of the vertebral column, and then again to the sides of the sternum, it is quite obvious that no such motion as this could take place. Having got thus far, I thought I began to see the physiological reason for this joint; for, as costal, as well as diaphragmatic respiration occurs in all the Mammalia, doubtless there is some good reason for it—some necessity deposited in the economy; and it was necessary for this mammal, like the rest, to breathe costally as well as diaphragmatically. But, inasmuch as the first rib was fixed in its fossa on the side of the trivertebral bone on the one hand, and to the side of the sternum on the other—if the trivertebral bone had been anchylosed to the rest of the dorsal vertebræ, costal respiration would have been impossible.

Here appeared the significance of the joint. For as the area *b a' c' d'* (Fig. 3) is much smaller than the area *b a c d*, it is plain that the motion of the trivertebral bone upwards and downwards, through a much smaller arc than that represented in the figure, must have amply sufficed to produce as large an alternate enlargement and diminution of the thoracic cavity as is effected by the costal movements of ordinary Mammalia.

This, indeed, is by no means the only help that physiology will yield in endeavouring to explain some of the peculiar and anomalous points in this animal. But I must pass on to the last question which remains,—to the question of how far this skeleton helps us in any way, to that which I defined as the great object of biological study; how far it helps us to throw light upon the history of the past, and how far it exemplifies or contradicts, some generalisations which have been put forward with respect to the character and nature of the changes through which the varied forms of life, which we know to have succeeded one another through past ages, have undergone.

One law it illustrates with remarkable force, and it is one which is established upon the best possible evidence, apart from any theory or hypothesis whatever. This law, which is one of those which must be taken into account as among the weightiest, whatever view we may be disposed to entertain with respect to the causes of the succession of events on the surface of the globe,—this law, which was first, I believe, clearly promulgated by Mr. Darwin for South America, is, that in that country—and, indeed, in all countries—the *fauna*, that is to say, the assemblage of animal inhabitants, at the present day, in its great generic and family features, is identical with the *fauna* which existed in the immediately preceding geological epoch; that is to say, taking the mammalia of the fauna of the old world—of Africa and Europe—you find over that geographical area elephantes, hyenas, rhinoceroses, hippopotamuses, and creatures of that kind. And going back to the animals immediately preceding that epoch—the post-pliocene—there you find skeletons of elephants, hyenas, rhinoceroses, hippopotamuses, and such like, all specifically different from those which now inhabit those areas,—or, at least, the great majority of them,—but belonging to the same genera and families, so that there is a similarity of character between the fauna which exists now and the fauna which immediately preceded it.

If you extend your researches to Australia, you find there the remains of great kangaroo-like and other Marsupial animals, differing specifically, for the most part, from those which now live there, but having the same great characteristics as the existing *fauna*. If you turn to South America, it exactly bears out the same conclusion, and it is a striking circumstance that you find predominant in the post-pliocene formations there, not rhinoceroses, or hippopotamuses, or kangaroos, but sloth-like creatures and armadillo-like animals, such as the *Glyptodon*; remarkable forms, differing specifically, or generically, from those which constitute the great features of the present fauna.

The other supposed law to which I refer is this, that the animals of the older formations were more embryonic or more generalised in character than those of the same groups which live at the present day.

To this generalisation the skeleton of the *Glyptodon* before us appears to me to give a glaring contradiction. No living armadillo, indeed no known Edentate animal, presents a vertebral column exhibiting more special characters, or one which departs so widely from the embryonic type, as that of the *Glyptodon*.

THE LEVEE.—In addition to those members of the profession who attended the levee last week, at St. James's Palace, a list of which appeared in our last number, we have now to report that the following presentations to His Royal Highness the Prince of Wales took place on that occasion, viz.,—Dr. Butler, Dr. Acland, Dr. Anderson, Dr. T. K. Chambers, Dr. W. Dick, Dr. C. J. Foster, Dr. Gallagher, Dr. Francis Hawkins, Dr. E. Hilditch, Dr. William Jenner, Dr. R. O'Shaughnessy, Dr. G. E. Paget, Dr. E. Phillips, Dr. G. C. Millar, Dr. J. M. Minter, Dr. Sieveking, Dr. G. Sykes, Dr. Forbes Watson, Dr. J. Grant Wilson, Mr. J. Moncrieff Arnott, Assistant-Surgeon Agnis, Surgeon H. Baillie, Mr. William Bowman, Mr. William Coulson, Assistant-Surgeon J. C. Corbyn, Sir Daniel Cooper, Mr. C. P. Du Pasquier, Surgeon W. C. B. Estwell, Surgeon R. Gilborne, Surgeon-Major E. Grant, Mr. C. H. Hawkins, Surgeon-Major Jee, Mr. James Paget, Mr. George Pollock, Mr. R. Quain, Surgeon H. Martin, Deputy-Inspector-General C. J. Smith, Assistant Surgeon R. Turner, Assistant Surgeon E. J. Vivian, Surgeon Young, and Surgeon-Major Wyatt, making, with the list published last week, the large number of ninety-three loyal members of our profession who paid their respects to His Royal Highness.

ROYAL INSTITUTION OF GREAT BRITAIN.—At the General Monthly Meeting, Monday, March 2, 1863, William Pole, Esq., M.A., F.R.S., treasurer and vice-president, in the chair, Edward Atkinson, Esq., the Rev. Henry Blunt, Col. Craven Hildesley Dickens, Frederick William Gingell, Esq., Ernest Hart, Esq., William Hartree, Esq., John Hogg, Esq., M.A., F.R.S., William Wood Humphry, Esq., William Edward Kilburn, Esq., Henry Lainson, Esq., Thomas Leckie, M.D., James Lees, Esq., William McKesand, Esq., Abraham Pope, Esq., John Rivington, Esq., John Rutherford Russell, M.D., John Benjamin Smith, Esq., M.P., and George S. Trower, Esq., were elected members of the Royal Institution. The thanks of the members were returned to Mr. James Glaisher, Prof. Frankland, the Rev. George Williams, and to Mr. John Lubbock, for their discourses on the evening meetings on Fridays, February 6, 13, 20, and 27. The presents received since the last meeting were laid on the table, and the thanks of the members returned for the same.

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ORIGINAL COMMUNICATIONS.

CLINICAL MIDWIFERY.

By FRANCIS H. RAMSBOTHAM, M.D.
Physician-Accoucheur to the London Hospital, etc.

(Continued from page 159.)

THE following six cases of cerebral affection in pregnancy or labour occurred in my practice during the last half of 1841, 1842, and the first two months of 1843:—

Convulsions after Labour, at Six Months.

Case 178.—On May 2, 1841, at 9.30 p.m., I was requested by a Professional friend to see Mrs. N., Bell-lane, Spitalfields, who had been delivered of her second child at six months, at one o'clock on the same morning. She had made no complaint during her pregnancy, went through her labour very well, and neither could she nor her Medical attendant account for its having come on prematurely. At 11 a.m., she was seized with a convulsion fit, without any premonitory symptoms or warning whatever. Before I saw her she had suffered four of a very violent character, and was in a state of profound coma. Some leeches had been applied to the temples without any benefit. I had her bled to twenty ounces immediately, and ordered ten grains of calomel to be placed upon her tongue, and a strong purgative mixture, of which a tablespoonful was to be given as often as she could be made to swallow until motions were obtained. She had no fit after the bleeding. The stupor continued through the night, but gradually diminished; and when I saw her at 1 p.m. on the next day, she was sleepy and dull, although quite sensible when roused, and she answered questions accurately. She recovered quite well, and had a perfect recollection of her labour.

Blindness coming on Gradually in Pregnancy—Craniotomy.

Case 179.—On June 14, 1842, I saw, in consultation with a Medical friend, Mrs. N., Commercial-road East, in the last month of her first pregnancy. The earlier months had passed over very well, but about six weeks before she began to lose the sight of both eyes simultaneously, and continued to get worse by degrees until my visit, when she was so completely blind that she could only just point out the situation of the window. She had not suffered any pain in the head, nor any unusual drowsiness; her recollection was perfect, and she was quite sensible. The pupils were much dilated, the right more so than the left. The pulse was quick and small. She was cupped, leeched, blistered, and slightly salivated, without relief, and continued getting worse until she could not distinguish the brightest sunshine. On the 23rd she began to feel a tingling and numbness in the right arm and leg without any loss of power, and on the 24th Dr. Blundell met us in consultation. He feared, as I did, that convulsions or apoplexy would occur during her labour. He recommended that more blood should be taken by leeches to the temples, and that the mercury should be continued. She went into labour at midday of the 28th; the membranes broke at 4 p.m., when her general attendant was sent for, and I was summoned to her at 11 p.m. The pains were then strong and frequent; the os uteri dilated to the diameter of half-a-crown and rigid; in two hours more, however, it became relaxed and began to open more kindly, so that I expected the labour would soon be completed. As she appeared comparatively well, with the exception of the blindness, I left her under the care of my friend, and retired to rest. At 7 a.m. I was called to her again, and found the head still above the pelvic brim, although the pains continued powerful and frequent, and the os uteri was almost entirely dilated. The pelvis was below the average size, and as the child was putrid I did not hesitate to perforate the skull. Delivery occupied nearly an hour; the placenta was soon expelled, and I left her much more comfortable than could have been expected. As far as her labour was concerned she went on exceedingly well; but the blindness, numbness, and tingling remained without diminution for ten days. After that she gradually began to mend; in a month she could distinguish objects; in six weeks she told me the hour by my watch, and on the 24th of August she went out of town very weak, but able to stand and walk with assistance, and she had completely recovered her sight. A deep sore formed on the sacrum, but this was healed before she left her home. She gradually recovered, and I know that she had one child afterwards without any return of the symptoms; but as she left that part of the town I am not aware whether she ever bore another.

Puerperal Convulsions at Seven and a-Half Months.

Case 180.—On June 25, 1842, at 8 p.m., I was called by a Medical friend to Mrs. L., Blackfriars'-road, in the last month of her seventh pregnancy. She was a delicate woman, nervous and hysterical, and for the last three or four days had complained of intense headache. She had been very sick during the day, and occasionally slightly delirious. She had had three convulsion fits when I arrived, from the last of which she was just recovering, and she was in a state of coma, with stertorous breathing; six leeches had been applied to the temples. I had her bled to twenty ounces, when the pulse began to falter, ordered her hair to be taken off, ten grains of calomel to be put upon her tongue, and a table-spoonful of a strong purgative mixture to be given frequently. At nine o'clock she had another fit; ten ounces more blood were taken, when she fainted. She began now to mutter unintelligibly, and, although she continued quite insensible, she had no more fits. The os uteri was quite close when I first saw her, but it soon began to open; dilatation went on rapidly, and she was delivered of a seven and a-half months' child living at 2 a.m. During her labour she seemed unconscious, except that with each return of uterine contraction she made a piteous outcry. At four o'clock another fit came on, but it was much less severe than any that had preceded it. Twelve leeches were now applied to the head, which bled freely; and the bowels acted copiously. From this time there were no more fits, and she fell into what appeared to be a placid sleep. She awoke at 8 a.m. quite conscious, did not complain of any pain in the head, recovered perfectly well, and nursed her infant satisfactorily.

N.B.—Case 73, already reported, is the history of one of twins complicated with convulsions, in which I extracted both children by the forceps. This occurred on July 31, 1842.

Puerperal Convulsions—Craniotomy.

Case 181.—On August 12, 1842, at 12 at night, I was sent for by a Medical friend to Mrs. N., Homerton, aged 39, of rather a full habit, in labour of her first child. The membranes broke at 8 a.m. The uterus was acting very strongly, and the head was partially in the pelvis, which was small throughout. The vagina and external structures were very rigid, and there was a very tough frenum at the posterior part of the vagina, greatly narrowing the canal, against which the head was being forcibly protruded. Neither ear was within reach of the finger. Feeling assured that the head would not be expelled for some hours, I went to lie down, leaving her under the care of her own attendant, and was called hurriedly at 3.15. I found her on the floor in a convulsion fit. She had got out of bed to pass water, and was sitting on the night-chair when it came on. Her legs had been œdematous for some weeks; but beyond that there had not been any untoward symptoms, and there was not the slightest premonition of what was about to happen. She was immediately bled to twenty ounces, which produced an approach to syncope; and her hair was cut off. She gradually recovered her consciousness completely. The pains became very forcing, much stronger than they were before the bleeding, but they made no impression on the head whatever. I proposed delivery; and, having emptied the bladder, I applied the long forceps over the child's head diagonally, with tolerable ease. I had a most powerful hold upon the head; but, with all the exertion I dared to use, I could not move it in the least degree. The uterus was acting so violently, that, fearing another fit would come on, I perforated the skull and delivered with considerable difficulty. The placenta came away in fifteen minutes, and the lady, for half an hour after delivery, appeared to be going on well; but as I was sitting by her alone in the room, she suddenly exclaimed—"I can't tell what you say." Two or three twitches of the facial muscles came on; in about two minutes she went into another fit; and, on its cessation, remained in a state of semi-coma. We immediately took about sixteen ounces more blood, and it flowed very freely. But a condition of deep syncope supervened; for some time there was no pulse to be felt at the wrist, jactitation came on, and she could not swallow; soon, however, we got a little brandy and ammonia down, and remained by her side for three hours, giving her occasion

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ally a small quantity of brandy and gruel. I have seldom seen a longer or more intense degree of faintness recovered from. However, there were no more convulsions. She remained insensible till between 8 and 9 a.m., when she gradually came to herself and went to sleep. In the middle of the day she was comparatively well, and she was restored by degrees to her ordinary health.

Convulsions before Delivery.

Case 132.—On February 28, 1843, at 2 a.m., I was requested by a Medical friend to see Mrs. P., in the Mile-end-road, about eight months advanced in her first pregnancy. She had complained of pain in the head for a fortnight, and, three or four days before, she had said to her mother-in-law that she was sure she was losing her memory, for she could not remember what her (the mother-in-law's) name was. On the morning of the 27th, her husband went down stairs between seven and eight o'clock, and when he returned to his room he found her in a state of coma, with stertorous breathing. From the disturbed appearance of the bed-clothes, there is no doubt that she had had a fit in his absence. Before her Medical man could arrive she had another fit, and he immediately took twenty ounces of blood from the arm, and had her hair cut off, and cold lotions applied. The bleeding soon restored her to consciousness, and she became quite herself. This gentleman stayed with her until 3 o'clock p.m., and left her apparently greatly relieved; but at 5 p.m. she had another fit, and, for some reason or other, they applied to another Practitioner in the neighbourhood. On his arrival he took twenty ounces more blood, blistered her neck by means of the *Acetum lytte*, and applied mustard to the feet and to the pit of the stomach. She had two more fits—five in all—between the first attack and my visit. I found her under deep coma, with stertorous breathing, and both pupils highly contracted. The pulse was full and hard. She was again bled to the amount of sixteen ounces, until, indeed, the lips became pallid and the heart's action faltered. There was no appearance of labour. I left and saw her again at 9.30 a.m., having ordered ten grains of calomel and a purgative mixture, of which a tablespoonful was to be given as often as was possible. She was still insensible, but there had been no fit since the last bleeding. Twelve leeches were ordered to the temples and forehead, and, as nothing had passed from the bowels, she was to go on with the purgative. During the early part of the day the medicine acted copiously, and, after that, she gradually recovered her consciousness. Next day (March 1) she was quite rational; did not recollect anything of her seizure, but remembered having seen me the previous evening. On March 2, she became maniacal, but was not violent; she was then ordered two grains of calomel every four hours. On the 3rd, she was rather better, but still talked incoherently, and the calomel was continued. In the course of that night the maniacal disposition ceased, and at 5 p.m., on March 4, she was delivered of a dead child after a rapid labour, during which she was quite conscious, though she complained much of headache. As this continued two or three days after delivery, twelve more leeches were applied to the head. Her mouth was made sore by the calomel previously taken. She gradually lost the pain in her head after the last leeches, and recovered completely.

8, Portman-square.

(To be continued.)

AN ACCOUNT OF THE

PHYSIOLOGICAL RESEARCHES OF THE REV. PROFESSOR HAUGHTON, M.D., TRINITY COLLEGE, DUBLIN.

(Continued from page 133.)

The results of the Rev. Professor Haughton's experiments on urea are, that the mean daily excretion of that substance, per vesicam, in well-fed, flesh-eating, wine-drinking men is 576 grains, and in well-fed, water-drinking vegetarians, 394 grains; the range being from 315·00 to 677·25 grains, affording a mean of 493·19 grains, which is almost exactly a mean between the two extremes. These results do not differ very materially from those recorded by Dr. Parkes, principally from German chemists, who fixes the daily excretion of urea at 512·4 grains, adopting the mean of the results of the experiments of twenty-four observers, including different chemical methods, and persons of different habits, and using different foods, between the ages of 20 and 40; wherefore, grouping together men of every weight, food, occupation, and country, we may set down 500 grains of urea per day as the natural healthy discharge in the urine. Professor Haughton, connecting the quantity of urea in healthy urine with the specific gravity, propounds the following bedside rule, which follows from experiments on the relation between the specific gravity of healthy urine and the quantity of urea contained in it, that "half the excess of the specific gravity of urine (not containing either sugar or albumen) above 1000 is the number of grains of urea per fluid ounce."

Experiments were necessary to establish the important point, that the whole of the nitrogen of the food is accounted for by the nitrogen in the urea and fæces, and for this purpose an analysis of various mixed diets was undertaken. The amount of water in each article of food was determined by drying at 212° F.; the dried product was afterwards analysed for nitrogen by burning in a tube with soda lime, and collecting the ammonia in muriatic acid. The quantity of nitrogen was found by adding bichloride of platinum, and afterwards weighing the double chloride of platinum and ammonium on a weighed filter, or by the weight of platinum after ignition, or by both methods. It was always found that, when the ignition of the double chloride was conducted slowly, the results were identical with those given by the direct weighing of the ammoniaco-platino-chloride. The subjoined table shows the quantity of urea equivalent to the nitrogen contained in various articles of food; and here it may be mentioned that, to find the amount of nitrogen in urea, we have to take $\frac{1}{3}$ths of the urea.

The Urea Equivalents of Several Kinds of Human Food.

No.	Food.	Quantity.	Urea equivalent.
1.	Lean roasted mutton—leg, near shank-end, contains fat and fascia	1 lb.	480 gr.
2.	Lean roasted mutton—leg, near the loin, very little fat or fascia	1 ,,	957 ,,
3.	Lean raw mutton—loin	1 ,,	544 ,,
4.	Lean roasted beef—sirloin	1 ,,	724 ,,
5.	Lean raw beef—sirloin	1 ,,	979 ,,
6.	White bread, first quality	1 ,,	196 ,,
7.	White bread, second quality	1 ,,	203 ,,
8.	Brown bread, wheaten	1 ,,	267 ,,
9.	Oatmeal	1 ,,	421 ,,
10.	Indian meal	1 ,,	150 ,,
11.	Rice	1 ,,	245 ,,
12.	Cauliflower, boiled	1 ,,	58 ,,
13.	Cabbage, boiled	1 ,,	57 ,,
14.	Tea	1 ,,	603 ,,
15.	Porter	1 qt.	54 ,,
16.	Milk, sp. gr. = 1025	1 ,,	116 ,,
17.	Milk, sp. gr. = 1027	1 ,,	126 ,,
18.	Milk, sp. gr. = 1035	1 ,,	174 ,,

The per-centage of nitrogen which Professor Haughton found in beef and mutton was 12, and goes to confirm the experiments of Schlossberger and Kemp, whose investigations show, that the amount of nitrogen in muscular fibre does not essentially differ throughout the whole animal kingdom, the average per-centage of nitrogen being about 13. Taking one part with another, and disregarding kind, 1 lb. of beef or mutton is equivalent to 737 grains of urea.

An individual [No. 1, Table A., see page 133] is now experimented on thus:—His diet, for some time preceding and during the investigations, is—

Roast beef (cold)	8 oz.	=	362 grains of urea.
White bread	8 oz.	=	98 ,,
Boiled cauliflowers	10 oz.	=	36 ,,
Milk (sp. gr.) 1025	1 pt.	=	58 ,,
Total equivalent of urea		=	554 ,,

The fæces passed per day by the same individual, who was under the same conditions of food and habits prior to and during the experiments, amounted to 5 oz., the analysis of which gave the following results:—

305·45 grains, dried at 212° F., gave 80·05 grains. 28·15 grains of the latter gave of am. plat. chloride 30·75 grains. From these data are found solids = 26·21 per cent. Nitrogen = 6·86 per cent.

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From this is obtained by the chain rule the total urea equivalent to the nitrogen thus excreted.

16	5 oz. fæces.
	7000 grains.
10,000	2621 grains at 212° F.
10,000	686 grains nitrogen.
28	60 grains urea.
	84·28 grains.

Now, the urea excreted by this individual, per vesicam, during the experiment was seen in table A to be = 465·09; so that, combining these results, we have,—

1. Urea, excreted per vesicam	. . 465·09	grains.
2. Equivalent of urea excreted per anum	84·28	,,
Total . .	549·37	,,

The close agreement of this result with that obtained from the analysis of the food, entitles the Professor to assume that no nitrogen is excreted *per cutem et halitum*, and this view is supported by the experiments of Bischoff and Voit, which show that in carnivorous animals all their nitrogen is excreted as urea.

We find, therefore, that the nitrogen entering the body as food leaves it by two different channels—per anum (the minor portion), per vesicam (the major portion). It is discharged by both ways as excrementitious, but the nitrogen in the fæces was cast off as surplus and unneeded; it was neither assimilated nor required by the body—it was never used; whereas the nitrogen, now urea, in the urine has done its work; it represents the wear and tear of tissue of every kind, and when fully used up is expelled the system as no longer useful, but actually noxious and dangerous; it is now an unassimilable nitrogenous compound; if administered, it is diuretic and is hurried out of the body,—if retained, it is a fatal poison; it must go to the vegetable kingdom, before it again returns in the protenic compounds as nutritious food.

We are, as yet, unable to reduce to symbols the metamorphoses by which vital chemistry converts the protein compounds into urea, as we are those by which vegetable chemistry re-converts urea into protein; but we know that the excretions are more highly oxidated than the food and drink consumed, and it is from this point of view the Professor proceeds to calculate the amount of work done by the animal body, and attempts the solution of a problem hitherto left unexplained.

(To be continued.)

PAPERS ON ENGLISH AND CONTINENTAL SPAS.

By JULIUS ALTHAUS, M.D., M.R.C.P. Lond.

I. Prolegomena.

As little attention has of late been paid to the nature and action of mineral waters, and, therefore, much misconception exists in the Professional mind concerning their therapeutical powers, I hope that the following communications on this important subject may prove acceptable to the readers of the *Medical Times and Gazette*.

It may be laid down as a general rule that Spas are only suitable for patients suffering from chronic diseases, and in these only, so long as the composition of the blood has not become too much altered, and in the absence of considerable structural changes of important organs.

The therapeutical action of the Spas depends chiefly upon their chemical composition and temperature. Each mineral water which possesses curative powers is, by virtue of its peculiar composition and temperature, as it were, an individual remedy which, although it may greatly resemble others of the same class, is not absolutely identical with any other, neither in a chemical nor in a pharmacological point of view. For this reason it is especially suitable for certain diseases in which other Spas, however similar to the former, are either less or not at all fit. It is therefore the duty of Physicians to make themselves thoroughly acquainted with the individual action of the several Spas, in order to be able to distinguish which one of them is most likely to prove successful in a given case.

Independently of the chemical composition and the temperature of mineral waters, there is a variety of other circumstances which have an important bearing upon the result of the treatment. Amongst these may be mentioned the situation of the place, its climate and neighbourhood, the formation of the soil, the character of the vegetation, the presence or absence of flowing and stagnant waters, barometric pressure, the mean annual temperature and the mean temperature of the summer months, the variations of temperature occurring during the twenty-four hours, and from one month to the other, as well as the amount of moisture contained in the air. The pleasant neighbourhood and sublime scenery which surrounds many Spas greatly aid the curative effects of the waters; while the gloomy and wild aspect of others may, at least in a certain number of cases, retard the benefit which would otherwise result from the peculiar virtues of the springs. The health of patients is much influenced according as the Spa is at a low level or in an Alpine neighbourhood, in broad and open places, or in narrow valleys surrounded by steep mountains. In places which are at a high elevation above the sea, the air itself is, by its greater purity and keenness, and also by its diminished density, an agent powerful for good and, it may be, for evil. Thus, persons suffering from abdominal plethora, torpidity of the nervous system, atonic blennorrhœa of the respiratory organs, hysteria and hypochondriasis, are frequently much improved by being transferred to a high and airy mountainous health-resort; while such as suffer from an irritable condition of the lungs, with tendency to bronchitis and hæmoptoë, are better in places at a lower level, with a mild and moist climate, and where there is sufficient protection against winds. Thus, for instance, it is easy to understand why the acidulous chalybeates of St. Moritz, in the Upper Engadin, which is 5464 feet above the sea, and where the mean temperature of the summer months is 51°, should have different effects from those of Pyrmont, which is only 704 feet above the sea, and where the mean annual temperature is 42°·5. The same may be said of the alkaline saline springs of Tarasp, in the Lower Engadin, which are at 4300 feet, and where the mean temperature of July is 51°·8; of Marienbad, in Bohemia, which is at 1932 feet, and has a mean annual temperature of 45°·5; of the indifferent thermals of Gastein, at 2939 feet, and with a mean summer temperature of 55°; of Pfäffers, at 2130 feet, and with a mean summer temperature of 56°; of Wildbad, at 1322 feet, and with a mean summer temperature of 61°; of Plombières, at 1272 feet; of Warmbrunn, at 1164 feet; of Schlangenbad, at 900 feet; of Teplitz, at 628 feet, and with a mean annual temperature of 50°.

The best time for commencing a mineral water cure is, in the majority of cases, the months of June, July, and August. For patients who suffer from great irritability and rheumatic affections, May and September are, however, frequently more advisable. The quality of whey is best in May; while sea-baths prove most useful in the later part of the summer. Certain mineral waters, as, for instance, those of St. Moritz, can only be used in July and August, as before and after that time the climate is too rough. The state of the weather in the several summer months is also of importance; thus, in Gastein May is very pleasant, June extremely changeable, July hot and stormy, while August and September are again pleasant. It may, therefore, happen that if patients are sent to Gastein for the months of June and July, they derive little benefit from the waters, while they might have been greatly improved or cured had they been advised to resort to that Spa for August and September.

It was formerly believed that mineral waters should on no account be used during winter. As far as the physical and chemical properties of the springs are concerned, this opinion is, for the large majority of cases, untenable; and experience has shown that, even during severe winters, they may be employed with the utmost advantage. There are many diseases for which a mineral water cure proves more successful than any other treatment, and where it would be wrong to delay at all the use of the waters, as in the mean time the complaint would probably be aggravated, and the chances of a cure be thus lessened. In winter it is generally advisable to prescribe artificial or imported natural mineral waters; but if it should seem desirable to send patients to the Spas themselves, we must take care to choose such only as are protected against cutting north and east winds; where no sudden changes of temperature occur; where the mean winter temperature is comparatively high, and where all comforts, double necessary at that inclement season, are easily obtainable.

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The mode of using mineral waters is now widely different from what it was in former times. The principle that the benefit is more considerable, the more water is drunk, and that "crises" and "critical excretions" are necessary if the treatment is to be successful, is now rejected by all enlightened members of the Medical Profession. Many cases have occurred in which large quantities of water, drunk in rapid succession, have not only greatly disturbed digestion, but have caused dropsy and general prostration, and a moderate use of the springs is, at the present day, justly believed to be the only safe plan.

The rules to be observed for the use of mineral waters have also been greatly changed. We no longer advise "preparatory cures," "great cures," "little cures," "prophylactic cures," and "after-cures;" but the mode of treatment is made to suit the requirements of each individual case.

Waters which contain much carbonic acid and few salines agree better with the stomach than such as are rich in solid constituents and poor in carbonic acid. These latter are, however, more easily borne if they have a somewhat high temperature. If the water, on issuing from the earth, is very hot, it is better to let it cool before taking it; water which is very cold must, on the other hand, be heated. If the quantity of carbonic acid contained in the water is very large, this should be allowed to stand for some time before being drunk, or flatulency might be caused; and if the quantity of salines contained in a spring is very considerable, it is better to dilute it with some fresh water. Moreover, in persons who have a weak and irritable stomach, milk or whey is frequently added, whereby the water is rendered more easily digestible.

In most cases early rising during a mineral water cure is advisable. The water should be drunk before breakfast, at intervals of about one-quarter of an hour between each tumbler, moderate exercise being taken at the same time. It is on this account of great importance, that porticoes, covered walks, benches, etc., should be in the immediate neighbourhood of the springs, so that exercise may be taken regardless of the state of the weather. Persons who become exhausted by exercise before breakfast, or who perspire freely in the morning, may take the water while in bed. Breakfast should not be taken immediately after the last tumblerful, but an interval of half an hour or an hour should be left. A second dose in the evening is in many cases advisable.

If patients cannot travel to Spas, much benefit may be obtained by prescribing mineral waters to be taken at home. Such was not the opinion of Hufeland, who, when speaking on this subject, says:—"Doubtless the use of mineral waters immediately from the spring,—that is, from the living hand of Nature herself,—is the only true method to obtain them in all their power and integrity. The slightest separation from the common mass, any deviation from their usual temperature, the mere removal from their subterranean laboratories to the contact of air and light, must produce a very considerable decomposition of their more delicate ingredients; so that we should, in fact, drink them with our lips immediately applied to the spring itself, and when that is not possible, carry the cup to the mouth as quickly as possible; for it is certain that every moment's delay is accompanied with a loss of curative powers." Although there is much force in this argument, experience has shown that mineral waters may, when drank at a distance from the place where they issue, exercise a most beneficial action upon certain diseases. No doubt the probability of a cure is greater if the patient is able to travel to the Spa. In certain cases, the journey and the change of air and of the mode of living prove of great benefit; the mixture may be taken in its integrity; besides which, baths of the most various kinds, douches, inhalations, and other allied remedies, may be used with greater ease than is possible at home. On the other hand, the patient who remains at home has the advantage that the cure may be commenced at once, without loss of time, money, and trouble; he is not dependent upon the weather; and his Medical attendants, familiar with his condition, may regulate the treatment as it proceeds.

If it has been decided that a patient is to drink mineral waters at home, we have then to choose between the imported natural and the artificially-prepared waters. The former would be altogether preferable if it were possible to avoid their decomposition after being bottled; but this is, unfortunately, only too apt to occur if mineral waters have been kept for some time, however carefully the vessels in which they are placed may have been closed. The waters specially liable to decomposition are the acidulous chalybeates and those containing sulphates. The former, after being bottled, lose the carbonic acid which keeps the iron in solution; bicarbonate of iron is then changed into carbonate, which is insoluble and precipitated at the bottom, whereby the mineral water becomes useless. In mineral waters containing sulphates, decomposition frequently takes place, if bits of organic matter, straw, cork, etc., have been accidentally enclosed with the water. The sulphates are then decomposed, and sulphuretted hydrogen is formed. Waters containing sulphuretted hydrogen and sulphurets of metals are also liable to be decomposed by the oxygen contained in the bottle previous to being filled. In order to avoid the injurious effects of oxygen upon the waters, and also to prevent the escape of carbonic acid, M. Hecht has introduced the method of filling the bottles with carbonic acid before the water is let in; but, although this proceeding is very judicious, the escape of carbonic acid cannot be entirely prevented by it, and it is therefore not advisable to use natural imported chalybeates and sulphurous waters; while those containing sulphates and others may be useful if sufficient care has been taken to prevent impurities from being mixed up with them.

M. Constantin James (a) has lately stigmatised, in strong terms, the various *artificial mineral waters*, which are employed as substitutes for the Spas themselves. He contends that these imitations are of no value whatever, save as mere refreshing table-drinks or purgatives; while when ordered for baths the most varied compositions are employed, and nothing analogous to the natural waters is obtained. No doubt most artificial mineral waters offered for sale richly deserve this censure; but the same cannot be said of Struve's imitations, which closely resemble the natural waters. In consequence of the great success of Struve's establishments, a large number of other manufacturers have invested their capital in the same trade, and most of these produce very inferior fabrications. The very cheapness of these imitations suggests the suspicion that they cannot have been carefully prepared. It is notorious that in some of these establishments the bitter water of Püllna is prepared by merely dissolving a certain amount of sulphate of soda in the water, and impregnating this latter with carbonic acid. Carlsbad water is in a similar manner made by dissolving sulphate of soda, chloride of sodium, and carbonate of soda in water; and in many cases the water is not even pure, but is used just as taken from wells or rivers! It is, therefore, important that, if artificial mineral waters are prescribed, we should insist on Struve's imitations alone being used.

In many Spas, bathing is of even greater importance than drinking the waters. The curative effects of baths are due both to the action of the water and its foreign ingredients upon the skin, and to the action of the gases ascending from the water, upon the mucous membrane of the air passages. In most cases it is advisable that bathing and drinking should not be commenced on the same day. Baths are either taken in single rooms or in common reservoirs, the so-called "piscines," or swimming-baths, in which exercise during the baths is possible. In the majority of cases, the latter are far preferable to the former; but care should be taken that the piscines are spacious and well ventilated, and that the water is constantly renewed. The piscines of Wildbad, in Würtemberg, are patterns of their kind. The fear that contagious diseases may, in these piscines, be transferred by means of the water from one person to another, has by experience been shown to be altogether unfounded.

Baths are generally taken between breakfast and dinner, and no doubt this is, on the whole, a judicious proceeding. In many cases, however, especially if the weather is damp and cold, it is preferable to order the bath to be taken before going to bed, when perspiration is most effectually promoted; and the patient may also indulge the sleepiness generally induced by bathing. It is scarcely necessary to observe that baths should never be taken shortly after hearty meals; and that great caution should be observed regarding their use by persons with a tendency to apoplexy.

"Psydracia thermalis," the "critical bath-eruption," the appearance of which was in former times welcomed alike by Physicians and patients, is now no longer looked upon as a favourable symptom, but rather as an unpleasant occurrence which it is by no means desirable to produce. Critical eruptions as such are by no means connected with an improvement in the condition of the patient, but are the necessary

(a) *Gazette Médicale de Paris*, 1862. No. 6.

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physiological consequence of a prolonged contact of water or mineral water with the skin.

The physiological and curative effects of baths are much enhanced by the addition of *graduated brines* and *mother-lye* to the water. Brines are graduated by letting the water slowly run down scaffolds of thorns, which, in many watering-places, are from fifty to ninety feet high, and several thousand feet long. In running over this immense surface, a considerable portion of the water evaporates, especially if the weather is warm and the wind high. The water thus becomes richer in salines, and if this process is repeated several times with the same water, the liquid may at last assume a high degree of concentration. At the same time, minute particles of salines are, by the wind, carried into the surrounding atmosphere, and the inhalation of air thus impregnated with salines has, in many instances, proved useful to patients suffering from diseases of the respiratory organs.

When brines have been concentrated to such a degree that they contain from 140 to 180 grains of salines in sixteen ounces of water, they are, in many watering-places, boiled in order that those salines which are not easily soluble, such as chloride of sodium, silica, carbonate of lime, carbonate of magnesia, alumina, iron and manganese, may be precipitated and removed from the liquid. That which remains after several weeks boiling, is called mother-lye. This is half salt and half water, as it contains from 2000 to 4000 grains of salines in the pound. Its chief solid constituents are chloride of calcium, magnesium, and potassium, and bromide and iodide of sodium and magnesium. The Dead Sea is a huge natural mother-lye, formed by the long-continued evaporation of water. This lake uninterruptedly receives water, but has no visible outlet; and as it is situated at a very low level, viz., 1300 to 1340 feet below the Mediterranean, the water conveyed into it does not filter below ground, but is removed chiefly by evaporation. Large quantities of salines are, therefore, precipitated, not only at the bottom, but also on its shores.

The chemical composition of the mother-lyes, prepared at the several Spas, differs according to the composition of the waters from which they are formed, and the temperature at, and the length of time during, which they have been boiled. The most celebrated mother-lyes are those of Kreuznach, Halle, Volterra, and Dürckheim. The quantity of mother-lye generally added to baths, varies from two to thirty quarts.

If mother-lye is again boiled, the liquid becomes even more concentrated, and after refrigeration crystallisation ensues. The hard substance which at last remains is called *salt of mother-lye*. This contains a considerable quantity of water and is very hygroscopic, so that, if exposed to the air, it soon again assumes a liquid state. Great care is therefore necessary in exporting mother-lye. It is scarcely possible to preserve liquid mother-lye in barrels, as on account of its high specific gravity it forces its way through the pores and joints of the wood. Salt of mother-lye is more easily exported, but if added to baths it does not produce the same effects as if liquid mother-lye is used; for as the different salines contained in the liquid have different points of crystallisation, the layers at the top of the barrel are different from those at the bottom. If, therefore, one layer is used after the other, only parts, and not all the ingredients of the mother-lye are employed. It would on this account appear advisable either to again dissolve the whole contents of the barrels previous to using, or to export the liquid mother-lye in bottles covered with wicker-work, from which there would be no danger of its escaping.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

WESTMINSTER HOSPITAL.

CONCUSSION, FOLLOWED IN THREE HOURS BY COMPRESSION—LACERATION OF THE MENINGEAL ARTERY—RAPIDLY FATAL RESULT.

(Under the care of Mr. HOLT.)

[Reported by Mr. ARTHUR BEADLES, House Surgeon.]

In a case of injury to the head, related in this Journal on August 30, 1862, at the autopsy the cerebellum was found to be torn, and the blood effused at the base, and on the surface of the hemispheres. Yet, directly after the accident, the patient walked about one-third of a mile, and could scarcely be persuaded that he was at all seriously ill. He kept apparently well ten hours; then symptoms of compression came on, and he died in five hours. No doubt, the greater part of the effusion occurred shortly before the serious symptoms set in.

In such cases of effusion of blood on the surface of the hemispheres, the paralysis follows the same rule as it does in cases of effusion into the corpus striatum, or thalamus opticus, *i.e.*, the paralysis is on the opposite side of the body. It is in cases like these, *i.e.*, when, after an injury to the head, symptoms of compression come on with paralysis on one side of the body, that trephining in the region of the middle meningeal artery, on the side opposite to the paralysis, has been successfully practised.

Mr. Prescott Hewett ("Holmes' System of Surgery") says —"Of the large extravasations, the most frequent by far is that from the middle meningeal artery. Out of thirty-one cases of fracture of the skull, accompanied by extensive extravasation, the blood had proceeded from the middle meningeal artery or its branches in twenty-seven cases."

A very interesting case, which occurred in the practice of Mr. Adams at the London Hospital, is related in this Journal April 19, 1862. In that case there was paralysis of the right side of the body, which came on after a blow on the right temple. There was, however, also convulsions on the left side. Mr. Adams, in a clinical lecture, a report of which is appended to the case, discusses the question of trephining under such circumstances. The autopsy showed that to have, as Mr. Adams expressed it, "trephined on speculation," would have been of no avail in this instance, as to have trephined over the left middle meningeal artery would have been useless, as the blood did not come from it, was not near it, and was under the dura mater. Besides, the brain was torn.

In the following case the question could never have been raised, as the patient died ten minutes after the symptoms of compression set in:—

John K., aged 25, was brought to the Westminster Hospital at half-past seven p.m. on November 25, 1862, with symptoms of concussion of brain. He had fallen from a scaffold about seven feet from the ground two hours and a-half before admission, and when he was found by his fellow-workmen, about five minutes afterwards, he was standing up against a wall. They spoke to him, and he said, "Never mind, I shall be better in a minute or so," and complained of being cold, and of a pain in his side. When he came into the Hospital he had all the symptoms of concussion of the brain; and, on careful examination by the House-Surgeon, no injury could be discovered except a bruise on the left side of the forehead. He remained in this state for about a quarter of an hour, when suddenly the symptoms of compression came on, the pupils became widely dilated (before being very much contracted), stertor and paralysis of the right side supervened, and he died in ten minutes, three hours having elapsed from the time he fell.

Post-mortem, Eighteen Hours after Death.—On opening the skull, a clot of blood, weighing three ounces and a-half, was found external to the dura mater, on the left side and anterior part of the brain, which was much compressed but not lacerated at this point. The hæmorrhage had evidently proceeded from the middle meningeal artery, which was found to be torn by a fracture passing through the squamous portion of the temporal bone on the left side, and also through the great wing of the sphenoid. The fracture had also extended across the petrous bone, the apex of which was broken off.

In this case there was probably at first little or no effusion of blood, the greater part at all events being effused when the paralysis came on.

MIDDLESEX HOSPITAL.

CASE OF CONCUSSION OF THE BRAIN—RECOVERY.

(Under the care of Mr. HULKE.)

At noon, October 22, 1862, a healthy servant-girl, aged 15, was struck on the right temple and shoulder by a falling scaffold-pole, and fell stunned. One hour after the accident, when she was brought to the Hospital, consciousness had

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partially returned; she had vomited, passed a loose stool, and voided her urine in her clothes; pulse small, rapid, fluttering; surface of body cold. At 3 p.m., when seen by Mr. Hulke, the eyelids, particularly the upper, were swollen and ecchymosed. The entire right temporal region was occupied by a prominent puffy swelling from extravasated blood. No fracture of the cranium was discoverable. The right shoulder was slightly ecchymosed. She lay on the left side, her legs and thighs flexed, the knees almost touching the belly, screaming and tossing herself restlessly about during the examination of the head and shoulders. When sharply spoken to, she gave a mono- or dis-syllabic answer to any short query; but when a longer question was put, she rambled and muttered incoherently. At 9 p.m. she had again vomited, and passed urine in bed; skin hot. Is very restless, and screams when touched. The left side of the head was shaved, and covered with a constantly wetted rag.

23rd.—3 p.m.—Pulse 104; head hot; answers "No" to every inquiry or request. Refuses food, and has not taken any nourishment since the accident. A caoutchouc bag of ice was laid upon the injured temple, and a small enema of beef-tea was ordered to be administered every four hours. 9.30 p.m. Pulse 72; head cool; she is less restless.

24th.—She talked loudly and incoherently from 3 till 8 o'clock this morning. Pulse 88; head hot; lips dry, but tongue clean and moist. She is more conscious, but still obstinately declines food. The enemata of beef-tea were continued. More hair was cut off, and cold was applied to a larger surface. As the bowels had not yet been moved, a purge of sulphate of magnesia was given.

25th.—Pulse 76. She understands perfectly all that is said, but still obstinately refuses food, and replies "No" to everything. The salts not having acted, a turpentine and castor-oil enema was administered.

26th.—Last evening she drank some milk, the first food she has taken since the accident, and to-day ate a light pudding. Pulse 70; skin cool; she is now quite rational. The swelling of the eyelids has subsided, and the extravasation in the temporal region is fast disappearing. The bowels continue bound, though the purgative enema was repeated.

27th.—Pulse 72; bowels have acted. She now begins to know where she is, but cannot understand that she has had an accident.

From this date her intelligence and general condition steadily improved, and she left the Hospital convalescent November 30. Her recollection of events before the accident was unimpaired, but of the accident itself she knew nothing. She was obstinate after she had acquired sufficient consciousness to understand what was said to her, and refused food, because, she said, she did not know where she was, and thought she had fallen into the hands of designing persons.

CASE OF SPINA BIFIDA—PARACENTESIS FIVE TIMES—SUGAR IN THE FLUID WITHDRAWN.

(Under the care of Mr. HULKE.)

The existence of sugar in the cerebro-spinal fluid after meals has been given by a French Surgeon as an important element in the diagnosis of cysts in the spinal region of doubtful nature. Mr. Hulke first learned its existence in the contents of spina bifida from Esmarch, of Kiel, and in the present case obtained on several occasions clear evidence of its presence.

The condition is so hopeless, and operations for the removal of the tumour, or its obliteration by iodine injections, are so uniformly fatal, that, beyond an attempt to retard the increase of the tumour by methodical compression, surgical interference is only called for where the distension is so great that sloughing and exposure of the interior threaten. The present adds another to the long list of cases which show how rapidly the fluid re-accumulates, and how temporary is the relief which tapping affords.

A well-grown, and otherwise well-made child, one month old, was brought to the out-patient's room, October 16, 1862, with a spina bifida in the lumbar region. The girth of the bag was nine and a-half inches, and the distension so great that rupture seemed imminent. The skin was very thin, red, translucent, and the cuticle desquamating. At the most prominent part of the tumour there was a white radiating scar. There were no convulsions nor paralysis. At birth the tumour was about a quarter of its present size.

To prevent the threatened bursting, the tumour was tapped with a grooved needle, and ℥viss of clear, colourless, cerebro-spinal fluid were drawn off. There was now sufficient flaccidity to permit the aperture in the spinal column to be felt: it was about three-quarters of an inch long, by half an inch broad, and running from the upper end of this gap across the bag to the radiated scar mentioned on the most prominent part was a soft cylindrical process. The little prick was covered with collodion, and a compress was applied over the spine by an elastic belt.

18th.—The sac is as much distended as at first.

30th.—The distension being very great, ℥viij. of fluid were drawn off—clear, colourless water, free from albumen as the first specimen, and giving a marked saccharine reaction with Trommer's test.

November 4.—The fluid collects less rapidly; the child thrives.

20th.—Rupture again threatening, ℥v. of fluid were drawn off—clear and colourless as the first specimens, but containing a trace of albumen. The liq. potassæ, sulphate of copper, and fermentation tests, all gave decided proof of the presence of sugar.

At Christmas, ℥xij. of fluid, of exactly the same character, were removed, and on January 17, ℥x. The day afterwards the child died in convulsions.

ST. BARTHOLOMEW'S HOSPITAL.

PRIMARY AMPUTATION OF THE THIGH FOR SEVERE COMPOUND FRACTURE OF THE LEG — RECOVERY — SUBSEQUENT FALL ON THE STUMP — NECROSIS OF THE SHAFT OF THE FEMUR—REMOVAL OF THE NECROSED PORTION.

(Under the care of Mr. LAWRENCE and Mr. COOTE.)

Mr. Holmes Coote said that in this case the points which merit notice are,—first, the imperative necessity of primary amputation in these cases,—a point sometimes overlooked; secondly, the effects of the fall.

Another point is interesting, namely that amputation of the thigh is not the same dangerous, indeed, almost fatal operation in this (as in some other of the London Hospitals) as modern authors, especially of the foreign school, would lead us to suppose.

In the autumn of last year, while the underground railway was in process of construction, a healthy young man, who was driving two horses attached to a truck in one of the tunnels, stumbled over a log of wood, and, clinging to the harness, was thrown down, the wheel passing over the right leg. He was conveyed to St. Bartholomew's Hospital, where Mr. Coote, after satisfying himself of the nature of the injuries received, performed at once the operation of amputation of the thigh by the flap method. There was nothing worthy of remark in the operation, nor in the after-treatment, except that the large intestines were loaded with fæcal matter, and the patient experienced great relief from the administration of a purgative shortly after the operation. After the separation of the ligatures, and the closure of the wound by adhesion, he got out of bed, and endeavoured to walk with the aid of crutches. On the first attempt he fell, and violently struck the stump on the floor. Great swelling and a sharp attack of inflammation ensued in the limb; the wound partly re-opened, and fistulous passages formed; finally, dead bone was detected.

On Saturday, February 22, Mr. Lawrence made an incision down to the bone, and drew forth a piece of the entire shaft, three to four inches in length, from a cavity formed of periosteum and new bone, and lined by a highly vascular membrane. The outer surface was beautifully marked by the action of the absorbents, the extremity was as sharp as if just cut by the saw. The discharge of pus was copious and offensive in odour.

Since this time the patient has gone on well, and will have an excellent stump.

THE LONDON HOSPITAL.

ENCEPHALOID CANCER OF THE ORBIT—CONSTANT HÆMORRHAGE—REMOVAL BY CAUSTICS, WITHOUT LOSS OF BLOOD.

(Under the care of Mr. MAUNDER.)

E. M., aged 6 years, became the subject of a tumour of the orbit, extending the right eyeball, in August, 1862. In September, the globe and tumour were removed in the

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Maidstone Hospital. The disease quickly returned, and when Mr. Maunder saw the child there was a tumour the size of the fœtal head. There was constant bleeding from its anterior surface. It hung over the nose and the right half of the mouth. The hæmorrhage was so great that it threatened the life of the child, who was already much reduced by it.

To remove the unsightly mass and check hæmorrhage was all that art could be expected to effect, and was accomplished by transfixing the tumour at its base, in severval diretions (à la Maisonneuve), with pencils of chloride of zinc and flour dried hard. These cut off the supply of blood to the mass, and on the tenth day the tumour was drying and shrivelling, and was forcibly torn away from its site, with only a little oozing of blood from the pedicle in the orbit. On the following day the pedicle was cautiously destroyed by the actual cautery.

The child left the hospital on February 6, with a granulating wound occupying the seat of the tumour.

ST. MARY'S HOSPITAL.

CLINICAL REMARKS ON THE RELATIVE VALUE OF ACONITE, OPIUM, AND VERATRIA IN RELIEVING PAIN—ILLUSTRATIVE CASES.

(Under the care of Dr. HANDFIELD JONES.)

In reference to the following cases, Dr. Handfield Jones remarked that the view which he was inclined to take of the action of the three remedies mentioned above, when applied locally, was, that *aconite* is most suitable to acute superficial pain, itching, and hyperæsthesia of the skin; *opium*, to pain of a more wearying, aching kind, more connected with debility, and requiring stimulating or tonic more than sedative treatment; and *veratria* to intermediate states, where a peculiar excitation of the nerve extremities seems to alter the morbid action of the affected nerve. More shortly the same may be put thus,—aconite is a benumber, opium a stimulant, veratria an alterant of nervous power. It is quite permissible, as is often done, to join opium with ammonia, chloroform, or turpentine, as these stimulants, if not in excessive amount, will rather promote the action of the opium. The other drugs should certainly be used alone. Belladonna is highly praised by the admirable Trousseau for its pain-subduing efficacy, especially in the case of external and superficial pains. He (Dr. Jones) had had more experience of its internal than of its external use, but was inclined to look upon it as a sedative akin to aconite.

He would not omit offering a caution as to the use of aconite, which is certainly a most potent drug. It should not be applied to weakly subjects, especially to those who had any tendency to syncope, and care should be taken that the liquid should not come in contact with any excoriated or mucous surface, unless, indeed, it be much diluted. In the case of ordinarily healthy persons it is quite safe, and may be used freely to the unbroken skin. It seems, also, pretty certain that the presence of acute pain, or severe itching, or any like affection, renders its use internally and *à fortiori* externally much more safe, even in weakly persons, than it would be if the nervous system was quite tranquil. He had then a patient under his care who had been taking twelve minims of the Pharmacopœia tincture daily for several weeks, on account of an obstinate spasmodic action of the muscles of one side of the neck. This quantity the patient bore well, and it benefited the spasms, but sixteen minims in the day caused some faintness. In tetanus this tolerance is very remarkable.

Case 1.—A man, 62 years of age. He had prurigo, for which he first used an ointment of veratria—twelve grains to the ounce. This, however, made him feel "as if," he said, "he was in a burning furnace." Dr. Jones then prescribed a lotion of aconite—one ounce of the tincture to two ounces of water. Under this and bichloride of mercury—one-twelfth of a grain three times a day—he was cured.

Case 2.—A man, 48 years of age, had a lichenous eruption ensuing on a state of neurolysis. It was cured by the lotion of aconite.

Case 3.—A female, 31 years of age. In this case the patient had suffered from gall-stone for nine months, and had severe pain in the right side. The pain distinctly relieved by the aconite lotion.

Case 4.—A man, aged 35. A case of cutaneous hyperæsthesia, great itching, cured by the local application of the aconite lotion and the administration of carbonate of iron.

Case 5.—A female, about 30 years of age. Severe rheumatic pleurodynia. She received but little benefit from poultices sprinkled with laudanum, but was very notably relieved by aconite lotion. She took, also, iodide of potassium from the first.

Case 6.—A man, 36 years of age, suffered from neuralgia in the head and in both infra-orbital regions. It was worse in the damp and cold weather. It was greatly benefited by the veratria ointment.

Case 7.—A woman, aged 31, suffered from menorrhagia and neuralgic pains in the temples and left side of the abdomen. The pain in this case was more relieved by opium liniment than by the veratria ointment.

Case 8.—A woman, aged 47. She had been subject to tic douloureux for four years on taking cold. She had the most pain in the left side of her face on eating. Exposure to cold air aggravated the pain very much. She had several decayed teeth, some of which had been drawn, without relief. She took quinine and iron and applied the ointment of veratria with much benefit. She said the ointment caused a pricking sensation and lulled the pain.

Case 9.—A woman, aged 55. For about eight months she had a remittent neuralgic pain of the lower and outer part of the right leg. The veratria ointment alone at first gave her much relief. Afterwards, she took quinine and iron, and used a liniment of opium. She then took iodide of potassium, still using the liniment. She thought the opiate liniment gave her more ease than the veratria ointment.

Case 10.—A man, aged 30. He had had severe pains in his head, probably rheumatic. A node formed. He found that a lotion of equal parts of laudanum and water aggravated the pain, but that the aconite relieved it. Under the use of the iodide of potassium he quite recovered.

Linimentum opii is so commonly beneficial in the various aches and pains of weakly people, that it is not worth while to adduce any instances of its action alone.

In several cases of intense photophobia, evidencing the extremest retinal hyperæsthesia, Dr. Jones has found the application of aconite lotion very beneficial, at least apparently, though it is not always easy to say how much of the improvement is owing to the lotion and how much to the tonics given at the same time.

The strength of the aconite lotion has been one part of the tincture to two parts of water, of the veratria ointment ten grains to an ounce.

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Medical Times and Gazette.

SATURDAY, MARCH 7.

THE PRESENT STATE OF THE ARMY MEDICAL DEPARTMENT.

If a distinguished foreigner found himself before that large and imposing pile of buildings known as the "Royal Victoria Hospital," at Netley, and were told that it was for the reception and treatment of sick and wounded soldiers, he could not fail to be struck with the liberality and munificence of the English nation.

This feeling would be increased still further by an inspection of its interior arrangements. Every thing that can minister to the comfort, treatment, and recovery of its inmates is to be found there,—supplied, too, with a profuse and lavi-

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hand. We here except, of course, the building provided for the Medical staff, which contrasts too strongly with its magnificent neighbour to escape attention. The separate house, provided for the Medical head of the establishment, appears to have been erected under the fear that one of the Medical staff might be married. Within a stone's throw of this, almost, is a much more imposing building, for the *military* governor.

He would, of course, infer that the officers upon whom devolved the trust of guarding the health and curing the diseases of the sick soldier, were participators in the liberality with which the nation had provided for the wants of her sick and wounded protectors. He would conceive the Medical as a highly valued, respected, and well-paid scientific department of her Majesty's army, and that service in it was highly esteemed, eagerly competed for, and not to be won but by men of the highest qualifications. We know how very much this would be at variance with the facts!

But let us suppose that he was informed of all the circumstances which had occurred at the time of the design and during the erection of that Hospital.—How the time is but just past when the little care bestowed upon the unfortunate soldier, or the men whose function it was to guard his health, caused such sore trials as to have amounted to a feeling of national disgrace.—How the nation had determined that, whatever the past might have been, for the future England should be well prepared.—How commissions had been appointed, and men, eminent by birth, position, and ability—in whom the nation had every confidence—had devoted themselves to the task.—How it was determined that thenceforth the Medical department of the army should be placed upon such a footing as to tempt the best men of our universities to enter it.—How—as an earnest of the spirit with which the nation was animated—the whole of this branch of the service had been remodelled; a royal warrant, conceding the long-withheld and just rights of its members, granted; a code of regulations, giving the army Medical element new and important duties, and defining the means by which these should be carried out, published; a Medical school for the special training of Medical candidates established; men of known energy and independence placed in high positions, and this building completed.

Let it be indicated how the wisdom of all this had been ratified by every day's subsequent experience, and that a campaign in an unwholesome soil had tested the new order of things with results which were acknowledged to be almost unparalleled in warfare. Then inform him how all that had been done was quietly but rapidly being undone!

Scarcely has Netley Hospital been completed, and not yet inhabited, before we find the whole Medical department in a ferment of discontent: deficient in the *quantity* of candidates for its appointments—perhaps, still more deficient in the *quality* of these; resignations on the part of the older and more zealous of its members, and a spirit of dislike, distrust, or worse—a stolid kind of apathy—the dominant feelings in every man's mind.

The English nation, liberal to prodigality, testing things by a principle of common-sense, did their best to bring their Government out of the Crimean disasters, and to prevent the recurrence of these: *there* they stopped; *here* the Horse Guards commenced, and have succeeded perfectly. The commander-in-chief has given the word—"as you were," and "as you were" it is accordingly.

At first, the process of destruction was not an easy one, for between the Horse Guards and the Medical department stood a man of markedly independent spirit, in whose talents and unflinching integrity the public and department had confidence. So long as he lived, he formed a breakwater against which the stream of attacks from the Horse Guards broke.

That there is a mournful change for the worse in every thing connected with our Profession in the army cannot be doubted. There is a staff of professors eminently qualified to afford that instruction, which is at once so novel and practical as to be, perhaps, one of the most useful courses ever given. In what terms does the Government expect these men to address their audiences at Netley next April; or how long are they to press hopelessly onwards against the current which sets in from the Horse Guards so dead against the Medical branch of the service? The work of two Secretaries for War has already been undone, and, unless some urgent need occur, we are not prepared to say at what limits the process will be arrested.

Let us trace in what way the authorities have altered their landmarks and broken the guaranteed rights of the army Surgeon. The circumstances of public irritation under which the warrant of 1858 was wrung from the Government must be fresh in our readers' minds. Among the clauses of that warrant we find the following:—

"'The relative rank of the Medical officers of our army shall be as follows:—Staff, or regimental Surgeon as major, according to the date of his commission, etc.;' and again, the seventeenth clause, which defined that 'such relative rank shall carry with it all precedence and advantages attaching to the rank with which it corresponds (except as regards the presidency of courts-martial, where our will and pleasure is, that the senior combatant officer be always president), and shall regulate the choice of quarters, rates of lodging money, servants, forage, fuel, and light, or allowances in their stead, detention, and prize money. But, when a Medical officer is serving with a regiment or detachment, the officer commanding, though he be junior in rank to such Medical officer, is entitled to a preference in the choice of quarters.'"

We are among those few who conceive that there might have been some other way of fixing the position and remunerating the Medical officer than by the above relative ranks. Still, it is in accordance with the advice of the ablest and most practical men, and the regular principle and custom of the service, and, when once given, it became a written guarantee to every Medical officer of his rights. What remains of it?

In 1861 the Surgeons were ordered to be always of junior rank to majors; and, notwithstanding the irritation this caused, the report of a commission that the terms of the warrant ought to be restored, and the appearance of a paragraph in the *Globe* that it would be, it never has!

Spite of the clearness of the language and meaning of the seventeenth clause, every one of its privileges has been ignored.

The *status* of a Medical officer is at present of such a kind that an ensign may obtain precedence of a Surgeon grown grey in her Majesty's service.

Military orders (as confidential circulars) were given, in direct opposition to the warrant, that no Medical officers should ever be allowed to sit president of a committee, whatever might be its nature, provided a combatant officer were present.

It is perfectly untrue that the Medical officer is desirous of assuming any command, and the warrant justly precludes his ever doing so.

Let it not be forgotten that all allowances (which are all important to the inadequately paid Medical officer) are guaranteed according to the scale of his relative rank—and these have not been given.

To India this warrant has not even been applied; and at this moment not one of its provisions has been allowed in any of the three presidencies. A Surgeon was ordered to be a member of a board there recently; he sent in his claim for lodging allowance, according to the rate of his relative rank as a lieutenant-colonel. His case was exceptional! He was granted the allowance of a captain.

It is proverbial that the Assistant-Surgeon of a regiment serving in India is the worst paid man in it, unless he be so fortunate as to obtain a separate charge.

We appeal to those who know the department for an answer

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to this question! In the event of a difference or conflicting of opinion between the Medical and combatant authorities abroad, how far have the former had the support of the powers at home—even upon matters of sanitary science, or questions connected with their own Profession?

We now approach another and late instance of injustice, which has been before animadverted on in these columns. We mean the appointment of an Assistant-Surgeon to the army, whose commission was ante-dated so far that he actually passed over the heads of upwards of 400 Assistant-Surgeons!

Let it be remembered that the gentleman in question was in receipt of a handsome salary from Government at and after the period of the ante-dating; that he was not at that time qualified according to the terms of the warrant, and is now over age. Now, we have nothing to say about this officer's merits—and they are said to be great—but this step is manifestly most unfair, and in direct opposition to the warrant, which rules that seniority shall be the means by which Assistant-Surgeons shall be promoted. The fact is, that promotion has been at a stand-still. As vacancies have occurred, they have not been filled up, but the numerical strength of the department has most rapidly decreased. Assistant-Surgeons of eight or nine years' standing will be years before they are promoted. By an easy process of calculation, it may be discovered that a candidate just entering may attain his first step in rank, as Surgeon-Major, after twenty years' service. Under these circumstances, what inducement can there be for any man to enter the service—to say nothing of the better class of men? The difficulty with which these latter are attracted to, and retained in the department, is evidenced from the rapid promotion lately given to the officer to whom we have adverted.

What is the amount of leave granted to the Medical officer compared with his more fortunate combatant brother? Is it not a fact, that men, returning after long years of expatriation, with shattered health, are placed (after a short sick leave) upon half-pay?—or, are not two months' leave conceded and often cancelled almost as soon as the officer has reached his relatives or home?

Of late, we learn, that Surgeons invalided from India must either rejoin their regiments, or go upon the staff; while, hitherto, they have been allowed to effect an exchange.

How many unnecessary moves has a Medical officer to make in a year; and what consideration is shown to his pocket, comfort, or the cultivation of those thoughtful and studious habits which, it is said, ought to characterise him?

The clerk work in the department, instead of being less than it was—when it excited the ridicule of business men—is carried even to a greater extent now. Not only is the Medical officer bound to comply with it, but any failure on his part in doing so is followed by an attack on his pocket—in the shape of his paying for any extra which he may have given, but not daily recorded in his case book.

It is well-known that some defects of vision are, occasionally, most difficult of detection, but woe to the Medical officer who passes a recruit unable to see an object at the longest rifle range, for he will have to pay for that man's kit!—so rules the Horse Guards.

To send a highly educated and energetic worker in Medical science to the daily drudgery of rifle practice, is but a poor way of training his faculties, though a sure one of disgusting him. Yet, to what an unnecessary extent is this—and his attendance at parades and reviews—carried!

We pass over the ill-advised system of confidential reports, which have excited so much irritation in the members of the Medical department.

Lastly, the teaching of the army Medical school is rendered barren of fruit from the discontent reigning in the department, and the want of respect evinced by the Horse Guards for the opinions of its members.

Such, we believe, is a truthful picture of the present state of the Medical department.

PROFESSIONAL REMUNERATION.

It has been truly said that the root of the distinction between profession and trade is the all-important fact that the professional man is occupied with the interests of others, relating to mind, body, or estate,—according as his vocation is divinity, medicine, or law,—while the mere tradesman works with his attention directed to his own benefit alone. Independently of this vital distinction, the remuneration of the learned professions must ever stand upon a perfectly different footing from the gain derived from purely commercial pursuits. The payment to be made to a tradesman is a very simple matter. It is to be measured by the value of the goods supplied, or trouble incurred in the particular case under consideration. But the professional man must receive a threefold remuneration. He must be compensated, first, for the enormous amount of time, capital, and exertion which he has expended in qualifying himself for his calling; secondly, for the labour and attention requisite for making himself master of the facts of the case under his care; and thirdly, for conscientiously applying to that case the knowledge derived from his professional education and experience. It is from attempting to extend to the professions the principles applicable only to trade that the present unsatisfactory state of the law as to professional remuneration proceeds.

The Medical and Legal professions are each divided into two classes, one class in each profession being supposed to enjoy some undefined superiority over the other. The remuneration of the superior class in each profession is, or was till lately, of a purely honorary character. The so-called inferior classes, however,—the General Practitioners and Attorneys,—have always been entitled to recover their charges in a court of law. But supposing a General Practitioner and an Attorney to have brought each an action, and to have succeeded in establishing a right to *some* compensation for their services, the amount of such compensation is usually assessed in different ways. In the case of an Attorney, it generally has been already ascertained by one of the Masters of the Court,—gentlemen thoroughly acquainted with the remuneration to which the plaintiff is justly entitled, and whose decision, as a rule, is satisfactory to all parties. In the case of the Medical plaintiff, the damages are assessed by the jury. Here the Medical profession stands at an enormous disadvantage. Were it left to common juries to tax the costs of Attorneys, it would, indeed, go hard with that body. The prejudice which exists against them among ignorant people, combined with the sympathy in the minds of the jury with anyone called upon to pay a lawyer's bill, would reduce the damages to the lowest figure. But, unfortunately, the dislike to pay a doctor's bill, as soon as the necessity for his assistance has, thanks to him, passed away, is no less intense than in the case of a lawyer's costs. The sympathies of the jury are entirely with the defendant, and in the verdict in the recent action of "Breary v. Green" we have a fair sample of the usual result.

In this case the learned and witty Baron Bramwell, not without a few facetious observations, told the jury that, if they believed the plaintiff's statement, he was entitled to recover; but kindly added that it was quite competent to them (the jury) to state what sum they thought he ought to receive. After mature deliberation, they came to the conclusion that £201 15s. 1d. was the pecuniary equivalent to the plaintiff's professional services, extending over some three or four years, during which the defendant suffered from a tumour pressing on the urinary canal, and during which the plaintiff supplied (*inter alia*) 2677 draughts and mixtures, had made 778 visits, and performed certain operations.

The fact is, that common juries are unfit tribunals to decide on the remuneration of professional men, whatever be their value (be it great or small it is not our business to determine) in actions on other grounds. The only clas-

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which is, or has till now been exposed to disadvantage from such incompetency, is that of General Practitioners. But our present object in drawing our readers' attention to the case just mentioned is to give them an opportunity of considering its bearing on another question. By the light of such verdicts as this we may estimate the advantage which would accrue to the class of Physicians, should the point, upon the construction of the Medical Act, which was reserved at the trial of "Gibbon v. Budd," be decided in accordance with the plaintiff's contention. In that event, it will have become settled law that the *members* of the Royal College of Physicians may, if they choose, avail themselves of the high privilege now accorded to their more (or less) favoured brethren, of having their fees assessed by the same competent tribunal, and in the same satisfactory manner we have just had the pleasure of contemplating. The Physician will then be in a far worse predicament than the present one of the Practitioner who dispenses his own drugs, for items for goods sold would be viewed with much greater favour than items for advice, though we have in "Breary v. Green" seen "goods sold" fare badly enough. Once let the public get hold of, and become familiar with, the notion that Physicians' fees should be assessed according to the ideas of a common jury, instead of the honour and conscience of the Practitioner and the patient, and the jury standard will become the usual standard, the last state worse than the first.

THE WEEK.

THE LATE DISCUSSION ON OVARIOTOMY.

The important discussion at the Royal Medical and Chirurgical Society on ovariotomy, to be found in another part of this number, will be read with much interest. Another discussion, of almost equal interest, on the same subject, took place at the Obstetrical Society last Wednesday, after a very valuable paper by the veteran ovariotomist Dr. Clay, of Manchester, who brought forward the results of 104 cases of this operation in his own practice. Mr. Spencer Wells, in the discussion, alluded to fifty-seven cases in his practice, and Mr. Baker Brown to fifty-three in his. So that the remarkable fact may be cited of three speakers having between them performed this capital operation in 214 cases. The points chiefly discussed were the length of incisions, the mode of dealing with the pediele, the temperature of the room, and the use of opium. But, for all this, we must refer to our usual report in a future number.

SMALL-POX AND VACCINATION.

Considerable alarm is felt at the increase of small-pox. The Small-pox Hospital is full to overflowing, and the temporary wards, which have been provided by some parishes, are so equally. Most of the cases occur in adults or young persons who have been vaccinated. Many questions will naturally be raised by this outbreak, especially as to the efficacy of vaccination as usually performed. Doubts will be expressed as to the amount of care taken in selecting *vaccinifers* with good vesicles, and as to the care taken to use only clear lymph, and not serum or blood which may be made to exude by *jobbing* a vaccine vesicle with the point of a lancet. It seems to be universally felt that a large number of cases is requisite in order to enable any vaccinator to keep up a good succession week after week; that it is a mistake to appoint too many vaccinators; and that it is better that students should learn this operation from the public vaccinators than at the Hospital.

HALL v. SEMPLE.

The answer which Sir George Grey gave to Mr. Butt a few nights ago in the House of Commons, when the latter inquired whether it was the Home Secretary's intention to propose any alteration in the law relating to certificates required in cases of alleged insanity, placed this case in its true light. The real blame rested not so much on Dr. Semple, who signed a certificate believing in its truth, as on Mr. Elliot, who received a patient into his Asylum on an irregular and illegal certificate. The sympathy for Dr. Semple felt by all ranks in the Profession has borne substantial fruit. We are informed that the amount of contributions received by Dr. Forbes Winslow and Dr. Waller Lewis, the joint treasurers of the "Semple Fund," exceeds £500. We have been requested by these gentlemen to state that "the subscription list is now closed, and that they publicly tender their acknowledgments to the members of the Medical Profession and others who have so promptly, kindly, and generously responded to the appeal made to them. It will be satisfactory to the friends of Dr. Semple to know, that the object which the treasurers had in view has been fully attained." This result is equally honourable to Dr. Semple and to the Profession of Medicine.

MEDICINAL BISCUITS.

What are the marks of a good remedy? We hold that they are these:—1st. It has been known and used by the vulgar for some indefinite period; 2nd. It is a thing sought for by ignorant instinct, antecedent to scientific research; 3rd. Its use has been confirmed by cautious clinical observation, and in some few cases has been explained on scientific principles. *Charcoal* is a remedy which has most of these signs. It is greedily devoured by some patients during certain states of stomach disorder, in obedience to a certain instinct; it is an old remedy, and its use is congruous with modern reason. Mr. Bragg, of 2, Wigmore-street, has endeavoured to combine charcoal with the materials of biscuit, so as to produce a not unpalatable result; a little gritty perhaps, but we think this may be overcome. If children were to masticate one of these biscuits at bed-time, it might purify the breath and whiten the teeth, and allay restlessness arising from indigestion and acidity.

Unlike charcoal, bran is a substance which the instincts of civilized man teach him to avoid. Working man exhausts the powers of his digestion, and must give over woody and sclerogenous substances to the lower animals to assimilate for him. Yet experience has shown that a small quantity of bran promotes the action of the bowels; chemistry teaches that it contains a large proportion of fatty and nitrogenous matters, and the experience and sagacity of Dr. Camplin has proved its value as an article of diet in diabetes, in which sugar and starch are inadmissible. The bran biscuits made by Mr. Blatchley, of 362, Oxford-street, are really nice; their flavour is so agreeable, and they please the eye so much, that when the dense branny material comes between the teeth, there is quite a feeling of disappointment. The dryness is of course inevitable, although art has done its best; and any non-diabetic person who wishes a gentle aperient may find that half a bran biscuit *per diem* will answer as well as a family pill. For the diabetic, they are invaluable.

KING'S COLLEGE SCHOOL AND HOSPITAL.

We have to announce the election of Dr. W. O. Priestley to the Chair of Midwifery at King's College, and to the office of Physician for Women and Children to the King's College Hospital. The Council of King's College have secured the services of a Professor who has been educated in the most advanced and philosophical school of modern Midwifery, and whose life has been devoted, almost exclusively, to that branch of Medical science, and who wins universal good opinion. The only shade of regret which we feel is that the appointment of Dr. Priestley has led to the resignation of Dr. Tanner, who, no less than Dr. Priestley, has devoted himself to the Obstetric branch of Medicine; who has acquired vast experience from his position at the Hospital for Women, and as

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Assistant-Physician to King's College Hospital; and who, besides, has deserved well of the Profession by his services to the Obstetrical Society; and who has shown himself a laborious and well-informed Physician by the books he has published on more than one branch of Medical science. But it must be so, even as amongst the Knight Templars of old, "When two get on one horse, one must ride behind." In our Articles on the "Medical Schools," which as soon as the gods send us space shall be resumed, allusion was made to the two lines of policy on which a staff of Medical Professors may be chosen by the governing body; the one is to select the best men out of their own school, with the view of creating a strong *esprit de corps*, and encouraging promising men to "hang about" the Hospital; the other is the more Spartan and heroic mode of throwing open the lists to all comers. King's College has followed the latter plan, and although an appointment at King's College is, on this account, one of the greatest prizes in the Profession, still the *alumni* of this scarcely-to-be called *Alma* Mater can hardly be expected to view these arrangements with perfect equanimity, nor can lookers-on help feeling considerable sympathy with those who have devoted their energies to the service of the school, and have then found themselves shut off from its highest rewards. But it is so in the Army, the Navy, the Church, and the Law. A quiet and dignified bearing under disappointment often conciliates esteem and support, which more than compensates the losers in the lottery of life.

PARLIAMENTARY.

NOTWITHSTANDING the opposition of Lord Naas, the Secretary for Ireland has carried his point,—the Births and Deaths Registration Bill has been read a third time and passed, and the dispensary Doctors are to be the sole Registrars in each district. Sir Robert Peel has conferred a lasting benefit on Ireland by this measure. His Act only now requires to be supplemented by a Registration of Marriages in Ireland, and we are glad to see that Mr. Monsell has moved for leave to bring in a bill having this for its object. Whatever difficulties depending on the present condition of the laws of marriage in Ireland may lie in its way, there is no question as to its necessity. If the death-rate of a civilised community affords the best test of its vital and hygienic condition, the marriage-rate gives an equally infallible criterion for judging of its prosperity.

Dr. Brady, whose vigilance for the public health and attention to the interests of the Medical Profession in the House of Commons deserve all praise, has obtained leave to bring in a bill to regulate the removal in hired or public carriages of persons suffering from infectious diseases in the metropolis. It is to be hoped that there will be no opposition to a measure which the recent prevalence of typhus, scarlatina, and small pox in London has proved to be absolutely indispensable for the public safety.

The subject of the enclosure of the Essex forest-lands was again brought before the House on Tuesday night. Mr. Torrens moved that a Select Committee be appointed "to inquire into the legality of certain enclosures in Waltham, Epping, and other forests in Essex; also, to ascertain what steps ought to be taken to preserve the rights of the public, of the poor foresters, and of the inhabitants of the Metropolis within the forests, and likewise to investigate the general management." The Attorney-General objected to Mr. Torrens' proposition on the ground that,—

"From the particular terms in which it was couched it sought very plainly to erect a Select Committee of the House into a court of judicature for the purpose of inquiring into and expressing an opinion with reference to the rights of individuals and of the Crown. Instead of the hon. member's proposition he would suggest that a Committee be appointed 'to inquire into the condition and management of the Royal forests in Essex, and into any enclosures which may have taken place therein since the report of the Commissioners of 1850, and to consider whether it is expedient to take any steps for preserving open spots in some forests.' (Hear, hear.)" Mr. Torrens said he was quite willing to withdraw his motion and accept the proposition of the Attorney-General. The question is of high importance on hygienic grounds, and we are heartily glad that Government have thus consented to entertain it.

THE ACCIDENTAL CASE OF POISONING AT SHIELDS.

IT will be read with satisfaction by the Profession, that an action for the recovery of damages, brought by the husband of Jane Gilhespie, the woman accidentally poisoned by strychnia dispensed by mistake in Dr. Fenwick's surgery, against that gentleman and his partner has been amicably settled. The barristers, both for the prosecution and defence, spoke in the highest terms of the conduct of the defendants. It will be remembered that the unfortunate blunder was committed by Dr. Fenwick's dispensing assistant. We reprint the report of the speech of Mr. Manisty, the counsel for the defence. Messrs. Fenwick and Peart have done all in their power to make reparation, and they deserve, and will receive, the sympathy of their brethren and the public:—

"Mr. Manisty remarked that he had the honour to appear for Messrs. Fenwick and Peart. His learned friend, Mr. Maule, had done justice to them, and had done it in terms which entitled him to the thanks of the defendants, although he had just done what he expected of him. A more painful case than the present had probably never occurred; and it was because of its painful character, and because of the feelings entertained by both his clients, and because of the sympathy which they had for the man who had lost a wife and the children a mother, it was upon those grounds, and those alone, that they had told him to arrange the matter with no niggardly or illiberal spirit. He might have exceeded the bounds; but he thought it right to deal liberally. He had also been instructed, at the same time, to express, on the part of the defendants, their deepest sorrow at the loss which had resulted from the act of some one whom they were responsible for. His learned friend had done that which he need not do now—he had acquitted the defendants of all personal negligence in the matter. He therefore trusted that their reputation would still be upheld, for there had not been the least shadow of a shade to implicate them. The prescription was right, but the medicine made up was wrong. His clients had considered their servants competent as they had proved them to be, but still they were answerable in the eyes of the law. They had agreed to give £500 as compensation, which would be apportioned, £400 to the plaintiff, and £50 for each of the children, one of which the deceased had by a former husband. He trusted that that would be satisfactory to all parties. The jury having given their assent to the offer, the case was concluded."

THE RADCLIFFE INFIRMARY, OXFORD.

IN a convocation held on Thursday, the 26th ult., the munificent sum of £1000 was voted from the University chest towards the completion of the new buildings at the Radcliffe Infirmary. These consist of a new accident ward, and an out-patients' waiting hall, attached to which are consulting rooms for the several Medical officers, and a Dispensary. Their shell is finished, having cost about £3000. Besides the University grant, about £1000 more will be needed to complete the internal fittings, and place the whole in thorough working order. Of the many grants made by the University for charitable purposes, not one redounds more to its honour than this recognition of the claims of this deserving and well-managed Institution. We subjoin one or two passages from a paper which was circulated in support of the grant:—

"The out-patients have increased prodigiously in numbers. In 1822 they were but 297; in 1861 they had risen to 2,702, together with 2,184 casualties, amounting in all to 4,886 who received relief out of the house. Twice a week these poor people crowd into the lobby and passages of the Infir and any one who will visit the house on these d

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once perceive that the polluted air pervading the house must be very injurious to the in-patients. The new hall, with its corridor, dispensary, and consulting rooms, will enable the out-patients to see the medical men, and receive their medicines, without entering the house at all."

We wish some one would have the courage to speak out boldly about this odious out-patient system at Hospitals and Dispensaries. Very likely it is managed better at the Radcliffe than at most others, but what does it amount to? A set of poor wretches, many of whom come long distances in all weathers, are assembled in some waiting-room, where they taint the air and imbibe each other's maladies. After long delay, they are admitted to the medical attendant, who (unless it be the first appearance) asks a preparatory question, and writes the magic word "Pt."—then more waiting, until the turn comes for medicine; then the dirty bottle with its dirty cork is handed in, and the poor wretch receives some compound of drugs put together by guess, for how can there be time for weighing and measuring? If the Dispensary be in debt, the wholesale druggist sends in any rubbish he may have on his shelves—methylated tinctures to wit—but, be the drugs good or bad, two-thirds are wasted, or else are spoiled before they are used. The patient, meanwhile, wastes three or four hours of the best part of the day, for these very equivocal benefits. If people are poor and cannot afford medical attendance, there is the Parish Surgeon, who is generally a man of skill, and whose livelihood depends on his reputation. He might live in luxury, and the patients be well attended, if the sums squandered on Dispensaries were spent in improving his salary.

Now let us look at another extract:—

"It is true that members of the University subscribe largely towards the annual expenses of the Infirmary; but it must be remarked that most subscribers send in the full number of patients allowed by the rules of the house; that the subscriptions given by each person do not nearly cover the expenses of these patients; and that these patients receive the benefit of the interest of the large funded property possessed by the Infirmary. It is true also that all the Colleges subscribe to the Infirmary; but even here far the greater part of the turns are used: and it must be added that, while between 1822 and 1861 the College subscriptions have increased by the gross sum of 6*l.* 6*s.* a year, the patients have increased in the same period from a total of 1,021 to 5,921. It is true also that the delegates and partners of the University Press, and the proprietors of Wolvercote Mill, are subscribers; but in their case also all the turns are usually filled up: and it must be remembered that the casualties occurring at the Press, though few in number for so large an establishment, have all been taken into the House without recommendation, and have in fact cost the Infirmary a very considerable sum."

Thus the Hospital system, instead of being a charity to the sick poor, is, in reality, a bonus to mean rich persons, on whom the responsibility lies of providing for their dependants. Why do Lord Noodle and Lady Screw "support" the neighbouring Dispensary?—For charity? Not a bit of it; but because for every guinea they give they get two guineas' worth of medical attendance and medicine, and of board and lodging, for sick servants and workpeople, whom, otherwise, common decency would compel them to provide for. But then, it is said, these "noble charities" are so useful to the Medical profession! Are they?

SUGAR.

In the Annual Report of the Committee of the Mercantile Law Amendment Society objections are urged to the present method of taxing sugar, which are worth the consideration of all persons interested in the science of food supply. Nearly all sugar is made from the same raw material—cane-juice—but it is imported into this country in a great variety of different forms. It may reach us white and nearly pure, or containing a very large percentage of molasses and dirt, and in all intermediate conditions. The different qualities depend on the different amounts of care and capital bestowed by different producers in converting cane-juice into sugar. All descriptions of teas and coffees, whatever their quality, are taxed equally; the result is that taxation produces no disturbance of the natural value of different kinds of tea and coffee. But it is not so with sugar—

"The Legislature has declared that sugars shall not all be taxed alike, and has devised a clumsy contrivance to assess different rates of duty, not according to the value of the sugar, but according to certain imaginary lines of demarcation in different qualities of sugar, which are to be decided according to the judgment or caprice of a number of Custom-house officers stationed at the different ports. Under this mode of levying the duties, the natural value of sugar is disturbed, and the legitimate profit which ought to reward the skill and enterprise of the producer is intercepted, and goes to the Customs' revenue, while the producer of inferior sugars actually receives a bonus for his careless manufacture, by a remission of the duty charged upon his produce. If a system so unjust was really productive of benefit to the revenue, it might afford some slight excuse for its retention, but it is doubtful whether it is a source of profit to the exchequer, or a positive injury."

The result is, as proved before the Select Committee of Parliament last Session, that the best producers do not send their fine sugars to this country. For instance, evidence was given before the Committee that no fine sugars at all were sent from the Mauritius. The effect is doubtless to increase the business of the English sugar refiners, but to diminish and deteriorate the value of the sugar. On this point, we quote a passage from an able article which appeared in the *Morning Post* of the 19th ult:—

"Another remarkable fact co-existent with the allegation that present fiscal imposts on sugar tend to the production of a low, coarse, impure quality is this—the straw-coloured, moist, aromatic grocery sugars of West India produce, such as were common some dozen years ago, have well-nigh disappeared. The material now commonly sold for moist colonial sugar is, in most cases, an impure refinery product. To an unpractised eye the difference may not be apparent, but the nose must be very torpid that could not detect the home-produced yellow sugar at once; whereas true moist sugar of colonial produce is pleasingly aromatic; the spurious substitute reeks of the dull faint odour of blood. Here, then, is a condition of things strained and unnatural. The refiner finds his interest to consist in manufacturing largely those yellow sugars which lose their best characteristic if they be not made from cane-juice direct; whereas the colonial producer, who has gone to the expense of chemical and mechanical refinements, is not allowed, as he alleges, to work up to the refiner's standard, namely, white sugar."

Sugar, as an article of food, is more important even than tea or coffee. In the case of the latter, the principle of *ad valorem* duties has been discarded with benefit both to the revenue and to the consumer. There can be no doubt that a similar and far greater advantage would result from the abandonment of an obsolete mode of taxation in the case of sugar, a food-product only second to corn in importance.

MR. LUBBOCK ON "ANCIENT LAKE HABITATIONS IN SWITZERLAND."

Mr. Lubbock's discourse on the "Ancient Lake Habitations in Switzerland," last Friday, was not only a complete *resumé* of that particular subject, but was a capital illustration of the triumph of the modern scientific method—the method not of conflating a huge theory, brilliant as a soap-bubble or a butterfly, and as ephemeral, but of soberly picking up facts, little or great, as they come to hand, and leaving the theory to follow in its own good time. This is the way by which geology has attained its present solid structure, and archæology—the history of man's first doings on this earth—which begins where geology leaves off, must follow the same course. It is well known that the level of the Swiss, as of other mountain lakes, is lowest when the weather is dry and cold. During a dry winter, a few years since, the dwellers on the

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banks of the Lake of Zurich seized the opportunity of enclosing a portion of the edge of the lake to enlarge their gardens. For this purpose they built a wall, and filled up the reclaimed land to the desired level by dredging mud from the bottom of the lake. During this operation, piles were discovered, and implements of bone and stone. Further investigations led to the recognition of the remains of very numerous habitations on piles. Then it was remembered that Herodotus described such dwellings as existing on Lake Phasias, and said that for the preservation and extension of them, every man who took a wife was compelled to drive in three piles (and most of the men had many wives); further, that the inhabitants of Borneo and New Guinea use such habitations to the present day; one proof, amongst others, that if we want to know the habits of ancient men, we should study those of modern men who are yet unmoulded by civilisation. The ancient fortified islands of the Irish were of the same character. It is difficult to conceive how the piles can have been driven in, but it is certain that, in some cases, stones were heaped up around them to keep them in their places. Such dwellings possessed certain tangible advantages: they were secure against enemies, human and feline, and water and fish were accessible. Of such settlements, ninety-three have been discovered. Mr. Lubbock's researches convince him of the accuracy of the expressions "stone age," "bronze age," and "iron age," as representing three consecutive stages of human progress; and he believes that some of the lake habitations belonged to each age exclusively. As a type of the first may be taken the ancient lake village of Wanwyl. Here a large, shallow lake had become a peat marsh, which has since been drained. In the marsh a system of piles was found, which was a puzzle, until it became evident that they originally surrounded an artificial island in the lake. They were of oak, fir, and alder, and varied from fourteen to eighteen feet in length. Under the peat, which of course covered what had once been the bottom of the lake, abundance of objects belonging to the stone age have been found,—*i. e.*, axes of serpentine, but less beautiful than the Danish; arrow-heads; flint flakes, used as knives; hammers; sling-stones; corn-crushers, and whetstones; awls, and chisels of bone, and implements made of split ribs. Fragments of pottery, of the rudest kind, have also been found in abundance. Most probably the inhabitants clothed themselves with skins; but portions of flax, curiously woven, have been found. Their food consisted principally of wild animals, especially the stag and marsh-boar, whose bones are found in abundance; portions of bread and apples have also been found. The fox seems to have been used as food, but not the hare, which, as Cæsar says, was *taboo* amongst the ancient Gauls, and may have been forbidden amongst their more savage predecessors. The same inferences are drawn from the reliques preserved in the Kitchenmiddens of Denmark. It is a comfort to think that there are no traces of cannibalism. No remains have been found of the inhabitants of the Swiss lakes; those of the parallel age in Denmark resemble the Laplanders. There are some traces of barter (or else of periodic excursions) as their best flints came from France. The reliques of villages which flourished during the "bronze age," of which that at Nidau may be taken as a specimen, exhibit axes, neatly ornamented knives, sickles, bracelets, fish-hooks, and rings. Their abundance suggests the idea that they were not merely things which had dropped into the lake and been lost, but that they were offerings cast into the water. And here the observation of the manners of rude peoples of the present day serves to interpret the past—in Scotland even now offerings of money and trinkets are made to Holy Wells. All these bronze implements were cast, and both moulds and bars of tin have been found. The discovery of amber, coral, copper, and tin, points to an extensive system of barter, and probably the art of making bronze had been introduced from Asia. The late Sir Richard Colt Hoare found, in the earliest tumuli which he explored, the corpse in a sitting posture, with implements of stone or bone. In the bronze age, the bodies were burned, in the iron age burial was resumed. In the "stone age" the preponderance of wild animals over the domestic may be gathered from the following enumeration of the relative frequency of their remains. Wanwyl represents the stone age, Nidau the bronze; and in reading the table the figure 1 is meant to be understood as representing a single individual of a species, 2 as indicating a few, 3 several, 4 a larger quantity, and 5 is used when the remains of the species are very common:—

Wild Animals.	Wanwyl.	Moorseedorf.	Nidau.
Brown Bear	..	2	..
Badger	2	2	..
Marten	3	2	..
Pine Marten	3	2	..
Wolf	1	..	..
Fox	3	2	..
Wild-cat	2	2	..
Beaver	2	3	..
Elk	1	1	1
Urus	.	1	..
Bison	1	..	..
Stag	5	5	5
Wild Boar	2	2	..
Marsh Boar	5	5	2
Domestic Animals.			
Dog	2	2	3
Pig	(?) 1	..	3
Horse	2	(?) 1	3
Ox	5	5	5
Goat	2	2	3
Sheep	1	2	4

The idea which this table conveys of the co-existence of ancient man with the wild denizens of the old forests of Europe, and the substitution of a more civilised race, and of domestic animals, is very complete.

DR. BROWN-SÉQUARD'S LECTURES.—LECTURE III.

Dr. Brown-Séquard occupied the greater part of his third lecture, delivered February 19, with a discussion of diseases of the pons Varolii. The substance of his remarks on the symptoms of disease of this part of the brain is as follows:—When one side of the pons Varolii is diseased, there is paralysis of the trunk and limbs of the opposite side. If the lower part of one side of the pons Varolii be affected, the facial nerve on the side of the injury may be also paralysed; but if the injury to the pons Varolii be high up in that organ, the trigeminal nerve of each side will, probably, be paralysed; that of one side before its decussation, that of the other afterwards. The sixth nerve is very often affected, thus allowing the globe of the eye to be drawn inwards. Paralysis of this nerve never exists, except with disease of the pons Varolii. Those fibres of the facial nerve which are distributed to the orbicularis palpebrarum have their roots spread into the pons Varolii, and hence, in disease of the pons Varolii, that muscle is often paralysed. In addition to the above positive evidence of disease of the pons Varolii, there is some negative evidence of great diagnostic value: the third pair of nerves, and hence the superior rectus, levator palpebræ, internal rectus, inferior rectus, and inferior oblique muscles remain unimpaired. There is, however, sometimes a slight constriction of the pupil, which, as has been ascertained, may be caused by injury to the trigeminal nerve. The fourth pair of nerves is not involved, so that the rolling power of the eye remains intact. Unless the disease extends to the medulla oblongata, the sense of hearing is also unimpaired. In ordinary hemiplegia the patient cannot really stand alone on the so-called healthy side; the power of the arm is also somewhat lessened; but in disease of the pons Varolii the strength of the healthy side is not diminished. In cases of disease of the upper part of the brain, the co-existent paralysis is caused by reflex action affecting

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the base, and a large proportion of the symptoms, probably amounting to three-fourths, are in such cases purely sympathetic; but in disease of the pons Varolii it is quite otherwise; the accompanying symptoms directly indicate a lesion of that part of the brain. This disease, as ordinarily manifested, does not affect the mind; but, in cases of sudden hæmorrhage into the pons Varolii, there are general convulsions. In illustration of the disease in question, Dr. Brown-Séquard showed three patients afflicted with it. The first patient was attacked, in 1859, with what is called "rheumatism." This is, in fact, a very frequent symptom of inflammation of the base of the brain, as well as of the spinal cord and nerves. The "rheumatic" pains were experienced in the right shoulder, in which there was the same tenderness as is observed in cases of diseases of nerves. These symptoms alternated with sickness, giddiness, and a sense of burning heat at the top of the head, the same burning sensation being also experienced on the inside of the right foot; they were followed by paralysis of the right side of the body, the face excepted. The external rectus being implicated, the patient saw double. In every other respect the senses were unimpaired. The tongue did not deviate to either side (in disease of the pons Varolii is not usually affected in this respect); but there is diminution of the sense of taste, as well as of feeling on the left side. Among the other symptoms, there was spasmodic drawing of the left side. In some cases, Dr. Brown-Séquard observed, this spasm exists on the injured side, and in others, a drawing on the opposite one. This patient moves his face well on the right side, and has now recovered much of his wonted power, but there is still some stiffness and loss of feeling. When he takes a long breath, a certain degree of paralysis of the inspiratory muscles of the chest is observable. The second patient to whom the lecturer called the attention of his audience was a finely-developed man, sixty-two years old; he is a farmer, and, but for the calamity which has befallen him, which shows itself in paralysis of one side of his face, would be regarded as a picture of health and strength. About eleven weeks previously, he was attacked with vomiting and giddiness, followed shortly afterwards by paralysis of the right side, excepting the face, which was affected on the opposite side, there being also incapacity to close the eye. He complains that the right side of the body is very tender and painful, the upper part of the calf of the leg being especially affected, and that he is much troubled by the seemingly great weight of the arm. He gapes frequently, and has jactitation of the limb at the same time—symptoms which the patient previously mentioned also exhibited. There is slight diminution of power in the external rectus; the paralysed arm is wasted; the leg is œdematous; sensation both in the thigh and leg is considerably lessened; and if either salt or sugar be placed on the tongue he pronounces both of them "acid," being unable to distinguish the one from the other. The power of feeling in the face is normal. He has no arcus senilis. The treatment consists of the administration of iodide of potassium. The third patient shown exhibited symptoms of disease of the pons Varolii far more serious: both sides of the body are involved. He feels absolutely nothing in the right arm; there is also great anæsthesia of the leg of the same side; during inspiration the left side of the chest dilates but slightly; and so great is the loss of sensibility on both sides of the face, that he cannot feel two points when four inches apart. The lecturer also showed a patient who has inflammation of the base of the brain above the pons Varolii. There was considerable paralysis of the left side, the arm and leg of which were tender; the right side was also very weak. Dr. Brown-Séquard observed that in a case of this kind tenderness of the calf of the leg often occurs, and, indeed, is generally significant of an affection of the brain. When the so-called rheumatic pain is, as in this instance, all on one side, it affords a strong presumption of cerebral disease, and, on inquiry, giddiness may often be discovered to have been already experienced.

Dr. Brown-Séquard closed his lecture by some remarks on Muscular Ataxy, a phenomenon studied by Romberg and other nervous pathologists, and which latterly has attracted special attention in France. It consists in a diminution of the power of directing muscular movements, the contractile strength of the muscles being scarcely, if at all, impaired. A woman under the care of Sir Charles Bell was incapable of directing the muscles of her arms and hands without looking at them; if, when holding her child, her attention was diverted from it, she would let it fall. One of Dr. Brown-Séquard's patients can neither walk nor stand without reeling when his eyes are shut; and there are cases of patients who can make no movement in the dark, and who, if asked to move a limb, will declare they have done so, although they have, in fact, never stirred. The lecturer showed a case of a man who is obliged to make many attempts before he can complete a movement; his muscular strength is but slightly diminished, but his sight is impaired; he often sees double, and he has a contracted pupil. There is also some chorea intermingled with the locomotive ataxy. Sir Charles Bell demonstrated the existence of a special muscular sense, the seat of which has been alleged by many physiologists,—among whom, in this country, Dr. Carpenter and Mr. Dunn are conspicuous,—to be the cerebellum. Dr. Brown-Séquard asserts, however, that disease of the cerebellum has been often observed to destroy that organ without impairing the power of movement. Several distinguished Frenchmen maintain that this remarkable affection is due to disease of the posterior columns of the spinal cord. In the cases relied on for proof of the correctness of this opinion, there was disease of the posterior columns; but, again, Dr. Brown-Séquard remarks that he has found these columns diseased, and unaccompanied by the phenomenon of muscular ataxy, whereas it has presented itself in cases of pressure on the pons Varolii and other parts of the base of the brain. In his opinion, if we understand him rightly, this impairment of the muscular sense is a symptom, though of rare occurrence, of cerebral lesion analogous to the impairment of the other senses, some of which are so generally affected in diseases of the brain.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY OF LONDON.

We have been requested to call our readers' attention to the following announcement:—

"The usual meeting of the Society will not be held on Tuesday, the 10th inst., on account of the marriage of H.R.H. the Prince of Wales.

"E. H. Sieveking, M.D.,
"John Birkett, } Secretaries."

NEW INVENTIONS.

CARBONIFEROUS PREPARATIONS OF MESSRS. PICHOT AND MALAPERT OF THE PREPARATORY SCHOOL OF MEDICINE AND PHARMACY, OF POITIERS.

These preparations consist of a "Carboniferous Charpie," "Spongy Carboniferous Charpie," "Bags, or Sachets of Carboniferous Charpie," "Carboniferous Paper," and "Carboniferous Tissue Paper."

The things themselves are what their name expresses, viz., charpie, or paper thoroughly imbued with some kind of carbon in an impalpable powder, but yet not so as easily to give off a black dust or create dirt. They have two objects. One is to act as disinfectants, and, for this purpose, the little *sachets* seem very handy, and may save trouble to the Practitioner. The other is that of forming applications for the ulcerated surface, so that they shall act as dressings and disinfectants in one. The carboniferous paper is of an absorbent character, so that it is intended to imbibe liquid discharges, and prevent the bed and linen from being soiled. Of course

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it is only the old and indolent ulcer which will tolerate the direct application of carboniferous charpie to its surface;—vigorous and vascular granulations must be protected by something intermediate.

As the readers of the *Medical Times and Gazette* are fully aware, our principles are the ancient solid empirical, in contradistinction to the hollow rationalistic. However well-devised a remedy may therefore seem on paper, we feel that it is the practical clinical test which alone can give it the true stamp. But we think that MM. Pichot and Malapert's preparations are well worth trying, and recommend such of our readers as have to do with cancers, sore legs, and the like unsavoury ailments, to send to Messrs. Maw and Son for some of the carboniferous preparations, or, at least, for the little pamphlet which explains their use. We feel strongly inclined to recommend the *carboniferous charpie* to be used instead of plain cotton, as a plug for the outer ear in otorrhœa. If the carbon can really deodorise, here is a scope for it.

REVIEWS.

The Renewal of Life: Clinical Lectures, Illustrative of the Restorative System of Medicine, given at St. Mary's Hospital. By Thos. K. Chambers, M.D., Fellow of the College of Physicians; Physician to St. Mary's Hospital; Lecturer on the Practice of Medicine, and Clinical Lecturer at St. Mary's Medical School. London: John Churchill and Sons. 1862. Post 8vo, pp. 430, price 6s. 6d.

Medicine is taught in two ways. By observation and experience at the bed-side the student may be set to gather the facts of disease; then, by a process of sifting and comparison, deduce such generalizations as the facts fairly justify. This is the method always adopted by our most eminent Medical teachers. To it we owe whatever advances have been made from time to time in our science. Or, the student may be sent to the bed-side ready prepared with a theory, and be taught to make the facts of disease accord with it. This latter is the method adopted, as far as we can judge from the book before us, by Dr. Thos. K. Chambers.

In the two introductory lectures, Dr. Chambers enunciates *his* theory. After endeavouring to prove the radical unsoundness of certain prevailing systems of Medicine—viz., Allopathy, Homœopathy, Evacuation, Counter-irritation, and Stimulation—and coolly stating his belief that these represent *all* the definite aims now-a-days professed in the treatment of disease,—Eclecticism and Expectant Medicine being mere protests or negations,—he observes: "In fine, all confess, either by words or deeds, that a true guiding principle—a single aim—in the treatment of disease is wanting." That is to say, his professional brethren are all victims of delusions: they are still benighted, still groping in the dark, or else misled hither and thither each by his own Will-o'-the-wisp, and yearning for some one true guiding light. Taking compassion on their plight, the restoratist Physician of St. Mary's comes to their assistance, and points out to them the guiding star—the one principle of action which will never lead them astray. Here it is; let us give it in his own words, his own capitals and italics:—

"Disease is in all cases not a *positive existence*, but a *negation*; not a new *excess* of action, but a deficiency; not a *manifestation of life*, but partial death; and therefore the business of the Physician is, directly or indirectly, not *to take away* material, but to add; not to *diminish function*, but to give it play; not *to weaken life*, but to renew life."

These are the principles of what he calls "Restorative" Medicine. A definition of disease so bold and thorough as is here given has been shirked by Medical writers of the present age. Men who have studied disease most profoundly have all acknowledged their inability to do what Dr. Chambers has here done. They have found disease to be deviation from the standard condition of the living body; further they have never gone. The essence of that deviation has been too subtle for them to determine; but to Dr. Chambers the great problems of health and disease no longer present any difficulties: all is clear as daylight. Health he has discovered to be "the *most active* renewal of the body possible;" disease, the *partial cessation* of such renewal; death, its *complete cessation*. All the varied phenomena of disease indicate deficient vitality. Excess of vital action is impossible: an organ, whose function is, in common parlance, exaggerated, diminished, or perverted, is an organ *defunct* or partially dead.

Sunt certi denique fines
Quos ultra citraque nefas consistere *morbum*.

Such, briefly, is the theory of disease which Dr. Chambers would have all students carry with them to the bed-side, and apply without compromise in the explanation of all diseases, however widely different. Like most Medical theories, it contains a certain amount of truth, but, when indiscriminately applied, breaks down, and obliges its supporter to have recourse to somewhat ignominious shifts for its defence. Let us test its application in a few instances.

Hypertrophy of the heart is a morbid phenomenon, but if (as is often the case in its earlier stages) it is unaccompanied by degenerative or other change, one does not readily see how it indicates deficient vitality of the heart's walls. Dr. Chambers is bound to admit that, in some cases, "it is, perhaps, not impossible" that the hypertrophy *may* be a positive excess of vitality. Feeling this admission to be slightly damaging to his theory, he tries to make out that the vitality of a part is increased only when the general vitality of the individual is diminished,—*i. e.*, that an hypertrophied heart cannot occur in an otherwise healthy person!—P. 38.

Plethora is a disease in which blood is formed beyond the need of the body. Such, at least, is the view taken by the ablest Medical observers,—men who have no pet theory to support. But how does this square with the dogma, that all disease indicates *deficient* vitality? This difficulty is summarily disposed of by the simple assertion that such a condition as general plethora "has no existence in nature." It is represented, too, as a delusion of "our forefathers."—P. 92.

How about inflammation? Surely the pain, heat, redness, throbbing, etc., of an inflamed part indicate excess of vital action? Quite the contrary, says Dr. Chambers; they are, each and all, evidence of deficient vitality. They *may* be so, but most assuredly Dr. Chambers' extraordinary reasoning does not prove that they *are*. On one occasion, even he himself feels that there is a trifling hitch in his argument. While maintaining (p. 27) that "pain does not indicate an excess of sensibility," he admits (p. 43) that "the occurrence of pain during the inflammation of tissues, destitute of nerves, and insensible under ordinary circumstances, such as the alimentary canal, cartilages, etc., is a very puzzling circumstance," and that he "does not see how this is to be explained as due to a deprivation of life." This is a piece of candour, and we must make much of it. Little difficulties of this kind do not usually disconcert Dr. Chambers. His book abounds in unproved assumption, disregard of proved facts, and in illogical reasoning. We must also observe that the style is oftener that of a popular lecturer to a mechanics' institute than a clinical teacher to a Medical school.

It is some comfort to find that Dr. Chambers, enlightened though he be, appears to treat disease much in the same way as his benighted brethren. Though inflammation is "local death," he still occasionally advocates the local abstraction of blood from the dying part. Though the business of the Physician is "not to take away material but to add," he does not discard "destructives" from his Pharmacopœia. In short, his treatment of disease is that adopted by any intelligent Practitioner, who, without ever having heard of the "Restorative System," aims at restoring his patient to health at the smallest possible cost of bodily strength. And so long as he keeps to practical details of treatment, his remarks are sensible enough; they form the unobjectionable part of each lecture. But his treatment, which is evidently based on experience, he will persist in explaining upon a theory, which looks very like an after-thought. He holds that the Physician who has no theory, has no guiding principle of treatment. True; but still this theory need not, and in the present imperfect state of Medical science cannot, be a supreme law, such as Dr. Chambers fondly imagines himself to have reached. Until we know and rightly apprehend all the varied phenomena of disease (which we are far from doing at present), how is it possible to discover the law which governs them? Improved methods of research, extended observation, and cautious induction may at some future time reveal to us this great secret, and the treatment of diseases will then be the treatment of disease. In the meanwhile we must content ourselves with those imperfect, but still ever-widening genera-

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lisations, which are deducible from the accumulating facts of Medical experience. These various rules of treatment applicable to various classes of diseases, in other words, the *Axiomata Medica* of Medical science, doubtless savour strongly of empiricism; they do not satisfy our impatient yearnings; they keep us plodding on our feet when we would like to be soaring on wings; but in Medicine, as in every other physical science, they have been, and must long continue to be, the only safe guides to truth.

GENERAL CORRESPONDENCE.

RUSSELL *v.* ADAMS.

LETTER FROM MR. F. C. J. PIKE.

[To the Editor of the Medical Times and Gazette.]

SIR,—Certain statements having appeared in some of the Medical journals in reference to the late action of Russell *v.* Adams, to the effect that I was professionally engaged and my costs paid by Mr. Propert, I beg to state most unequivocally that my services were engaged by Miss Russell and her mother, with the latter of whom I had become professionally acquainted upwards of eighteen years previously. The action of Russell *v.* Adams was commenced so far back as November 21, 1861; it was not, however, until after incessant solicitations by Miss Russell and her mother, that I, with the consent of Miss Russell's then attorney, assented, on January 22 in the present year, to become the attorney for the plaintiff in that action.

I have not directly nor indirectly received, nor do I expect to receive any portion of my costs in such action from Mr. Propert; and, I may add, that I had no communication whatever with Mr. Propert with reference to my undertaking the prosecution of the action on behalf of Miss Russell.

I am, &c.

F. C. J. PIKE.

6, Serle-street, Lincoln's-Inn, March 4.

"BRAN BREAD" IN DIABETES.

LETTER FROM DR. CAMPLIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the *Medical Times and Gazette* of February 14, page 156, we are presented with two cases of diabetes, under the care of Dr. Laycock and Dr. Smart, in the Edinburgh Infirmary, which I doubt not your readers interested in the subject have perused with attention.

In many particulars these cases confirm my own observations, and I should have deemed any remarks on them unnecessary, had not my attention been drawn to the trial of bran bread, No. 6, in which it is said—"this bread differed in no important particular except in its milder action in the production of sugar, but this difference was trivial." Your readers who happen to be acquainted with my history will not be surprised that I wished to learn what kind of "bran bread" had been used in this instance, and on enquiry Dr. Smart kindly informed me that it was bread made from the ordinary "whole flour," and, consequently, that which would have been termed by us brown (not bran) bread. As brown bread and preparations of bran of various kinds have often been confounded with the bran cake recommended in my work on "Diabetes," and might have been so by some of your readers in the present instance, I am desirous to call attention to this circumstance.

In the work alluded to(a), it is observed that the ordinary brown bread is scarcely, if at all, to be preferred to the white, and that in my own person it was not unfrequently followed by even more sweetness in the mouth. Long experience shows me that there are few cases in which the bran cake *properly* prepared will not be of signal service in the treatment of diabetes; but if brown bread in its various modes of manufacture (in all containing a large quantity of starch), or *ill-prepared* cakes or biscuits, are administered, the result will be disappointment. All this, however, may be easily avoided if my directions are followed.

A provincial Surgeon of eminence connected with an Hospital where the bran is prepared on the spot, writing to me a few months since respecting a patient who had been under his care, says, "I have often doubted in his case, as in others, whether the bran had not a positive influence in restraining the formation of sugar, as well as the negative action by exclusion of starch; the relief of symptoms has been sometimes so direct and complete as to point to a true remedial action." And I have myself seen so many instances of the rapid change of symptoms mainly owing to the substitution of bran cake for bread, that I do not wonder he should have formed this opinion. I should like to enlarge on several other topics connected with the treatment of diabetes, both Medical and dietetical, but must conclude for the present.

I am, &c. JOHN M. CAMPLIN, M.D.

33, Compton-terrace, Islington, Feb. 27.

(a) Camplin on "Diabetes," &c., second edition, pp. 50 and 51.

THE RECENT APPOINTMENT OF A CERTIFYING SURGEON AT OLDHAM.

[To the Editor of the Medical Times and Gazette.]

SIR,—In a recent Number of the *Medical Times and Gazette* you did me the favour to insert a letter in reference to the appointment of a non-resident, recently qualified gentleman as certifying Surgeon at Oldham. As I have reason to believe the subsequent proceedings of the Medical Practitioners here have been watched with considerable interest and anxiety by our brethren in other towns, where similar appointments are in the gift of the inspectors of factories, I ask your indulgence whilst I give your readers—either as a guide or a warning—the concluding chapter of this disgraceful episode.

At a numerously attended meeting of the Medical Profession resident in this town and neighbourhood, it was unanimously resolved that a deputation should wait upon the Home Secretary, for the purpose of laying before him the whole circumstances of the case, and of urging him, on the grounds of equity, to revoke the appointment. A memorial to the Town Council of Oldham was also signed by every Medical Practitioner in this borough, except by the gentleman who holds the corresponding appointment to the one in question, bringing the matter prominently before them. This appeal, to the honour of the council be it told, was most heartily responded to. Not only was our memorial favourably received, but, by every gentleman who spoke, the appointment was severely animadverted upon, and the council unanimously adopted, on public grounds, the following memorial, and resolved that J. M. Cobbett, Esq., and J. T. Hibbert, Esq., the Members of Parliament for the borough, should be requested to present it:—

"To the Right Honourable Sir George Grey, Bart., Her Majesty's Secretary of State for the Home Department.

"The memorial of the Mayor, Aldermen, and burgesses of the borough of Oldham, in the county palatine of Lancaster, in council assembled, under the common seal,

"Sheweth,—That this council views with much dissatisfaction and regret the recent appointment made by Alexander Redgrave, Esq., of Mr. Robert William Coles, jun., to the office of certifying Surgeon to the factories, lately held by Mr. Earnshaw, inasmuch as there are numerous resident Practitioners in the borough of standing and experience, eminently qualified to serve the office.

"That it is manifestly unjust to the whole Profession, resident and practising in the borough, that their claims and qualifications should be overlooked in favour of a young gentleman entirely unknown to the public, non-resident, and only recently qualified; and your memorialists humbly pray that you will revoke the appointment of Mr. Coles, and give directions that the same be conferred on some resident Medical Practitioner."

This memorial was accordingly presented, and a deputation, consisting of Messrs. Abraham Leach, A. Thom Thomson, and Dr. S. H. Armitage, accompanied by the members for Oldham, afterwards had an interview with Sir G. Grey at the Home Office. They were courteously received, and attentively listened to; but were given to understand that, unless they could advance some legal or moral objection, he (Sir G. Grey) did not think he could interfere with Mr. Redgrave's nomination. The only legal ground the deputation were prepared to urge, and they have authority for thinking it fatal to the appointment, was this:—That the Act of Parliament (7 & 8 Vic. c. 15) provides that the person receiving the appointment shall be *practising* medicine or surgery, and that, as Mr. Coles was only acting as an

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assistant to another surgeon in a neighbouring town, he could not be considered to be practising within the meaning of the act. This point Sir G. Grey reserved for consideration, and promised an early decision. That decision has now reached us, and, as we anticipated, is unfavourable. Avoiding altogether the question of justice or equity, he merely, through his secretary, states—that having referred the complaint of the appointment of Mr. Coles, junr., to Mr. Redgrave, the inspector, and having received his reply, he (Sir G. Grey) does not think there are any grounds which would justify him in revoking the appointment, which the inspector was authorised by law to make, and which could only be properly revoked by him on clear evidence of some legal or moral disqualification, of which he considers there does not appear to be any proof in the present case.

So end our efforts, not altogether futile let me hope, in this the *first* clear case of nepotism in the patronage of these factory appointments. It is to be hoped it may not form a precedent.

Hitherto we have had reason to boast that the rank weeds of nepotism have found no congenial soil in our profession. More favoured in this respect than our clerical sister, patronage in life and limb has been held too sacred a trust to be lightly exercised; and the relative or friend has had to find his natural level in the hard race for public preferment. So much the more is it our duty jealously to watch for and expose any deviation from the strict path of rectitude where a public trust is in question.

In almost all the manufacturing towns, where the position of certifying Surgeon is within the reach of the Profession, the great bulk of the population necessarily consists of the working classes. In such towns, however high a reputation a Medical man may attain, he finds it necessary to build up his practice with such material as exists around him. There are no aristocratic or select practices by which a competency may be realised from a comparatively limited number of patients, but, as a rule, the work is heavy and the remuneration light. Physical and mental toil soon tell their story.(a) "The snow appears early on the mountains," and the appointments connected with the factories—the only appointments of value in these districts, and arising, as it were of necessity, out of the evils from which we suffer—are looked forward to as a haven after the heat and burden of the day.

If patronage is to be exercised, as it has been by Mr. Redgrave in the case at Oldham, a serious question must sooner or later arise between our profession and the civil service. Subordinate officers will educate their sons with a certainty of preferment; the workshop and the foundry will give up their youth; some complaisant member of our profession, holding or *expecting* to hold, a factory appointment, may be found willing to accept them as pupils without a fee; and a gross professional wrong, maturing for years, may find its consummation so soon as the fortunate neophyte has crossed the portals of the medical profession. It behoves all of us therefore to watch narrowly subsequent nominations emanating from the same quarter. The whole tribe of incompetent mediocrities and subservient hangers-on may, in this instance, sing a pæan over our failure; but if any future Redgrave or Coles, trusting to this as a precedent, should contemplate the perpetration of a similar injustice, there shall at least be found on record the indignant protest of an outraged profession. I am, &c.

Oldham, March 2. BETA.

LONDON INSTITUTION.—Mr. Carter Blake's lecture on Wednesday last was devoted to an exposition of the principal *classificatory* characters afforded by the four great groups of *Mammalia*, known as the *Lyencephala*, *Lissencephala*, *Gyrencephala*, and *Archencephala*. He divided the *Lyencephala* into the orders *Monotremata* and *Marsupialia*, the latter being subordinated under the families *Rhizophaga*, *Poëphaga*, *Carpophaga*, *Entomophaga*, and *Sarcophaga*. The *Lissencephala* were divided into the orders *Rodentia (Nonclaviculata* and *Claviculata)*, *Insectivora*, *(Talpidæ*, *Soricidiæ*, and *Erinaceidæ)*, *Cheiroptera (Frugivora* and *Insectivora)* and *Bruta (Bradypodidæ*, *Dasypodidæ*, and *Edentulæ)*. The next lecture will be devoted to the subclass *Gyrencephala*.

(a) In the town of Oldham, the mortality amongst Medical men has been perfectly appalling. Only three of those practising eleven years ago are now alive. During that period twelve have died; nine of these died before attaining the age of 46, and nine either primarily or secondarily of brain disease.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 24.

Dr. BABINGTON, President, in the Chair.

A PAPER, by Deputy Inspector-General T. LONGMORE, was read, entitled,

REMARKS ON TWO CASES OF KELIS.

The writer referred to the Paper by the late Dr. Addison, in the thirty-seventh volume of the Society's *Transactions*, on the "Keloid of Alibert," and on that form of kelis which he (Dr. Addison) considered to be of a distinct character, and which he designated "true keloid." The two cases now brought to the notice of the Society were very striking illustrations of these two forms of keloid disease; but the writer was led to question whether evidence was not afforded by them that they were only simple varieties of one and the same affection, dependent upon the same keloid constitution of the dermal tissue, and owing their different features solely to the differences in the exciting causes. In the first case, the disease was developed after punishment, by flogging, of a comparatively light nature. There was scarcely any laceration of the skin. About three months after the date of punishment, the soldier noticed a growth upon the spot where the flogging had been chiefly received. This growth gradually increased from a small round tubercle to a large flat mass, nearly as large as a man's hand. It was not accompanied with pain, but there was irritability, itching, and tenderness, when the part was subjected to the pressure of the cross-belt and weight of the knapsack. On the front of the patient's chest were several small tumours, evidently of the same nature, but the date of the first appearance of these growths could not be ascertained. The disease in the second case was more extensive then had been described by any writer hitherto, and presented a most remarkable appearance. It was of the kind which Dr. Addison considered should be separated from the former variety under the name of "true keloid." The patient, a cavalry soldier, of strong, powerful frame, went to India with his regiment in November, 1857. Five months afterwards, at the commencement of the hot season, he began to suffer from lichen tropicus, in common with all the other men of the regiment. About a month afterwards, the keloid disease began to show itself, in the form of a few prominent red tubercles on the right fore-arm. It next appeared over the middle of the sternum, and thence extended gradually toward the two sides of the body. At the same time it appeared on the left shoulder and various parts of the back, and continued to spread until it had covered the entire dorsal surface of the body. The skin of the face was also affected. The physical characters and accompanying symptoms of the disease in both instances were fully described in the historical accounts of the cases presented to the Society. Their characteristic features were represented in the drawings and photographs. The writer urged that no two more striking examples of the two species, "true keloid" and "spurious keloid," according to those who designate them as distinct species, could be met with than the cases brought to the notice of the Society. He argued, however, that, in the case in which the kelis was excited by flogging, the comparative slightness of the punishment, the rarity of such a consequence, but more particularly the presence of the keloid spots in their favourite habitat—the skin covering the anterior part of the chest—established the constitutional nature of the disease, just as fully as it was established in the second case, where it appeared to follow the excitement of the prickly heat. The fact, too, that the general character of the diseased growths in both instances were alike, and that in each instance the hypertrophy was greatest where the pressure of the cross-belt was chiefly exerted, confirmed still further the identity of their nature. The deduction was hence drawn, that, both the patients being of a keloid diathesis, the difference in the mode of distribution, and in some of the features, of the diseased growths in the two cases could be accounted for by the different natures of the exciting causes. No treatment had appeared to exert permanent beneficial change in either case. The fact that the pressure of the cross-belt acted in

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each instance as a stimulus to increased growth was held to be a sufficient argument against treatment by continued pressure, which had been recommended by some Surgeons. The evidence of the constitutional origin in the case where the chief tumour was isolated upon the left shoulder, as well as the nature of the immediately exciting cause, had counter-indicated any attempt at cure by extirpation.

Mr. Partridge asked Mr. Lee to give the result of a case of kelis on which he had operated some years ago.

Mr. Henry Lee said that in that case the arms were bound down to the side by contractions of the skin from the disease. There were, however, no interstices. He divided the adhesions, but interfered with the kelis as little as possible. The result was very satisfactory.

Dr. Greenhow said that a few months ago he saw a young lady who had had a small tumour removed from the shoulder. The cicatrix became hard, and increased in size. It was removed three times, but it recurred again, and when Dr. Greenhow saw her last, there was a pink, hard, and elastic swelling. He advised that it should not be again removed. He found that she had had a number of boils, and that the scars left by all of them had become hard. The small tumour on the shoulder formed in the site of a boil.

Mr. Curling considered Mr. Lee had been fortunate in his case, as keloid disease generally returned in the cicatrix after excision. Some years ago, he had under his care, in the London Hospital, a case of extensive keloid growth in the cicatrix of a burn on the neck and chest, in which steady pressure and other means were tried without success. The friends wished something more to be done, but, before venturing to excise the whole of the disease, he removed a small isolated growth, but it returned, and he therefore declined performing any further operation. The case afterwards came under Mr. Skey's care at St. Bartholomew's Hospital, and was operated on there, but he did not know with what result. Mr. Curling doubted whether the two cases described by the author were genuine examples of the two forms of keloid disease described by Dr. Addison. Both appeared to him to belong to the form called spurious keloid, though the second did not arise from any injury to the skin. He spoke with some reserve, as the diseases were rare, and he had witnessed only one case of the true keloid. He differed from the author in regarding the diseases as quite distinct, and, therefore regretted that the same term keloid had been applied to both of them by Dr. Addison. In the true keloid, the skin was extensively affected, became like parchment, the part was "hide-bound" and shrunk. Such was the condition in the case he had witnessed, where the side of the face, the neck, and both arms were affected, the motions of the limbs being impeded. In both the cases described by the author, the skin was hypertrophied, and tubercles or swellings existed.

Mr. Partridge mentioned the case of a young lady who had had boils, in the scars of which were little tumours. One the size of a pea was removed, but the disease returned in the scar of the incision, and also in the scars of the punctures made in closing the wound. The disease was again removed, but it returned.

The Author then briefly replied.

Dr. Robert Lee gave

AN ESTIMATE OF THE EXTENT TO WHICH HUMAN LIFE HAS BEEN PROLONGED OR ABRIDGED BY OVARIOTOMY.

Dr. Lee, after stating that statistical tables of ovariotomy have been compiled with great labour at different periods by various eminent individuals, proceeds to analyse the tables of Dr. Clay, published in 1860, which comprise in all 567 cases. Of these, 242 were considered successful, and in 235 the patients died from the direct effects of the operation. If 477 cases be deducted from 567, there will remain 90 cases. Whether, however, life was prolonged or abridged in these cases, Dr. Lee cannot state, as he has been furnished with no information on the subject. The author avers that since 1860 the operation of ovariotomy has been performed in numerous cases in Great Britain, and that a number of fatal cases have occurred of which no report has been published. In illustration of this statement, he gives brief accounts of thirteen unsuccessful cases, not hitherto published, of which he has obtained information. Dr. Lee concludes his remarks with the statement that he considers it demonstrated that ovariotomy is an unjustifiable operation where the life of the patient is not in immediate danger, and where there is not a great probability of the life of the patient being saved by the removal of the disease.

Mr. Macilwain thought that what was wanted was more accuracy in diagnosis, and had no doubt that there had been even worse mistakes than Dr. Lee had enumerated, and that a great many had died from a want of knowledge of certain circumstances previous to operation. He considered that the facts required to decide a question so important could not possibly be gathered by any single person, however large his experience might be. But by a vigorous action of this Society, enough facts might be accumulated in a few years from which more definite conclusions could be drawn. He considered that this disease ought to be studied from the laws of general pathology, and he felt convinced that the danger of removing the ovary had been exaggerated. He had observed that Mr. Spencer Wells, in his paper on the subject, seemed to regard the after-treatment as the Alpha and the Omega. It was to be repose. Mr. Spencer Wells had given him the addresses of twelve women, residing in the suburbs, who had been operated on, and who are now quite well. He had seen ten of these cases, and he felt convinced that the question of ovariotomy was worthy of most serious consideration, and that it should not be the subject of mere hostile interchange of opinions. The first case he saw (and he would add that they were all pretty much alike), was a young woman from whom Mr. Wells had removed a tumour weighing forty pounds. She and the other nine were quite well. He regretted very much that he had not had the pleasure of Dr. Lee's company. In conclusion, he begged respectfully to suggest to the Council that they should issue a series of questions for the collection of information on cases of this operation. In two years, he thought, a sufficient amount of evidence would be obtained.

Mr. Baker Brown stated, that so far from finding fault with Dr. Lee for bringing this subject so frequently under discussion, he felt extremely obliged to him for so doing, feeling convinced that the greater the investigation the greater must necessarily be the elimination of truth; that he (Mr. Brown) had openly and frankly published every unsuccessful case which had occurred in his own hands, and he believed, as a rule, other ovariotomists had done the same; that he had performed the operation fifty-three times during the past twelve years, the result being twenty-nine recoveries and twenty-four deaths; that, as far as he knew, only two of these had subsequently died—one from fever, after making a perfect recovery; the other from the recurrence of disease in the other ovary, which at the time of operation was perfectly healthy, and which, as he understood, had lately been removed by another gentleman, and followed by death in three or four days. The mortality of his practice of late years, had been very much less than during the first years, as evinced by the fact that, in the London Surgical Home, of the thirty-one operations performed, there had been only ten deaths; and of the last fifteen operations there, and in private practice, he had only had four deaths. Mr. Brown had been surprised to hear Dr. Lee assert that some speaker on the last occasion on which Dr. Lee had brought this subject before the Society had stated that the operation was simple and not dangerous. Mr. Brown, on the contrary, believed it to be the most dangerous operation that was ever performed; so dangerous, indeed, did Mr. Brown consider the operation, that he never on any occasion advised a patient to have it performed; that he placed the facts of the case frankly and fairly before the patient, and having done so, left her, assisted by her friends, alone to decide; and although easy of performance, it could not be called a simple operation, as the complications were often of the most serious nature. It was not an operation requiring great Surgical skill, but plenty of nerve. Mr. Brown observed, that the most important part of the question was that of diagnosis; that, although he had devoted more than thirty years of his life to the careful study of this subject, and had paid especial regard to the question of diagnosis, he unhesitatingly affirmed that there were no rules which could be laid down so absolute as to enable any Surgeon to diagnose with perfect certainty before operation. He would therefore express a strong hope that Dr. Lee would continue to give his great powers of mind and investigation to the solution of this most difficult problem, believing that he would thereby do more good service, and strengthen the hands of the operating Surgeon, than by any further attempt to discourage ovariotomy. Dr. Lee stated that he had inquired of a Surgeon whether, if he were a woman, he would have submitted to the operation, to which inquiry no answer had been returned. Mr. Brown observed that he could not enter into the question in the way

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placed by Dr. Lee; but he could assert that ten years ago he had performed this operation on his own sister; that she had since married, had lately been confined in New Zealand of her fifth girl, and had never had any illness from the date of the operation; that he should, if occasion arose, follow the same plan in any one near or dear to him, if it were a case suitable for operation. Therefore, in conclusion, Mr. Brown observed that he did consider this operation justifiable, and it ought to be recognised as a legitimate one in Surgery.

Dr. Tyler Smith said that the fatal case in his practice to which Dr. Lee had referred was very inaccurately stated. It was not a case of ovarian disease at all, but of cancerous tumour of the mesentery. The patient was in extreme danger at the time, and had been warned of the probable result of the attempt at operation. He thought it unfair that Dr. Lee should bestow so much time in seeking out the unsuccessful cases, while he paid little or no attention to those which were successful. This plan was as unreasonable as it would be to test any point of Medical or Surgical practice by visiting a cemetery. Dr. Lee maintained, as one of his chief grounds of objection to the operation, that in many cases of ovarian tumour the progress of the disease was so slow that, taking those who were killed by the operation and those who recovered into account, the average duration of life was not, on the whole, prolonged by ovariotomy. On this point his opinion deserved every possible attention. All knew that occasionally cases were met with where tapping was borne a great number of times, or where the tumours remained almost stationary for many years, so that such patients might, and sometimes did, actually reach the ordinary term of life. In the greater number of cases the progress of disease was, however, more rapid, and a time sooner or later came in which life was threatened, and interference, either by tapping or removal, became necessary. Still, the facts respecting the occasionally chronic character of these tumours, as insisted on by Dr. Lee, ought to be well weighed in regard to the operation in every given case. They had undoubtedly an important bearing on ovariotomy. Mr. Spencer Wells had, on the last occasion on which the subject was discussed by the Society said, in reference to this question, that ovariotomy did not differ from other operations, and that the healthier the patient at the time of the operation, the greater were the chances of success; while Mr. Hutchinson maintained that the earlier it was performed the better. He (Dr. Tyler Smith) held a different opinion. There was a great peculiarity about ovarian disease—namely, that beyond the material abstracted from the system, it was only injurious by mechanical pressure. These tumours did not otherwise threaten life. It was not therefore right, in his belief, to operate until the health began decidedly to give way. Of course we ought not to wait till the health was so completely broken as to destroy the chances of the success of the operation. But there should be unmistakable signs of mischief from further delay before we were justified in resorting to ovariotomy. Otherwise there would be many cases of success, but mixed up with them would be cases of women cut off suddenly in the prime of life, merely the subjects of mechanical discomfort, and who but for the operation would have lived many years. Such cases must cause great regret to any operator. He believed that, as regarded the prospect of operating successfully, we did not lose anything by waiting till the disease had begun to threaten life. There was a well-known axiom of John Hunter, that "health bears disease ill." This might be applied to Surgical operations, and persons in good health did not, according to his (Dr. Tyler Smith's) experience, bear ovariotomy so well as those who were in a lower condition. In the latter there was far less risk of peritonitis; and it was acknowledged that women between fifty and sixty years of age, who had passed the meridian of strength, recovered better than the young or middle-aged. Nor was anything lost by waiting. The only evil of such delay as he recommended was the possible formation of adhesions, but even these adhesions did not greatly diminish the chances of success. At all events, we ought not, for fear of their occurrence, to expose women in fair health to the chances of a sudden and violent death. The objections of Dr. Lee were not, then, in his opinion, sufficient to condemn the operation, but only its indiscriminate performance. He had as far as possible gone upon the principles now laid down, and out of fifteen cases twelve had recovered; and he had only made the one error of diagnosis in the case adverted to by Dr. Lee.

Mr. Spencer Wells repudiated altogether the practice attributed to him by Dr. Tyler Smith, of performing ovariotomy in all stages of ovarian disease. In both the papers which he had read before that Society, and in one read before the British Medical Association at Canterbury, he had stated his belief, as clearly and strongly as he could, that, while it was wrong to put off any serious operation until the health of the patient was so broken down that there could be no reasonable hope of success, on the other hand, it was wrong to advise any patient to submit to any serious operation unless her life was seriously endangered by the disease. It was by care in the selection of cases that the judgment of the Surgeon must be tested. If he performed ovariotomy before it was rendered necessary by the progress of disease, he would often lose patients who might live for years without operation; but if he did not operate till the disease was very far advanced, his operations would be unsuccessful because they were performed too late. In all his own cases he was guided by these considerations, and there was no foundation for the statement that he performed ovariotomy indiscriminately. Some of Dr. Lee's arguments were also very unfair. He had alluded to one case in which death had followed an incision made into an ovarian tumour at the Westminster Hospital. He (Mr. Wells) knew nothing of the case; but it was obviously wrong to call that case one of attempted ovariotomy because the operator chose to tap with a scalpel instead of with a trocar, in order to empty a cyst more completely of viscid contents. This had to be done occasionally to give temporary relief in cases where ovariotomy could not be thought of. Then Dr. Lee ignored altogether the fact, that fatal cases after tapping were constantly occurring, but no one thought it worth while to record them. It was said to be the natural progress of disease, which tapping could not check. But patients frequently died in a few days, or a few weeks after tapping, whose lives probably might have been saved by ovariotomy. Dr. Lee had shown great industry in collecting unrecorded cases of failure, but nothing would induce him to see patients who had recovered after ovariotomy, and remained in good health. In reply to a request from Dr. Lee, he (Mr. Wells) had given him, some weeks ago, the names of twelve patients, all living within three miles of Savile-row, and told him that he could see them at his own time. Dr. Lee first arranged to see them with Mr. Macilwain; but, at last, Mr. Macilwain was obliged to go alone, and Dr. Lee had not seen one of these patients. It was as unfair to ignore successful cases and make fatal cases only known, as the opposite error, for which Dr. Lee so pertinaciously charged his opponents. Doubtless, some unsuccessful cases had not been reported; but the same might be said of successful cases. That very morning, Dr. Royle, of Manchester, had called upon him (Mr. Wells), and told him of two successful cases which he had not published. In addition to the statistics given by the two previous speakers, Mr. Wells stated that, besides one case in which he had performed ovariotomy for the second time on one patient, he had operated in fifty-five cases, with a result of eighteen deaths and thirty-seven recoveries. In his later cases his success had been much greater than in his earlier cases; for of the last twenty cases eighteen had recovered, and only two had died. These facts were quite enough to prove that the time had passed when an operation performed with such results could be denounced by any man of sound judgment as "unjustifiable." Mr. Wells concluded by expressing the hope that the Council would adopt the suggestion of Mr. Macilwain, would appoint a committee, and would instruct that committee carefully to inquire into the condition, years after operation, of those patients who had recovered.

Mr. Charles Hawkins urged on the Society the adoption of Mr. Macilwain's proposition. He considered that there was a tendency to regard the operation with greater favour than before. He agreed with Mr. Baker Brown, that the question should be fairly stated to the patient. It was a very remarkable thing that the leading Surgeons had not expressed any opinion on the subject. He had attended all the discussions on the subject, in the hope that they would; but, with the exception of those who had made diseases of this class a specialty, not three of the leading Surgeons had said anything either for or against the operation. He was surprised that so little attention was paid to the fact, that women with ovarian disease often live a long time. In one instance a patient lived twenty years, and was tapped three times in that period. There was this in favour of the operation, that, if the patie

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got well, they kept well; but then, in the unsuccessful cases, many might have lived with the disease who were cut off by the operation. Mr. Spencer Wells had spoken of patients frequently dying after tapping, but he thought this was really rare. It was quite clear that what was wanted was greater certainty in diagnosis, and also a better account of patients who have been left alone. He did not see any harm in finding out unsuccessful cases, and thought it not wrong to go to churchyards to study diseases. He concluded by seconding Mr. Macilwain's suggestion.

Mr. Curling did not think the remarks made by Mr. Hawkins respecting the silence of Hospital Surgeons should pass without receiving some reply. The fact was, only a small number of operations for ovariotomy had been performed in the metropolitan Hospitals. With the exception of one large Hospital, it was only in recent years that an obstetric department had been attached to these institutions, so that comparatively few patients labouring under ovarian disease apply there for relief. They resort chiefly to obstetric Physicians, and to Surgeons who cultivate a special department of practice—the diseases of women. It has been questioned whether a large Hospital is the best place for the performance of this important operation, and certainly no Surgeon would be justified in undertaking it whilst pyæmia or erysipelas prevailed in the wards. Then, the application for the admission of other cases are so pressing that it is sometimes difficult to devote a ward solely to a case of ovariotomy. On a recent occasion, at the London Hospital, his colleague, Mr. Maunder, had to wait some weeks before he could obtain a suitable ward for the treatment of an ovarian case. Hospital Surgeons, however, do not shrink from undertaking these operations in suitable cases, sanctioned by their obstetric colleagues. Four operations had been performed at the London Hospital, two of which were done by himself. He believed that the particulars of them had been published. One was successful, and three died. The reason why Hospital Surgeons did not take a prominent part in these discussions on ovariotomy was, because they could speak only from limited experience.

Dr. Lee said his attention had been called to ovariotomy at an early period, in consequence of a fatal case having occurred, in which a fibrous tumour of the uterus was mistaken by another Physician for a tumour of the ovarium, and removed. He (Dr. Lee) resolved to investigate the whole subject of the pathology of the ovaries in relation to this operation. With this view he examined carefully every case of ovarian disease that came under observation, preserved accurate written histories, and where death took place the bodies were examined, for the express purpose of determining whether life could have been preserved by ovariotomy. This, he conceived, was the only method by which a knowledge of the diagnosis and prognosis and treatment of ovarian disease could be acquired. Dr. Lee said that he had published 170 cases, and could now communicate double that number. The result of all these inquiries was, that it was impossible in any case to determine before actually laying open the abdomen what the condition of the viscera was, and hence it was not justifiable to perform such a dangerous operation in the dark or at a venture. He thought it most unphilosophical to set aside the experience of the whole world during a long course of years, and now to substitute in its place the experience and the marvellous and boasted success of a few Practitioners during the last two years. The tables referred to in the paper contained abridged histories of 567 cases of ovariotomy — all that had occurred from the period of the first operation in America, about forty-five years ago, up to February, 1860. Of these 567 cases, 242 were stated to have been successful; and 235, or about one half, died speedily after the operation. There then remained 90 cases wherein the operation of ovariotomy was performed, the greater number of which might justly be added to the list of fatal cases, though they had been included in the list of recoveries. The fact being now universally admitted that the diagnosis of ovarian disease was most difficult, the prognosis uncertain, and the operation of ovariotomy fatal in a large proportion of cases, or 50 per cent., he (Dr. Lee) continued to think that it was unjustifiable, except under the circumstances stated at the conclusion of the paper. The personal remarks which had been made he considered it unnecessary again to notice. No one had ventured to impugn the accuracy of the statements made in the paper. In the course of his observations, Dr. Lee said he considered it not only unscientific, but an inhuman act, to publish all the successful and conceal many fatal cases; and added that he had performed the operation of ovariotomy frequently on the dead body, but never on the living subject. He had, however, recently witnessed the performance of the operation by Mr. Spencer Wells, and a most horrible sight it certainly appeared. The bowels gushed out of the wound, reminding him of the fate of Judas Iscariot. Yet the patient was reported to have recovered; thus showing how very great an injury might be inflicted on the abdominal viscera without causing death, which he considered a striking physiological phenomenon. Some of the occurrences which had taken place during the last twelve months he considered an opprobrium to Surgery and Midwifery. In a case which occurred some years ago in St. George's Hospital, Dr. Lee stated that he had called a consultation of the Surgeons, observing that if the operation was ever to be performed, this was a proper example. The Surgeons refused to operate, unless Dr. Lee gave his sanction, which he could not do conscientiously, believing the patient's life to be in no immediate danger. This young woman had been operated upon by Mr. Spencer Wells, and she was now alive. More recently a case of ovariotomy had occurred at St. George's Hospital, but he (Dr. Lee) never saw the patient, and was not called upon to give any opinion respecting the operation, and therefore was in no way responsible. In conclusion, he referred to a case that had occurred to Mr. Spencer Wells the day before, and, respecting which, it had been reported to him that it was ascites, and not ovarian dropsy.

MEDICAL NEWS.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, February 26, 1863:—

James Hunter Armstrong, Harmer-street, Gravesend; George Branston Valentine Nash, Royal Infirmary, Liverpool; Robert Slade, Pool, Dorset.

The following gentleman also on the same day passed his First Examination:—

Francis W. S. Wicksteed, St. Bartholomew's Hospital.

APPOINTMENTS.

Albiston, Russell, M.D. Edin., has been appointed Certifying Surgeon under the Factory Act.

Barnes, George, L.R.C.P. Edin., has been appointed Certifying Surgeon under the Factory Act.

Boos, Robert, M.R.C.S., Eng., has been appointed to act as Deputy Coroner for North Somersetshire.

Bonthron, Andrew, M.D. Edin., has been appointed Surgeon Superintendent, on behalf of the Queensland Government, to its immigrant ships. First, the S. S. *Cariegorm*.

Duke, Stephen, M.D., has been appointed House-Surgeon to the Great Northern Hospital, King's-cross.

Duff, Robert, M.D. Aberd., has been appointed Consulting-Physician to the Royal Infirmary, Aberdeen.

Hare, Charles J., M.D. Cantab., has been appointed Professor of Clinical Medicine at University College Hospital.

Harden, George J., M.D. St. And., has been appointed Assistant Medical officer to the County Lunatic Asylum, Worcester.

Hogg, Jabez, M.R.C.S. Eng., has been appointed Surgeon Oculist to the Royal Masonic Schools.

Kidson, Dr. John S., M.R.C.P. Lond., has been elected Physician to the Cheltenham General Hospital.

Kirkwood, William, M.D., has been appointed a Member of the Executive Council of the Bahama Islands.

Penny, George S., M.R.C.S. Eng., has been elected Surgeon-Dentist to the Cheltenham General Hospital.

Ringer, S., M.R.C.S. Eng., has been appointed Professor of Materia Medica at University College Hospital.

Saunders, Edwin, F.R.C.S. Eng., has been appointed Surgeon-Dentist to the Prince of Wales.

Thomson, John, L.F.P.S. Glasg., has been appointed Certifying Surgeon under the Factory Act.

Timson, William P., has been appointed Certifying Surgeon under the Factory Act.

Wintersottam, Lauriston, M.R.C.S. Eng., has been appointed Surgeon to the Cheltenham Female Orphan Asylum.

DEATHS.

Boyle, William, M.D., of the Bengal Medical Service, at 19, Blacket-place, Edinburgh, on March 1.

Borland, James, M.D., Inspector-General of Army Hospitals, at Bridgeman House, Teddington, on February 27, aged 80.

Campbell, John, M.D., Surgeon R.N., at Elm-grove, Southsea, on Feb. 24

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GRANT, CHARLES, L.R.C.P. Edin., at Heanor, Derbyshire, on February 23, aged 35.

GROVE, Dr. W., formerly of York, on January 31, at New York, aged 68.

GUGGENBÜHL, Dr., the well-known founder of the Abendberg Institution for Cretins, beautifully situated near Interlacken, and as to the efficiency of which so much controversy has prevailed in Switzerland, has just died at Bale. He has left 500,000 francs to the Moravian Brethren on condition that they continue the Abendberg Establishment, under the title of the Guggenbühl Hospice.

LINDSAY, WALLACE, at Corosal, British Honduras, on December 31 last, Staff-Assistant-Surgeon (of Edinburgh), aged 25.

MCNICOLL, THOMAS, M.R.C.S. Eng., at 102, Crown-street, Liverpool, on March 1, aged 41.

SCHMITZ, C. T., M.D., Assistant-Surgeon at Fort Lahore, at Cape Town, on December 24, aged 25.

STUART, JOHN GRAHAM, M.D., H.E.I.C.S, at 54, India-street, Edinburgh, on March 1.

WALKER, JOHN, M.D., at Richmond Lodge, Trinity, Edinburgh, on March 1.

WOODS, Dr. W. H., Surgeon R.N., at Sandford, near Dublin, on February 20, aged 36.

WOODS, R., Surgeon, at Ilchester, on February 21.

THE Geological Society has awarded the Wollaston Gold Medal to Professor Gustav Bischoff, of Bonn; and the Wollaston Donation Fund to Professor Senft, of Eisenach.

HEREDITARY LONGEVITY. — The papers have lately noticed the death of a Mr. David McVey, aged 101. This gentleman's maternal grandmother lived to 103, his mother to 100, his sister to 92, and a brother, present at his funeral, is now nearly 90 years old.

"PHYSICKED MEAT."—The *Times'* report of a recent case tried at the Central Criminal Court, in which a man named Robert Buxton was found guilty of having sent meat unfit for human food to market, attributes the following evidence to Dr. Letheby:—"Dr. Letheby proved that he examined a portion of the beef, and found it in a most diseased state, and when analysed, he found it to be charged with physic."

INCREASE OF POPULATION IN QUEENSLAND. — On the third anniversary of the separation of Queensland from New South Wales, the *Brisbane Courier* stated that the population with which this new colony started in December, 1859, was about 25,000, and at Michaelmas, 1862, the number was 42,000, and in December was not less than 46,000. The population has thus nearly doubled itself in three years.

HEALTH OF THE NIGER EXPEDITION. — Lieutenant Lefroy's letter which was published in the *London Gazette*, gives an excellent account of the health of the men employed in the ascent of the dreaded river Niger. He writes: "I am happy to state that during the fifty-three days her Majesty's ship *Investigator* was up the river the health of the ship's company was exceedingly good, only a few cases of slight fever occurring, and that among the men received from her Majesty's ship *Brisk*, who had not been accustomed to the river work, my own men remaining perfectly healthy."

THE entire staff connected with the Royal Artillery and Royal Engineer Hospitals at Brompton barracks, Chatham, together with the patients and attendants, vacated the Hospitals on Saturday afternoon, and took possession of Fort Pitt Hospital, which will in future be used as a general Hospital for the entire garrison, on the removal of the Army Medical School and staff to Netley Hospital. A portion of the Hospital hitherto used at Brompton barracks is still to be retained for the purposes of a Hospital, in which the sick troops will be received and inspected previous to their removal to Fort Pitt.—*Times*, March 2.

OVARIOTOMY IN FRANCE.—It will be seen, from our account of the distribution of the prizes in the gift of the Paris Academy of Medicine, that if the cases of ovariotomy have been few in France, their importance is duly appreciated. A reward of 2000 francs has been appropriated from Baron Barbier's bequest (a large sum left to reward the discoverer of a cure of incurable diseases, or the nearest approach to this) to Dr. Kœberlé, Assistant-Professor at the Faculty of Medicine of Strasbourg, for two successful cases of ovariotomy performed by him. These were the first successful operations performed in France.

GENERAL TOM THUMB.—The American papers contain the revolting announcement that a miserable little dwarf, under the name of General Tom Thumb, has been married to another dwarf of twenty-one years old and thirty-two inches high. We believe that the original Tom Thumb died, a few years ago, in poverty and neglected in a European Hospital. Whether this be the case or no, we may safely assert that it is only in America, where a clergyman married the Siamese Twins, that two of the same cloth could be found to perform the ceremony of marriage between a dwarf thirty inches high and another of thirty-two inches.

A NEW LITHOTRITE.—The accompanying is an engraving of a new Lithotrite recently constructed by Messrs. Weiss and Son, and to which we alluded in our report of the proceedings of the Medico-Chirurgical Society, in our impression of January 31. The improvement consists in the movement which attaches and releases the screw power in connexion with the male blade. This renders the instrument more simple in its action than the French Lithotrite, as the change from the screw to the sliding action can be effected by placing the thumb or finger of either hand on the button, A, without in the slightest degree relaxing the grasp, and the movement being effected in a line with the shaft, produces less motion or concussion than the rotary movement hitherto employed. It is also more powerful than the Lithotrite just referred to, and the power is capable of being very gradually applied. The cylindrical form of the handle is also a decided improvement, as it is extremely firm in the grasp of the operator, and admits of the most delicate manipulation when held only between the thumb and finger. The mechanism is of the simplest, and, at the same time, of the strongest and most solid construction; it can be readily taken to pieces for cleaning, is as easily readjusted, and is not liable to derangement of any kind.

CONVICTION FOR CRIMINAL ASSAULT. — A man named Hugh Rankin has been sentenced at the Newcastle Assizes to two years' imprisonment, with hard labour for criminally assaulting a girl of 11½ years of age. The principal evidence against the prisoner appears to have been the stained condition of the girl's linen. It was urged, on the part of the defence, that this might be attributed to natural causes. We should be glad to know what examination of the stains was made in this case.

DISTRIBUTION OF PRIZES AT THE PARIS ACADEMY OF SCIENCES FOR 1862.—1. The Grand Prizes on the Physical Sciences—"The Comparative Anatomy of the Nervous System of Fishes." No memoir is considered to have fulfilled the conditions laid down, and the prize is adjourned until 1864, an encouragement of 1500 francs being in the meantime accorded to MM. Philipeaux and Vulpian for their memoir. The prize on "Vegetable Hybrids" has been accorded, with many eulogiums, to M. Naudin, of the Natural History Museum. 2. Prize on Experimental Physiology—"On the Cardiac Circulation." A prize of 1800 francs has been decreed to M. Ballanti, and one of 1200 francs to MM. Chauveau and Marey. 3. Prize in Medicine and Surgery. Three prizes have been adjudged for works on Pathological Anatomy, one of 2500 francs to M. Cruveilhier for his work on General Pathological Anatomy, one of 2000 francs to M. Lebert for his work on Pathological Anatomy, and one of 2000 francs, to Professor Frerichs, for his work on Diseases of the Liver. An encouragement of 1500 francs has been given to M. Larcher for his researches on the "Hypertrophy of the Heart during Pregnancy," one

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francs to M. Cohn for his work on Embolism, and a third of 1600 francs has been divided between MM. Dolbeau and Luys for researches on Epispadias. 4. The Alhambert Prize—"Experimental Study on the Modifications which the Action of External Agents may Exert on the Development of the Vertebrata," has been divided between Prof. Lereboullet, of Strasbourg, and Prof. Dareste, of Lille. 5. The Breant Prize for a discovery of a cure for cholera has, of course, not been decided; but 2000 francs of the bequest has been adjudged to M. Barralier for his demonstration of the Non-identity of Typhus and Typhoid Fevers.

PRIZES AND PRIZE QUESTIONS AT THE PARIS ACADEMY OF MEDICINE.—The Academic prize for 1862, subject "The Natural Course and Expectant Treatment of Pneumonia," was divided between two competitors, MM. Molland and Duclout. The Portal Prize, "Vascular Obstruction of the Lungs," was not adjudged, 300 francs being decreed as an encouragement to MM. Colin and Goubaux. For the Bernard de Civrieux Prize of 2000 francs, for a memoir on the "Moral Treatment of Nervous Diseases," there were ten candidates. To M. Padioleau was decreed a reward of 1000 francs, and to MM. Pastural and Artance an encouragement of 500 francs each. For Baron Barbier's Prize there were eleven candidates. A reward of 2500 francs was decreed to M. Kœberlé, of Strasbourg, for his account of two successful ovariotomies; and one of 1000 francs to MM. Vulpian and Charcot for their memoir on "Progressive Wasting Palsy." The Capuron Prize, "Pemphigus of New-born Infants," was decreed to MM. Olivier and Ranvier. For the Orfila Prize, "Poisonous Fungi," three memoirs were sent in, none of them obtaining it. Numerous medals were also adjudged to Vaccinating-Physicians, Epidemic-Physicians, and Mineral-Water Medical Inspectors. The following are the *Prize Subjects for* 1863:—1. The Academy Prize, 1000 francs, "Malignant Pustule (*maladies charbonneuses*) in Man and Animals." 2. Portal Prize of 1000 francs, "The Pathological Alterations of the Placenta, and their Influence on the Development of the Fœtus." 3. Madame Bernard de Civrieux Prize of 1000 francs, "Dyspepsia." 4. Capuron Prize of 1000 francs, "Compare the Advantages and Inconveniences of Pelvic Version and the Application of the Forceps in cases of Narrow Pelvis." 5. Lefevre Prize of 2000 francs, "Melancholia. 6. Amussat Prize of 1000 francs. This prize will be decreed to the author of the work or of researches, simultaneously based upon anatomy and experiment, which realises or prepares for the most important advance in Surgical Therapeutics. 7. Barbier Prize of 3000 francs. To be decreed to the discoverer of a complete cure of diseases reputed usually as incurable, as hydrophobia, cancer, epilepsy, scrofula, typhus, cholera, etc. Recompenses will be adjudged to those who, without attaining this end, have approached it most nearly. 8. The Argenteuil Prize of 12,000 francs. This magnificent sexennial prize will be decreed to the author who has made the greatest improvement in the curative Treatment of Stricture during the period 1856-62; or subsidiary to this to the author of the greatest improvement during these six years in the treatment of other Diseases of the Urinary Organs. *Prize Subjects for* 1864:—1. Academy. "Exhibit by the aid of clinical facts the complications which may occur during the course of Acute Rheumatism on the part of the nervous centres and their membranes." 2. Portal. "What is the condition of the nerves in Local Paralyses." 3. Bernard de Civrieux. "The history of Ataxie, Locomotive Progressive." 4. Itard. This triennial prize of 3000 francs is decreed to the author of the best work on Practical Medicine or Applied Therapeutics. The work must have been published at least two years. 5. Orfila (600 francs). "Poisonous Mushrooms,—Give their general characters, especially such as may be generally appreciated; examine into what effects are exerted upon their poisonous or eatable qualities by climate, exposure, soil, culture, and periods of the year; separate the toxical principles, indicate their physical and chemical characters, and exhibit the means proper to detect their presence in cases of poisoning; examine whether it be possible to separate or neutralise the poisonous principles, and in the latter case determine what has taken place during the decomposition or transformation which has occurred; examine into the action of poisonous mushrooms upon the organism, the means to prevent this, and the remedies which should be opposed to it." 6. Barbier Prize as in 1863.

INDIAN MEDICAL SERVICE.—(From the *Englishman*, December 19).—Sir Charles Wood's victims out here are not exactly quite so purblind as he thinks them, especially when their own vital interests and rights are concerned; if they cannot always see which way the wind blows when a few odd straws are thrown up, they can pretty well perceive how the atmospheric current is setting when a whole sheaf is scattered in the air. The Medical officers of the late Company's armies have, for a long time, thought and felt that they had suffered serious injustice at Sir Charles's hands, and latterly appear to have settled down into that apathy which marks the demeanour of people who believe that their cup of despair is full. But in this assumption they have been mistaken; as they have just now received the greatest discouragements yet, in our opinion, sustained by them as a service. The blow has been inflicted with a clumsy stealthiness which shows a sense of its injustice even on the part of him who delivers it, but which does not for a moment conceal it from those who are at all acquainted with the actions and manœuvres of the striker. If any person will take up the "Official Quarterly Army List" just published, and will open the pages assigned to the Medical department, he will miss from above the names of a number of officers the heading "Surgeon Majors," and he will find in a side column the date of arrival at that distinguished honour and exalted rank, notified by two small italics somewhat as the Brevet-Captains in the Sepoy Corps used to be indicated in former times. Perhaps it may be thought that this matters little, is of no real significance, and has been arranged by the compiler or printer of the Army List; but we can assure the medical service that such is by no means the case; and that, on the contrary, it is Sir Charles Wood's doing, through the military authorities in this country. Its significance only amounts to this, that the promises and provisions of the Royal Medical Warrant are not to be extended to the Indian medical officers; that their having served up to the rank of Surgeon Majors is to bring no material advantages whatever with it, and that, finally, it is only as it were brevet, or to speak more correctly, titular rank. We are not writing down hasty suppositions or assumed deductions, but are giving to the medical officers and the public the substance of the orders sent out by Sir Charles Wood to this country on the subject in question. There is nothing of doubt, assumption, or supposition about the matter; it is exactly as we have stated. In the Royal Army List the Surgeons Major remain as they have always been, and in the Royal Army their rank, that of Lieutenant-Colonel, carries all the advantages of that rank with it—pay, precedence, quarters, brass spurs, scuttles of coals, and dip candles, colonial allowances when abroad, and, in a word, everything that is desirable, useful, or trivial. But the Indian Medical Service is to "die out," and in the last days of its good and honourable career it is to be injured and insulted, and the faith of sovereign and country—of her Majesty's word and Warrant is to be broken with it by one of the most unjust and unscrupulous men who has held high official employ in England since the days of the Walpoles. In the Army List to which we have referred, it will be seen that the Surgeons who, by the terms of the Royal Warrant, were to rank as majors, have no rank whatever assigned to them, but as, even if they had it, it would bring them no real advantage, they are of course better without it. It is now fully obvious that for the Medical officers of the late Company's armies to expect anything like justice or consideration would be nothing short of stupid infatuation; that they have got all they will ever get from him; and that, in all probability, if he could take from them the little they still have, he would do so. They may now "die out."

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Toolesposre.—General Peel.

12 *st.* 7 *lb.*—You will pay your money, and you may take your choice.

Dr. J. Ogden Fletcher.—Our present arrangements do not permit us to publish births and marriages.

Methylated Spirits.—We may tell the chemists and druggists that the increasing distrust of the purity of drugs, and the belief that methylated spirit is largely used instead of pure spirit, is producing a most injurious effect.

WILLS, THE AUSTRALIAN EXPLORER.

The series of attempts which have been made by hardy explorers, under the auspices of the Royal Geographical Society, to explore the centre of

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Australia, have usually resulted in signal failure. Such, however, was not the case with the expedition which, on August 20, 1860, left Melbourne with the object of following in the steps of Leichardt and Stuart, under the command of the ill-fated Burke. The second in command, William John Wills, was the son of a Medical Practitioner, Dr. Wills, who formerly practised at Totness. We take the following extracts from a review of his life in the *Athenæum* :—

"As a child he was intelligent, and fond of associating with his seniors. A thoughtful, sedate, inquiring urchin, he was never treated as a mere schoolboy; but he was not the less ready to take part in athletic sports and the pursuits of the playground. At eleven years of age he was trusted alone with a gun, and was a notably good shot; and, having no dog to accompany him on his sporting excursions, he trained a favourite cat to follow him about the fields, and hunt the hedge-rows. At the Ashburton Grammar School, which he entered in his twelfth year, he gained no distinction at examinations. A hard-working, nervous boy, he was far from brilliant; and through the defect of a slightly-impeded utterance, he failed to take so good a position in the class as he would otherwise have attained. In the May of 1850, he left Ashburton School, and was apprenticed to his father, who at that time thought of educating him for the Medical profession.

"Two years later he came up to London, where he pursued his Medical studies in an irregular manner,—picking up a knowledge of anatomy in the Guy's Museum, witnessing surgical operations at the theatres of different hospitals, and attending Dr. Stenhouse's practical chemistry class at Bartholomew's Hospital. With the summer of 1852, however, his student-life in London ended; and on October 1 of the same year, he and a younger brother went on board the *Janet Mitchell*, emigrant ship, off Dartmouth, and on the first day of the following year sighted the Australian coast." He there first got employment as a shepherd, afterwards practised medicine in the bush, and ultimately obtained an appointment in the Meteorological Observatory at Melbourne.

When selected to join the expedition which had been long contemplated "he was twenty-seven years of age; but, though he wore a beard, and had decision stamped on his face, it was remarked that he did not look more than twenty. Some photographic artists, present amongst the crowd who witnessed the exodus of the explorers, wished to take his likeness; but he refused, saying with a sad smile, 'Should it ever be worth while, my father has an excellent one which you can copy from.' On June 27 of the following year, the poor fellow, with unsteady hand, was penning these last words of his last letter to his father; 'You have great claims on the committee for their neglect. I leave you in sole charge of what is coming to me. The whole of my money I desire to leave to my sisters; other matters I pass over for the present. Adieu, my dear father. Love to Tom. I think to live about four or five days. My spirits are excellent."

A Few Words of Warning to the Medical Students of Great Britain.

Among the large body of Medical students now qualifying themselve in the various schools of the United Kingdom for the practice of their Profession, there are numbers who look forward with confidence to a future career of honour and emolument in the Army Medical Service. The British Government, on the other hand, expects, with equal confidence, that the needs of the public service will continue to be supplied, as they have hitherto been, by a never-failing tide of skill, energy, and devotion. But each party may find itself mistaken, when the rising generation of Medical students learn, as they may, that Military Medical officers, so far from being honoured and cherished by the Government, are treated as of light estimation; that their rights and privileges, acknowledged and granted by the Crown and guaranteed by Act of Parliament, may be set aside and held in abeyance; while false hopes of benefits to come, ever seeming near at hand, and ever fading away in the distance, are held out to them to cover broken faith and cold indifference.

Medical Students of Great Britain! listen to the voice of one who now speaks to you from India, in the hope that you will, as you can, unite to obtain justice and fair treatment for your Professional brethren now, for yourselves hereafter; justice and fair treatment which are denied to the officers of the Indian Medical service to-day, and which may be refused to yourselves at a future time. The Indian service, it is true, is closed, and you may think that better treatment awaits you in that of the Royal Army; but pause and reflect ere you put faith in a Government, which, wishing to be rid of a service that has ever nobly done its duty, can cast it away with ingratitude and contempt; which can raise hopes only to disappoint them; scatter to the winds privileges secured by Act of Parliament; nullify and make void a Royal Warrant. That such has been the action of the Government towards its Medical officers in India, let the following statement prove :—

In the year 1858, when the government of India passed from the hands of the Honourable East India Company into those of the Crown, there existed in India two distinct Medical Services—the Queen's and the Company's. Each had its own privileges and advantages, and was in all things independent of the other. The latter service, with the military and naval forces of the Company, was then transferred to the Crown, the pay, pensions, and privileges, as regards promotion and otherwise, which they had enjoyed in the service of the Company being guaranteed to them by Act of Parliament (21 and 22 Vict., cap. 106)

It was determined to amalgamate the two Medical services, and to make them equal in pay, promotion, and pension; but various difficulties were found to stand in the way, and, as a temporary measure, a Royal Warrant was issued, bearing date February 1, 1859, which was supposed to confer upon the Indian Medical officers certain advantages, which had, in the preceding year, been conceded in like manner to the Royal service. This warrant, by some of its provisions, altered existing rules with regard to promotion in the Indian Medical Service, and might therefore be regarded as an infringement of the covenant under which the Indian officers enlisted, and a breach of their privileges guaranteed by Act of Parliament. Professing to place both services on the same footing, it in reality gave an inferior position to the Indian, and it was, in consequence, regarded as not entirely satisfactory. Nevertheless, it was accepted as an omen of promise, an evidence of goodwill, an earnest of better things to come. Time only was wanting to shew that the Royal Warrant was but "a mockery, a delusion, and a snare." Four years have passed away since it was penned, and it remains an empty, unfulfilled promise. Nominally, indeed, the Warrant is in force; its titles are conferred, but the rank, precedence, and pay which they should carry are all withheld.

Surgeons, after twenty years' service, are appointed Surgeons-major, and should, according to the original Warrant, hold the rank of lieutenant-colonel, but junior of that rank. Regimental Surgeons should rank with majors according to the dates of their commissions. Such relative rank should, in the words of the Warrant, "carry with it all precedence and advantages attaching to the rank with which it corresponds," and should "regulate the choice of quarters, forage, and prize money." Actually, however, it carries none of these advantages. The Surgeons-major are not even recognised as a separate class in the official Army List. A re-issue of the Warrant by the Horse Guards decrees that the Surgeons shall rank as majors, *but junior of that rank*; precedence is refused them; it has been ruled that they hold only brevet rank, and they are allowed to draw only captain's pay.

Thus is the shadow only given where solid advantage has been promised; but the substance is freely conferred when the provisions of the Warrant are injurious to those for whose benefit it was designed. Henceforth, in the words of the Warrant, "No Assistant-Surgeon shall be eligible for promotion to the rank of Surgeon, until he shall have passed such examination as our Principal Secretary of State for India in council may require, and shall have served in India with the commission of Assistant for five years, of which two shall have been passed in or with a regiment." And "a Surgeon, whether on the staff or attached to regiments, must have served ten years in India, of which two must have been passed, with the rank of Surgeon, in or with a regiment, before he will be eligible for promotion to the rank of Deputy-Inspector-General of Hospitals. These rules, applied, as they are to be to officers who entered the service prior to the date of the Warrant, are breaches of faith, alterations of existing rules for promotion, the continuation of which had been guaranteed by Act of Parliament, as above stated.

Every Assistant-Surgeon who enlisted prior to the date of the Warrant entered a seniority service, and understood that promotion would be his when he arrived at the head of the list, without reference to the nature of his past employment; and he has as just a right to promotion by seniority as he will have to pension on the completion of his service. Under the new rule, Assistant-Surgeons who have been transferred to the Civil Department before completing two years of military service, who have held charges of the most responsible nature, and have enjoyed the advantages of a far wider field of practice than is generally offered by a regimental Hospital, must resign these appointments and seek military service, or indefinitely forfeit their promotion. Pecuniary loss and great personal inconvenience will thus be the reward of years of useful service; and every officer who comes under this regulation will have reason to complain that faith has not been kept with him, and that he has been subjected to what, in former years, would have been considered as the punishment of a fault. Recently, as if in mockery of the wrongs under which these officers smart, the option of resigning their appointments has been offered them. They have been invited, "should they desire it," to arrange for fulfilling the period of army service required; to reduce themselves probably from positions just fairly remunerative and no more, to the smallest military allowances while doing duty with a regiment, to the ruin of themselves and their families. Hereafter, when the promotion, which should be theirs by good service and by right, is denied, they will be told "It is your own fault, you were duly warned."

The rule which requires two years' military service as full Surgeons, as a necessary qualification for the rank of Deputy-Inspector-General of Hospitals is equally objectionable. Among the Surgeons of the Indian Medical Service are many who have spent their whole time in civil employ. After having given their best energies to the service of Government for years, after having held appointments entailing the most onerous Professional duties, these officers are to be considered unfit for the rank of Deputy-Inspector-General of Hospitals, unless they forfeit their appointments and perform the required amount of regimental duty.

A similar rule to this, indeed, formerly existed in the Indian Medical Service; but, owing to its injurious action, it was wisely repealed. Such regulations, while they effect no public good, serve only to irritate and annoy individuals, to raise a general feeling of discontent, and to make every officer feel that he belongs to a service which the Government delights to dishonour.

The examination of Assistant-Surgeons, to ascertain their fitness for promotion, has not yet been brought into practice. It cannot be enforced in the case of officers who entered the service prior to the date of the Warrant, without interfering with their privileges, guaranteed by Act of Parliament. In any case, it would be as absurd, as it is insulting to the Profession at large. The proposal to examine men whose fitness has been proved at the commencement of their career by proper authority, and, subsequently, by years of successful practice and unchallenged good repute, is preposterous. The Universities and Examining Boards are in duty bound to protest against such treatment of their graduates. Assistant-Surgeons should unanimously refuse promotion offered to them on terms so derogatory to the honour of their Profession; and properly-qualified Medical men should decline to enter a service which threatens them with so degrading a condition.

While some portions of the Warrant have been dealt with in the manner before described, others have been kept entirely in abeyance; but it is not necessary to take notice of these; enough has been said to show that the original Warrant, designed in a spirit of liberality, has been so tampered with, that it tells against, rather than in favour of, those who expected to receive in it a boon. The officers of the Indian Medical Service asking for bread have received a stone; they have trusted to a broken reed, and it has pierced them. There are at least four years' arrears of the pay of their rank, promised in the Warrant, due to them; and they may justly complain that they have been treated with injustice and contempt, and that they have purchased their commissions at the cost of their birth-rights as Englishmen.

Lastly, during the four years which have elapsed since the Warrant was signed, what has been the conduct of the Government towards the service? Well knowing the anxiety felt by the Indian Medical officers, has it vouchsafed them one word of explanation and encouragement? In all its futile deliberations concerning the amalgamation of the services, has it called to its councils any of those most interested? The answer must be No. Military officers have been employed to draw up schemes for the amalgamation, and to officiate as amateur actuaries in winding up the affairs of the Medical Retiring Fund. That fund, a private association for the grant of annuities to retiring officers, to which subscription was made compulsory by Government, is now dying of inanition. The closure of the Indian Medical service has sapped its roots; no new subscribers are added to its list, while its expenditure in annuities increases yearly. It is said, indeed, that the Government guarantees the advantages

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of the fund to the present subscribers; but of what value is a Government guarantee to men with whom the Government has already broken faith?

It is, unfortunately, a fact, too well established to be doubted, that Medical officers of all branches of the service have ever been hardly treated by the Government, and that what consideration they now enjoy, has been granted to them only by degrees, and under pressure. But, a few years ago, the position of the Medical officers of the navy was so degraded, that no candidates could be found for employment in that service. The students unanimously refused to enter the navy, and at length the Secretary of the Admiralty reported that no Surgeons were forthcoming to fill the vacancies. Then, and not till then, were naval Medical officers treated as gentlemen and members of a learned Profession (a).

Such a crisis is now at hand; a paucity of Medical officers is becoming felt in India; many of the seniors, disgusted with the treatment they have received, are anxious to retire; let their want and their worth be felt. Now is the time for the students of Medicine to assist their elder brethren, and to secure their own future prospects. Let there be a cry for military Surgeons, and no response; then, and then only, will military Surgeons receive the treatment which is their due. Let vacancies in the army Medical service remain unfilled, until an order of Government is published and communicated to the schools, promising that the original Warrant prepared in a true spirit of liberality by the late lamented Sydney Herbert, shall be strictly and faithfully observed; that the rights and privileges of the Medical officers in India shall be respected; and that they shall receive, in accordance with the terms of the Warrant, their proper pay and staff allowances, and *bona fide*, not brevet rank.

Let it ever be remembered that the rank and position of the army Medical officer must be established on the firm and permanent basis of the royal command; not on a sand so shifting and treacherous as the favour and good will of any subordinate authority. So long as a Royal Warrant may be altered at the pleasure of a Secretary of State, so long will it be unworthy of the name, so long will the position of the Medical officer be uncertain and unsatisfactory, and dependent only on the urgency with which his services are required. So long, in fact, will it be undesirable to become

AN ARMY MEDICAL OFFICER.

RUSSELL *v.* ADAMS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—There is a mistake in the report of the meeting. I asked, "I there any friend of Mr. Propert present who will answer the question, whether Mr. Pike is or is not Mr. Propert's private solicitor?" No one did answer, and therefore I believe now, as I had been informed before, that Mr. Pike, who conducted the plaintiff's case, is Mr. Propert's solicitor.

I am, &c.

36, Basinghall-street, City, March 4. H. H. CANNAN.

A HOLIDAY FOR MEDICAL ASSISTANTS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Probably no other class of individuals are so over-worked, ill paid, and less thought of by their governors and the public than the Medical assistants, and to them a holiday would prove a great boon. The retail once are pent up in shops or surgeries from Monday morning till late Saturday nights without a change of air, and the out-door visiting ones, have duties to perform night and day through the whole year, with even scarcely an hour's liberty to call their own. As every one is likely to be taking advantage of the occasion of the forthcoming rejoicings, can you in any way intercede in behalf of such a large class, and call on the Medical Profession generally to lighten the day's duties, particularly for those in the suburbs of town, who are for ever toiling in the same monotonous way? I feel certain you will confer a blessing on many by using your influence in your widely circulated Journal in asking for a share in the rejoicings of the nuptial day for all such. I am, &c.

March 3. L. S. A.

THE TERM "PYTHOGENIC."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I entirely agree with the observations of your learned correspondent "Queriens," in the last number of your Journal, in regard to the attempted introduction into the Medical nomenclature of fevers of the term "pythogenic," and for this simple reason, that to give a name to a form of fever from its supposed (but erroneous) cause is absurd.

It may be in accordance with the views of those visionary theorists, who ascribe the origin of enteric fever, its proper and pathological name, to putrid emanations; but the so-called facts, or arguments, on which this assumption rests are so futile and easily overthrown, that I trust the effort to perpetuate this fallacy will be resisted by the more practical and sober-thinking members of our Profession, and that the two leading forms of continued fevers may be henceforth distinguished by the simple and intelligible terms "typhus" and "enteric."

In my lectures on "Fevers," I have invariably adopted these terms—the former being distinguished by the absence of the invariable intestinal and abdominal lesions which characterise the latter.

I am, &c.

17, Fall-mall, March 3. A TWEEDIE.

THE WIRE COMPRESS A SUBSTITUTE FOR THE LIGATURE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Referring to Mr. Dix's letter on the above subject, I have briefly to state that "my share of blame" is simply this: I saw Mr. Dix's paper on "Acupressure," which "suggested as a crude hint the use of fine suture wire instead of the needles." I immediately and voluntarily supplied Mr. Dix with a description and illustrations of a method of employing the fine wire, which was devised by me six months previous to his suggestion; the plan he at once ridiculed, but, after a lapse of time, he made trial of it, and found it to answer. Mr. Dix, I believe, was the first Surgeon to test the method on a bleeding vessel, and the success may fairly be attributable to his care and dexterity; in addition, he has favoured the plan with a name, and with his sanction and approval; if, therefore, the "wire compress" becomes "a substitute for the ligature," I shall regret if it is not always known as the method of arresting hæmorrhage adopted by Mr. Dix.

(a). The Naval Medical Warrant, however, has been indirectly tampered with, and is susceptible of improvement. The rank of the executive officers relatively with the army has been raised so as to keep the Medical officer below. A lieutenant of eight years' standing in the navy now ranks with a major in the army, and so obtains precedence of a Medical officer of the same standing.

Had the published reports contained the passage which Dr. Dix's letter supplies, I certainly should not have initiated this correspondence, and I will not now prolong it, or increase the recoiling effect of certain sentences in his letter by any comments.

I am, &c.

WILLIAM B. HILLIARD,
Instrument Maker to the Glasgow Royal Infirmary.

Glasgow, February 26.

COMMUNICATIONS have been received from—

MR. REYNOLDS; DR. WYNNE FOOT; TOOLESBOOKE; DR. RAMSBOTHAM; DR. CAMPLIN; MR. R. H. MEADE; DR. ACLAND; DR. GRAY; DR. KIDD; GOSPORT; DR. FRANCIS ANSTIE; MR. KNAGGS; L.S.A.; 12 ST 7 LBS.; THE SECRETARY OF THE WESTERN MEDICAL AND SURGICAL SOCIETY; DR. J. OSBORN FLETCHER; DR. T. B. MORIARTY; CALCUTTA; MR. E. C. HULME; MR. HAYNES WALTON; DR. DEVERSIM; PARIS; DR. HILLIER; DR. SIEVEKING.

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 28, 1863.

BIRTHS.

Births of Boys, 1163; Girls, 1077; Total, 2240.
Average of 10 corresponding weeks, 1635·02, 1626·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	733	707	1440
Average of the ten years 1853-62 ..	654·2	645·3	1299·6
Average corrected to increased population ..	..	..	1418
Deaths of people above 90	..	..	8

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-Cough.	Typhus.	Diarrhœa.
West	465,388	2	8	16	1	7	15	2
North ..	618,210	11	6	15	6	15	13	3
Central ..	378,058	8	7	9	1	4	6	2
East	571,158	15	6	14	1	8	12	1
South ..	775,175	6	9	14	4	20	13	3
Total... ..	3,808,989	42	36	68	13	54	59	11

APPOINTMENTS FOR THE WEEK.

March 7. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

MEDICAL SOCIETY OF LONDON, 5 p.m. Anniversary Meeting. Oration by Dr. Habershon. 6½ p.m.—Dinner.

ROYAL INSTITUTION, 3 p.m. Professor Max Müller, "On the Science of Language" (Second Series).

9. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Clinical Discussion—Dr. Thudichum, "On Cancer of the Pancreas; and on Purulent Disease of the Kidney, Complicated with Disease of the Bladder;" and on other Communications.

10. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Meeting.

ROYAL INSTITUTION, 3 p.m. Professor Marshall, "On Animal Mechanics."

11. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

HUNTERIAN SOCIETY, 8 p.m. Dr. Fowler, "On the Autopsy of a Case of Artificial Anus, in the Groin Successfully Treated."

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 p.m. Croonian Lectures—Dr. Risdon Bennett, "On Some Points Connected with Bronchitis, and its Results."

12. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Prof. E. Frankland, "On Chemical Affinity."

13. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 p.m. Lumleian Lectures—Dr. Chambers, "On Formation of Mucus and Pus."

ROYAL INSTITUTION, 8 p.m. Dr. J. Hall Gladstone, F.R.S., "On Fogs and Fog Signals."

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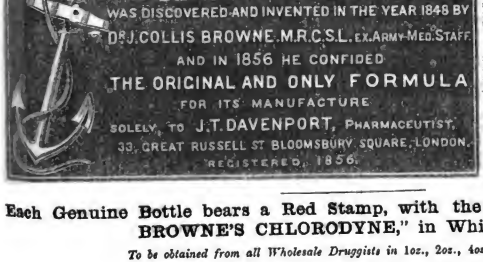

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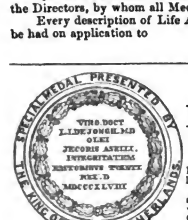

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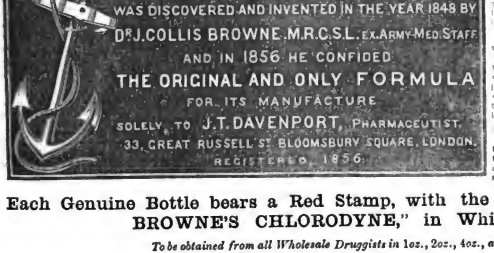

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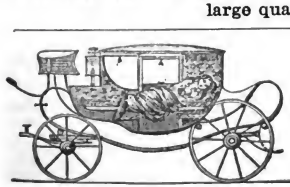

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ORIGINAL LECTURES.

PROFESSOR HUXLEY'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

Lecture II.

(Being the First of Six Lectures on Classification.)

Mr. President and Gentlemen,—The classification of any series of objects means the arrangement together of those which are like and the separation of those which are unlike; the purpose of this arrangement being to enable the mind to appreciate and to recollect the resemblances and differences of the objects in question. So that there may be as many kinds of classification of natural, or of other bodies, as there are distinct common properties in the whole of that series of bodies; and it would be more proper, perhaps, to speak of *a* classification, than of *the* classification of the animal kingdom. The galleries of this museum are sufficient evidence that, for the physiologist, the classification of the animal kingdom has a different end altogether from that which it has for the student of pure anatomy. John Hunter arranged his original collection upon the principle of illustrating the modifications of physiological organ in the animal series, and that arrangement was a perfectly good and valid one,—an arrangement which a physiologist might with great propriety adopt. But the student of geographical distribution might with equal fairness adopt a different arrangement, corresponding with the provinces which exhibit particular assemblages of organic beings. The student of palæontology might adopt yet another, and arrange the animal world according to the order and succession of its groups in time. The kind of classification, however, of which I propose to speak here, and to which I intend to devote these preliminary lectures, is none of these, but is a morphological classification—a classification according to structure. It is the great object of this classification to arrange together those animals which resemble each other in structure, and to separate those animals from each other which differ in structure, and so to subordinate the different groups, and classes, and subdivisions, that the arrangement shall serve on the one hand as a *memoria technica*, while, on the other hand, it shall be a useful and important instrument of investigation by suggesting new inquiries, and enlarging the present bounds of knowledge.

But the possibility of the existence of a morphological classification at all depends upon a circumstance which is by no means obvious *à priori*, or for any reason that we can see in the mere nature of the case. It is possible and conceivable that every separate animal should have been constructed, so to speak, upon a different architectural plan. The possible diversity of the combination of natural forces into a physiological machine is practically infinite, and there does not appear to be any necessity, in the nature of the case that between a horse and a fish, for example, or between a bird and an ape, it should be possible to discover any unity of organisation at all. But, although we do not know why it should be,—although, in the nature of things, as I have said, there does not appear to be any good and valid reason why it should be,—yet, as a matter of fact, the relations which do exist between the different members of the animal kingdom are totally different from these. There is no such independence of arrangement among animal forms; on the contrary, there is a clear and distinct community of organisation running through the whole, so that the highest and the lowest, the most similar and the most diverse, are connected by certain common features of construction. The connexion may be closer or wider, the resemblance may be great or little, but however this may be, there is a certain definite amount of resemblance; so that, turning the matter another way, any classification of animals which arranges them according to their structural resemblances (that which I speak of as a morphological classification), is a statement of the empirical laws of animal form; that is to say, of those laws of coexistence or correlation of animal structure which are brought out by study and by experience. We can rarely see our way to a rational understanding of the causes on which these laws of correlation depend, but they are not the less useful or valuable on that account. On the last occasion on which I addressed you, I pointed out that in the great *Glyptodon* the lower jaw consisted of a single piece of bone on each side, and articulated with the squamosal element of the skull; and I stated that, from that amount of information, it was quite possible to predict that the animal suckled its young. In fact, it has been established by an enormous multitude of examples, that when you meet with one of those characters in any animal you meet with the other. No one can tell why one of these circumstances should accompany the other, and this, therefore, is a purely empirical morphological law. All our definitions of orders and classes, if we have done our work properly, are statements of those co-existences and correlations of animal structure observed and determined in this empirical way. The fact that this is the case is what lends to the study of classification its immense and predominant importance; for, if classification is a statement of the observed laws of correlation of animal forms, it follows upon the validity of that classification, and upon the perfect accuracy of all its definitions that it puts into our hands the power of using our knowledge of animal structure as a means of reasoning from the known to the unknown; so that, apart from its immense usefulness in remembering a chaos—or what would otherwise, perhaps, be a chaos—of facts—a classification, which in this way throws our knowledge into the fewest possible general propositions, is of profound importance, and becomes one of our most powerful instruments of investigation. Therefore, that which is required of a classification, and the absence of which largely destroys its value, is, that, before all things, it shall be accurate and precise.

In the infancy of zoological science, when the knowledge of the great majority of animal forms was necessarily imperfect, the persons who devoted themselves to this study acquired a sort of learned tact—a kind of classificatory instinct—and even where the naturalist could not be sure of the structure of an animal there was often, to a practised eye, a look about it—a sort of similarity—which would lead him, and that, too, in many cases with great justice, to class it with a certain group. It was by means of this sort of tact, as well as of his vast knowledge, that Linnæus was able to frame his great generic divisions so well; it was not so much that he had the means of ascertaining the structure of the species he grouped together with rigorous precision, but he felt that they were alike. That is a state of things which is very necessary and even desirable in the earlier conditions of science; in fact, it is only by breaking ground in this way that we can hope ultimately to arrive at exactness of knowledge. But nevertheless the object of further study is to end this transitory condition, and to substitute for such rough tact and feeling of resemblance an accurate definition of the nature of that resemblance. I propose, therefore, to take a course somewhat different from that which is usually adopted in dealing with classification. The great point is to get firm standing-ground, and from thence to see what we can do in the way of further advances in one direction or another. I propose to see whether we cannot get this kind of firm standing-ground by comparing all those groups which are called classes in the animal kingdom.

The Classes of the Animal Kingdom, the Limits of the Four Cuvierian Sub-Kingdoms being Indicated by the Brackets and Dotted Line.

RADIATA.

Gregarinida. Infusoria.		*Echinodermata.*	
Rhizopoda (?)		*Scolecida* (?)	
Spongida.		*Annulata.*	ARTICULATA.
		Crustacea.	
		Arachnida.	
Hydrozoa.		*Myriopoda.*	
Actinozoa.		*Insecta.*	
Polyzoa.			
Brachiopoda.	MOLLUSCA.	*Pisces.*	VERTEBRATA.
Ascidoidea.		*Amphibia.*	
Lamellibranchiata.		*Reptilia.*	
Pteropoda.		*Aves.*	
Pulmogasteropoda.		*Mammalia.*	
Branchiogasteropoda.			
Cephalopoda.			

Not that I mean to say that it is necessary for my p that the groups of which you see named on this table

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be absolutely and precisely equivalent one to another, but at any rate the sum of them is the whole of the animal kingdom, and each of them embraces one of the principal types or plans of modification of the animal kingdom, so that if we have a precise knowledge of that which constitutes the typical structure of each of these groups, and of the characters which are possessed by every member of the groups, we shall have, so far, an exhaustive knowledge of the animal kingdom.

Having endeavoured to define in this way these various groups, I shall afterwards ask you to take up with me some of those points which are more open to discussion; to see how far we can group these classes into larger assemblages, with definite and constant characters; and, on the other hand, to inquire how far the existing subdivisions of the classes are well based or otherwise. But the essential matter, I repeat, is to be quite clear about the different classes, and to have a distinct knowledge of the clearly-definable modifications of animal structure in the animal kingdom.

Fig. 1.

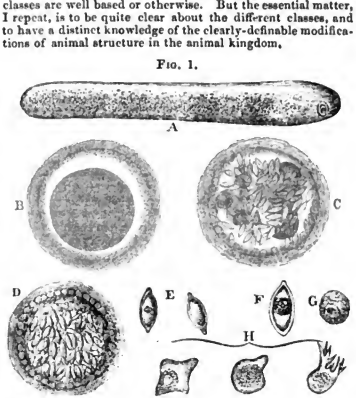

Fig. 1.—A, Gregarina of the earthworm (after Lieberkühn); B, encysted; C, D, contents divided into pseudo-navicellæ; E, F, free pseudo-navicellæ; G, H, free amœbiform contents of the latter.

The first class of which I shall speak is the group of the *Gregarinida*. These are among the simplest animal forms of which we have any knowledge. They are the inhabitants of the bodies for the most part of invertebrate, but also of vertebrate, animals; you may find them commonly in abundance in the alimentary canal of the common cockroach, and in earthworms. They are all mieroscopic, and any one of them, leaving minor modifications aside, may be said to consist of a sac, composed of a more or less structureless, not very well-defined membrane, containing a soft semi-fluid substance, in the midst of which lies a delicate vesicle; in the centre of that, again, is a more solid particle. (Fig. 1, A.) No doubt many persons here will be struck with the close resemblance of the structure of this body to that which is possessed by an *ovum*. You may take the more solid particle to be the representative of the germinal spot, and the vesicle to be that of the germinal vesicle; while the semi-fluid sarcodic contents might be regarded as the yelk, and the outer membrane as the vitelline membrane. I do not wish to strain the analogy, but it is, at any rate, interesting to observe this close morphological resemblance between one of the lowest of animals and that form in which all the higher animals commence their existence. These animals—sometimes more lengthy, sometimes constricted—always have this peculiar and fundamental character. They are devoid of mouths and of digestive apparatus, living entirely by imbibition of the juices of the animal in whose intestine or body cavity they are contained. The most conspicuous of those phenomena, which we ordinarily regard as signs of life, which they exhibit, is a certain contraction and expansion along different diameters, the body slowly narrowing and then lengthening in various directions. Then, at a particular time, though the conditions of the change are not thoroughly understood, it is observed that one of these *Gregarinida*, whatever its form may be, will convert itself into a well-rounded sac, the outer membrane ceasing to exhibit any longer those movements of which I spoke, and becoming coated by a structureless investment or "cyst" (B).

The substance of the body contained within the cyst next undergoes a singular change. The central nucleus and the vesicle disappear, and, after a time, the mass breaks up into a series of rounded portions, and then each of those rounded portions elongates, and, becoming slightly pointed at each end, constitutes a little body which has been called a "pseudo-navicella" from its resemblance to the Diatomaceous *Navicula* or *Navicella* (C, D). Next, the capsule bursts; the pseudo-navicellæ (E, F) are scattered and passed out of the body which they inhabit, and though, of course, a great number of them are destroyed, some, at any rate, are devoured by other animals; and when that is the case, the little particle of protein substance which is inclosed within the pseudo-navicella is set free from its shell, and exhibits much more lively movements than before, thrusting out processes in various directions, and drawing them in again, and, in fact, closely resembling one of those animalcules which have been called *Amœbæ* (H). The young Amœbiform *Gregarina* grows, increases in size, and at length assumes the structure which it had at first. That, in substance, is all that we know of this lowest division of animal life. But, you will observe, there is a hiatus here; I mean to say that our knowledge is not complete. We cannot say that we know the whole nature and mode of existence of this or any other animal until we have traced it to its sexual state; but, at present, we know nothing whatever of this condition among the *Gregarinæ*, so that in reasoning upon them we must always exercise a certain reticence, not knowing how far we may have to modify our opinions by the discovery of the sexual state hereafter.

The process of becoming encysted (after that conjunction of two *Gregarinæ* which often occurs) was formerly imagined to correspond with what is termed among plants "conjugation,"—a process which in some cases, at any rate, appears to be of a sexual nature. But the discovery that a single *Gregarina* may become encysted and break up into *pseudo-navicellæ* seems to negative this analogy. You will observe, as a very remarkable characteristic of this group, that there is no separation of the body of the animal into distinct layers or into cellular elements.

But now, leaving this, I pass on to the next class—that which is indicated in this table as the *Rhizopoda*. And I have put a query against it, as I shall have to return to it as another of those respecting which our knowledge is incomplete. And at this moment I beg merely to direct your attention to the salient and characteristic features of the whole group (Fig. 2).

Fig. 2.

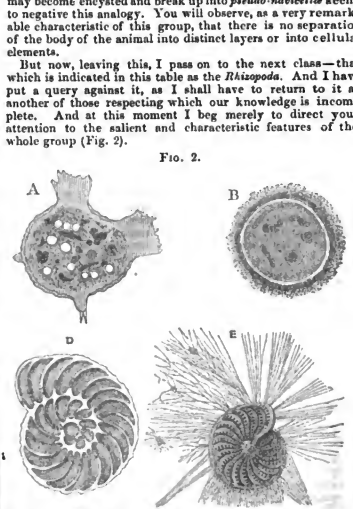

Fig. 2.—A, B, Free and encysted conditions of an *Amœba* (after Auerbach); E, a Foraminifer (*Rotalia*) with extended pseudopodia; D, its shell in section (after Schulze).

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It seems difficult to imagine a stage of organisation lower than that of *Gregarinida*, and yet many of the *Rhizopoda* are still lower. Nor is there any group of the animal kingdom which more admirably illustrates a very well-founded doctrine, and one which was often advocated by Hunter himself, that life is the cause and not the consequence of organisation; for, in these lowest forms of animal life there is absolutely nothing worthy of the name of organisation to be discovered by the microscopist, though assisted by the beautiful instruments that are now constructed. In the substance of these creatures, however, nothing is to be discovered but a mass of jelly, which might be represented by a little particle of thin glue. I do not mean to say it corresponds with the latter in composition, but it has that texture and sort of aspect; it is structureless and organless, and without definitely formed parts. Nevertheless, it possesses all the essential properties and characters of vitality; it is produced from an organism like itself; it is capable of assimilating nourishment, and of exerting movements. Nay, more, it can produce a shell—a structure of the greatest possible complexity and most singular beauty,—as we may see by these few examples on the table.

That this particle of jelly is capable of combining physical forces in such a manner as to give rise to those exquisite and almost mathematically-arranged structures—being itself structureless—and without permanent distinction or separation of parts, is to my mind a fact of the profoundest significance.

Though a *Rhizopod* is not permanently organised, however, it can hardly be said to be devoid of organs; for the name of the group is derived from the power which these animals possess of throwing out processes of their substance, sometimes of great length. These processes may flow into one another so as to form a network, and they may be thrust out from any part of the body and retracted into it again.

If you watch one of these animals alive, you see it thrusting out these pseudopodia,—first one and then another,—exhibiting motions which are comparable to those singular movements which anybody may see for himself, by simply taking a drop of his own blood and by means of a microscope watching the movements of the white corpuscles in it. The movements of these *Rhizopods* are quite of the same character, only they are much more extensive. The *Rhizopod* feeds itself by means of these pseudopodia, which attach themselves to nutritive particles, and then draw them into the substance of the body.

There is neither ingestive nor egestive aperture, neither special motor nor prehensile organs, but the pseudopodia perform each function as it may be required. But here, again, we labour under an imperfection of knowledge. For, although it is quite certain that the *Rhizopoda* may multiply by division of their substance—in a way somewhat analogous to that which I detailed when speaking of the *Gregarinida*—yet, as in that case, we have no knowledge of any true sexual process. It is a most remarkable circumstance that though these animals are excessively abundant, and are constantly under observation, we are still in ignorance upon that essential point,—still uncertain whether there may not be some phase in the cycle of vital phenomena of the *Rhizopoda* with which we are unacquainted; and, under these circumstances, a perfect definition of the group cannot even be attempted.

The next division is the group of the *Spongida*, which exist under such multitudinous forms in both salt and fresh water. Up to the last few years we were in the same case with respect to this class as with the *Gregarinida* and the *Rhizopoda*. Some zoologists even have been anxious to relegate the sponges to the vegetable kingdom; but the botanists, who understood their business, refused to have anything whatever to do with them. And the botanists were quite right; for the discoveries of late years have not left the slightest doubt that these sponges are animal organisms, and animal organisms, too, of a very considerable amount of complexity, if we may regard as complex, a structure which results from the building up and massing together of a number of similar parts.

The great majority of the sponges form a skeleton, which is composed of fibres of a horny texture, strengthened by needles, or spicula of silicious or calcareous matter; and this framework is so connected together as to form a kind of fibrous skeleton. This, however, is not the essential part of the animal, which is to be sought in the gelatinous substance which during life invests the fibres of the skeleton, and is traversed by canals which open upon the surface of the sponge, directly or indirectly, by many minute and fewer large apertures.

If I may reduce a sponge to its simplest expression—taking the common *Spongilla*, for example, of our fresh waters,—the structure, removing all complexities, and not troubling ourselves with the skeleton, because that has nothing to do with what we are now considering, may be represented by this diagram (A, Fig. 3). There is a thin superficial layer formed

Fig. 3.

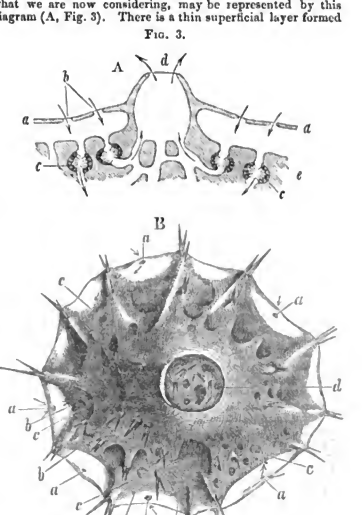

Fig. 3.—A, Hypothetical section of a *Spongilla*; *a*, superficial layer; *b*, inhalent apertures; *c*, ciliated chambers; *d*, an exhalent aperture; *e*, deeper substance of the sponge. The arrows indicate the direction of the currents. B, A small sponge with a single exhalent aperture, seen from above (after Lieberkühn); *a*, inhalent apertures; *c*, ciliated chambers; *d*, exhalent aperture; C, a ciliated chamber; D, a free-swimming ciliated embryo.

entirely of a number of the so-called sponge particles, or ultimate components of the living substance of the sponges, each of which is similar to an amœba, and contains a nucleus. These are all conjoined in a single layer, so as to form a continuous plate, which constitutes the outer and superficial layer of the body. Beneath this is a wide cavity, communicating with the exterior by means of minute holes in the superficial layer, and of course filled with water. This cavity separates the superficial layer of the sponge from its deeper substance, which is of the same character, being made up of a number of aggregated sponge particles, each of which has a nucleus and is competent to throw out numerous pseudopodial prolongations if detached. If, while the living sponge is contained in water, you watch it, you will find a great number of currents of water are setting in to the superficial chamber through the apertures. Then, at the bottom of the chamber, number of other apertures which lead into canal

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in the deep layer, and eventually ending in the floors of certain comparatively lofty funnels or craters, the top of each of which presents one of those larger and less numerous apertures, which have been referred to as existing on the surface of the sponge.

As Dr. Grant discovered, many years ago, strong though minute currents of water are constantly setting out of these large apertures, being fed by currents which as constantly set in by the small apertures and through the superficial cavity and the canals. The cause of this very singular system of currents remained for a long time unknown. It was rendered intelligible by Dr. Howerbank's discovery of the existence of vibratile cilia in the genus *Grantia*, but it is only quite recently that the precise nature of the arrangement of the apparatus, which gives rise to these currents in ordinary sponges, has been made out by Lieberkülun and by Carter. The canals which enter the deep substance of the sponge become dilated into spheroidal chambers, lined with sponge particles, each of which is provided with a vibratile cilium, and as all these cilia work in one direction—towards the crater—they sweep the water out in that direction, and its place is taken by fresh water which flows in through the small apertures and through the superficial chamber. The currents of water carry with them such matters as are suspended in it, and these are appropriated by the sponge particles lining the passages, in just the same way as any one of the *Rhizopods* appropriates the particles of food it finds in the sea-water about itself. So that we must not compare this system of apertures and canals to so many mouths and intestines, but the sponge represents a kind of subaqueous city, where the people are arranged about the streets and roads in such a manner that each individual can easily appropriate his food from the water as it passes along.

In the sponges two reproductive processes are known to occur: the one of them, a sexual, corresponding with the encysting process of the *Gregarinidæ*; and the other, truly sexual, and answering to the congress of the male and female elements in the higher animals. In the common fresh-water *Spongilla*, towards the autumn, the deeper part of the body becomes full of exceedingly small bodies, sometimes called "seeds" or "gemmules," which are spheroidal, and have, at one point, an opening. Each of these bags—in the walls of which are arranged a great number of very singular spicula—is, in point of fact, a mass of sponge particles which has set itself apart—gone into winter quarters, so to speak—and becoming quite quiescent, wraps itself round and remains still. The whole *Spongilla* dies down, and the seeds inclosed in this case remain uninjured through the winter. When the spring comes, the encysted masses within the "seed," stimulated by the altered temperature of the water, creep out of their nests, and straightway grow up into *Spongillæ* like that from which they proceeded.

But there is, besides, a true sexual process, which goes on during the summer months. Individual sponge particles become quiescent, and take on the character of ova, while in other parts particular sponge particles fill with granules, the latter eventually becoming converted into spermatozoa.

These sacs burst, some of the spermatozoa come into contact with the ova, and impregnate them. The ova develope and grow into ciliated germs, which make their way out, and, after swimming about for a while, settle themselves down and grow up into *Spongillæ*.

Now that we know the whole cycle of the life of the sponges, and the characters which may be demonstrated to be common to the whole of this important division of the animal kingdom, I do not think any one who is at all acquainted with the organisation or the functions of plants, will be inclined to admit that the sponges have the slightest real affinity with any division of the vegetable kingdom.

ORIGINAL COMMUNICATIONS.

HYDROCYANIC ACID IN THE TREATMENT OF INSANITY.

By KENNETH McLEOD, M.D.

Among many trials of the efficacy of particular medicinal agents and modes of remedial treatment in particular forms of mental derangement, which I have instituted since coming into asylum practice, I have made a careful series of experiments into the effect of hydrocyanic acid in allaying cerebral irritation and excitement. The results which I have obtained are, upon the whole, so satisfactory that, although I should desiderate a more extended and minute induction for the sake of indicating exactly the cases and circumstances in which it is most suitable, still I consider it better to give them publicity, in order that the use of the drug, if it is as valuable and effectual as I believe it to be, may be extended, and that its merits and defects may become a subject of inquiry at the hands of others. As far as I have been able to learn by reading and personally inquiring into the practice of other asylums, though prussic acid is, in over-dose, the cause of such immediate and striking effects upon the brain, its moderate use has not been applied to any form of disease of that organ whose activities it is capable of extinguishing in less than a minute.

Aware of the fallacies which are so liable to complicate investigations into the modes of action of therapeutical agents, and to cripple, nullify, or falsify results, I have with care attempted to guard against them. The most common sources of fallacy are—

1. The natural course and resolution of the disease after removal of a cause or causes, or the completion of the changes which constitute its term.

2. The effects of regimen, diet, moral treatment, and other circumstances operating simultaneously with the administration of the remedy as causes in a course of events.

3. The effect of other remedial agents given at the same time or previously.

4. The tendency to anticipate results and to "explicate appearances—not as they are, but as the observer pleases."

I have endeavoured to obviate these, which attach largely to a practice in insanity, by—1st. Estimating the probable issue from a consideration of existing circumstances and symptoms, and comparison with other similar cases. 2nd. Making due allowance for the effect of other means in existence as causes of cure. 3rd. Administering the drug void of combination. And, 4th. Cultivating a salutary scepticism as to results, and taking rather the unsolicited testimony of other observers than depending solely on my own observation.

The evidence which I possess of its action has been gained from—1. Personal observation, as constant and close as possible. 2. The observations of attendants upon the insane. 3. The statements of other patients. And, 4. The admission, in several cases, of the patients themselves.

The trials have extended over six months, and the number of patients who have for a longer or shorter period been under treatment with it exceeds forty. I shall, in what follows, consider in order—1. The circumstances and cases in which the drug has been administered. 2. The effects of the administration. 3. The preparation, dose, and mode of administration employed; and 4. The indications derived from my experience of it, of its further use or trial; and give, shortly, a few of the most remarkable illustrative cases.

I. The feature or symptom which has in every case indicated the administration of the drug as a reputed calmative, is excitement—the manifested excess of cerebral activity which almost invariably accompanies, or assists in constituting, most forms of acute insanity, however caused or conditioned.

This increase of manifested energy may consist in an excessive activity of any or all of the representative faculties, gesture, feature, voice, or an intensified action of the brain itself, resulting in a morbid rapidity of ideation.

A simple increase of the evolution of nerve force, causing a more rapid rate of brain action and greater intensity of representation in the form of muscular acts, when excited by sufficient motive, and devoted to any end or a rational end, is a phenomenon of sound psychological action, and is manifested as emotion, passion, etc.; but when it exists in excess, without an adequate motive or any motive at all, and is not, consequently, devoted to any rational end or any end at all, it constitutes a pathological fact of the same sort, as every other pathological action or phenomenon characterised by excessive activity in a particular direction. Beyond recognising this excessive and sakeless cerebral vigour, or hypernoia (ὑπερνοῦν), as it may be appropriately termed, as a simple, ascertained pathological fact, we cannot go; and, admitting it as such, we instinctively look for its conditions and causes, and, in the way of treatment, strive either to remove the cause, or introduce new causes—the knowledge of the causes and conditions of the pathological manifestation, as well as the

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causes and conditions which will remove it, being matter for investigation.

The *hypernoia* may co-exist with more or less mental derangement. It may be an utter delirium, in which reason and design are totally wanting, or may exist along with incoherence and delusions of all sorts and degrees, and with one or several active propensities, erotic, destructive, dirty, malevolent, homicidal, suicidal, etc. It forms the element of acuteness in many different forms of insanity, is the main object of the exhibition of medicines and plans of remedial treatment, morphia, antimony, warm bath, douche, emetic, purge, etc. Its degree measures alike the gravity of the disease, and the success of treatment; its abatement is a token of amelioration, and removal a triumph; the treatment of the faculty disorganisation or *paranoia* (παρανοῦς) being subsequently accomplished mainly by tonic, dietetic, and moral means.

The particular forms of insanity in which I have employed this remedy are—

		Cases.
1.	Mania, acute	13
2.	,, chronic	2
3.	,, chronic, acute paroxysms	2
4.	,, menstrual	2
5.	,, puerperal	2
6.	,, recurrent	1
7.	,, epileptic	2
8.	,, epileptic, with menstrual excitement	2
9.	,, with hemiplegia	2
10.	,, with general paralysis	5
11.	,, with chronic hydrocephalus	1
12.	Melancholia, acute	3
13.	,, chronic, with acute paroxysms	3
		40

II. The *effect* in every case has been very manifest. It has been almost purely psychal, consisting in a very remarkable, sudden, or gradual cessation of hypernoetic manifestations, with or without the induction of sleep. While its repeated exhibition has never failed to have some calmative effect, this has varied, according to the circumstances of the case, and has occurred in all degrees from the gradual, slight, and temporary, to the immediate, absolute, and permanent.

1. In cases of mania and melancholia of great severity and long duration, with organic disease of the brain and body, its calmative action has been more slowly produced, with more difficulty maintained, more evanescent and furtile.

2. In recent cases of mania and melancholia, where no grave structural change exists, and the morbid condition has not become so stereotyped by constant repetition of similar changes, its exhibition has been followed by an immediate and sustained change for the better.

3. In the violent, paroxysmal mania of epilepsy and general paresis, in menstrual mania, and acute melancholic paroxysms, a single administration, or a few full doses at short intervals, have effectually dispelled the paroxysm.

The effect is thus of two sorts. 1. Immediate. In a few minutes, one to five generally, a patient who has just been shouting, chattering, dancing, swearing, thumping, &c. &c., becomes settled and quiet, sits upon a seat, and perhaps falls into a sound sleep. And 2, gradual; the patient becoming, as the hypernoia is thus, from time to time, warded off, more rational, companionable, and useful. While changes in psychal manifestation are thus very obvious and striking, observed and appreciated by attendants, and confessed to by patients themselves, who, on being questioned, admit the calmative action, and conferred power of self-control, concomitant physical phenomena are very obscure or wanting. Only in two cases have I observed a very decided change in the character of the pulse, which became slower, weaker, and, in one, slightly irregular; but this is probably owing to the difficulty of accurately observing it in such circumstances. In two other cases in which a slight over-dose was given, a semi-comatose condition was induced, with complete adynamia, partial ptosis, the accumulation of frothy saliva, pallor, slight affection of breathing and pulse, phenomena almost exactly resembling those immediately preceding an epileptic paroxysm. In a few cases the subjective sensations were described as—1. Slight transient vertigo; 2. Slight nausea and a peculiar constrictive feeling at the back of the throat; 3. An unwillingness and almost inability to energise in any way, and sometimes a desire to recline. These feelings were experienced in a few minutes after the dose was taken.

The result of administration in the forty cases in which I have noted the effect, may be represented as follows:—

1. Slight, or well-marked temporary amelioration, without any decided effect on the cause of the disease. This result I have observed in 10 cases: 1 of puerperal mania, in which the dose was probably insufficient; 1 of melancholia, in which the treatment was altered; 1 of menstrual mania; 3 of acute mania of long standing and great severity, ending in exhaustion and death, and resisting every mode and plan of treatment; 2 in recent mania, the effect being sustained and cure completed by other means; 1 in acute mania, when its administration was not sustained; and 1 in an acute paroxysm of chronic mania.

Even in these cases the effect has been most beneficial, the patient becoming very much more manageable, giving over violence, noise, excitement, stripping, restlessness, etc., and becoming more amenable to moral and dietetic management.

2. A more decided and permanent effect, the disease being still stationary or progressive. Of this class I have noted 19: 5 general paralytics, in whom, while the morbid excitement has been vastly abated or expelled, the disease has progressed to its fatal termination; 5 chronic maniacs, in whom an intercurrent acute paroxysm was effectually dispelled; 3 melancholics, in whom acute manifestations were permanently removed; 1 case of acute dementia, in which excessive hypernoia was immediately arrested; 2 epileptics, in whom a paroxysm of excitement was summarily dismissed; 2 cases of epilepsy with menstrual excitement, in which the contrast of duration with former attack was most striking; 1 case of hysterical mania, in which the disease oscillated from an extreme of hypernoia to an extreme of hyponoia; 1 case of puerperal mania, in which rest and sleep were induced after other measures had signally failed; 1 case of mania with hemiplegia, in which an intercurrent excitement was disposed of; and 1 case of mania with chronic hydrocephalus, where a change in conduct and demeanour was very evident.

In all the cases the benefit conferred has been simply obtained, satisfactorily established, and duly appreciated by the attendants and patient.

3. Cases in which the drug has been a factor, and a very main one, in rapid restoration to reason. The cases of this class have been 8 in number: 6 of acute mania, and 2 of acute melancholia. I shall append some of the most interesting cases of each class.

III. The preparation which I have employed in every case has been Scheele's dilute acid, which I have found remarkably uniform and convenient.

The dose has varied from ♏ij. to ♏vj. Beyond that, disagreeable effects are apt to occur; ♏v. is the most convenient dose, and if the effect is not promptly established, a repetition every quarter of an hour effectually secures it. The effect is rather evanescent, and has been observed in some cases to disappear within an hour; but if a slight degree of hypernoia recurs, a subsequent administration is apt to have a more potent effect, in consequence of a prior. The interval may vary according to the nature and exigencies of the case, and the effect produced. Short at first, until an effect is produced (5′ to 15′), it may be prolonged after the excitement has disappeared (to one or two hours). It may, in many cases, be left, within limits, to the discretion of an intelligent attendant.

The only modes of administration I have employed have been mixture and subcutaneous injection. The simplest and best menstruum is water, and ♏v. may be easily and safely introduced beneath the skin, combined with ♏xxx. of water, by means of Wood's syringe, when the patient resists all other means. Of its application to the extensive pulmonary mucous membrane, by means of pulverisation and inhalation, I have no experience; but I should anticipate interesting and important results from such a method of administering it, and other medicines, in insanity.

IV. The advantages of the drug, in comparison with other calmatives and hypnotics, are:—1. The rapidity, certainty, and simplicity of its effects. 2. It manageability and freedom from any cumulative property. 3. The absence of any disagreeable, concomitant, or consequent physical disturbance, which most other analogous modes of remedial treatment possess. 4. Its small bulk, want of colour, and miscibility. 5. Its want of repulsive smell and taste—a very great virtue with the insane, who are very apt to rebel against medicines,

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6. Its not impairing appetite and digestion, but rather improving both.

On the whole, I should recommend and urge the adoption of the drug in every case of insanity with hypernœia, as an empirical antagonist to that pathological phenomenon, combining or exhibiting it simultaneously with any other remedy or plan of treatment which an ascertained pathological condition may demand. Simply as a "quietener" it has its merits, proving an invaluable auxiliary to the moral management of a ward generally, or the patient in particular. Very often, I have heard the attendants express their sense of the great value of "the medicine" as completely altering the character of their gallery and the conduct of their patients,—benefiting the latter, and assisting themselves in the performance of their duties. But, in acute cases of mania and melancholia, and in maniacal and melancholic paroxysms, I attach a much higher value to it, and should more strongly advise its trial, as, from the experience I have had, I feel convinced of its potency and efficacy. I have no doubt that it has the power promptly of staying cases running on to chronic insanity on the one hand, or exhaustion and death on the other, and of obtaining, simply and satisfactorily, results which are at present aimed and arrived at by boiling a patient in hot baths, half drowning him in douches, narcotising with opium or morphia, nauseating with tartar emetic, exhausting with purging, roasting with blister, or debilitating with lancet, leech, or cup.

Case 1.—*Congenital Imbecility—Intercurrent Mania—Violent Hypernœia—Subcutaneous Injection of Hydrocyanic Acid——Calmative Effect sustained by Morphia—Gradual Amendation under Stimulants, with Sedatives, Nutrients, and Tonics—Cure.*

On Admission.—Is a slender, emaciated youth, of very feeble physical organisation, and low diathetic status. Is pale and cachectic; no organic disease discoverable. Appears to be an imbecile. Until April 10 no acute manifestation declared itself; he was restless and silly, but quiet and amenable to control. Complained of pain after food, vomited, and suffered generally from gastro-hepatic derangement. Treated successfully with bismuth, rhubarb, and opium; feeds well, but does not appear to assimilate food.

10th.—Presents a change for the worse; gesticulates, crouches, strips, moans, shouts, etc.; very disorderly and unmanageable. Broke several panes of glass in his dormitory last night.

11th.—Excitement progressive; is most violently maniacal this morning; darts out of bed, flies at the windows, struggles most tenaciously with the attendants; is utterly delirious, repeating incessantly the same expression; strength surprising. 10 a.m.—Slightly calmed by a cold shower-bath. Effect did not last beyond a quarter of an hour. Bowels much constipated. ℞ Ol. crot. tig., gt. ij., statim. 8 p.m.—Has become still more excited; is making intense efforts to strangulate himself; is being held in bed with difficulty by three attendants; resists all medicine. ♏iij. acid. hydrocyanic dil. was injected over the scapula. Became almost instantly quite quiet; gave over violent struggling, stood beside his bed, and looked about him. Took vin. rub. ʒij., morph. mur. gr. j. Latter to be renewed at hour intervals, until sleep induced, diminishing morphia to gr. ss.

12th.—Rested well up to 4 a.m., when he became excited, but not so violently as before. 8 a.m.—Is still restless, repeating, gesticulating, etc. 10 p.m.—Had bread-and-milk and Oj. beef-tea. To have Oj. porter and gr. j. morph. mur.

14th.—Has been much quieter during the last two days, and slept during the last two nights. Still raves; is very restless; pulse 80.

17th.—Has continued to improve slightly since last report. Eats and sleeps better; more manageable. ℞ Ol. tec. asselli, ʒss., 3ee. daily; quinæ disulp., gr. ij., ter. in dies. Continue porter, with morphia and generous diet.

23rd.—Continues very disorderly, but by no means so violent; is dirty, destructive, restless, and incoherent. Improves slightly in general health.

October 1.—Has continued uniformly to improve, both in general health and mental condition. Amendment caused mainly by dietetic and moral treatment. Is now as well as ever he has been, both physically and mentally.

(To be continued.)

RESEARCHES IN ETHNOLOGY.

By the late R. KNOX, M.D., F.R.S.E.

ON THE APPLICATION OF THE ANATOMICAL METHOD TO THE DISCRIMINATION OF SPECIES.

The discovery of true descriptive anatomy, and its application to all classes of the zoological kingdom, led the illustrious Cuvier to the discovery of the fossil world. Many distinguished observers had previously, no doubt, made some happy conjectures respecting the antiquity of the fossil world, and the advantages to be derived from the application of the anatomical method in the discrimination of species. Daubenton, Vicq d'Azyr, and Pinel, in France; Pallas, Blumenbach, and others, in Germany; Hunter, in England, had long prior to the era of Cuvier discovered and appreciated the utility of anatomical inquiry in zoology; but the credit of having placed this method on a new basis, and of having demonstrated by its means the true nature of the fossil world, belongs, unquestionably, to Cuvier. As many observations and hypotheses have been ascribed erroneously to this illustrious man, and more especially in England, it seems best to ascertain in the first place his own opinions of the value of the method he had discovered.

In the fossil world, those external characters by which an animal species is at once discriminated from all others, had been, with but few exceptions, wholly destroyed. I allude more especially to the animals we call mammals; and thus, if the species of these fossil animals were to be discovered at all, it could only be done through their osteological remains, including the teeth. The plan succeeded admirably, and led to the most astounding discoveries by Cuvier. As was to be expected, it threw the Linnean method into the shade, and all but extinguished the reputation of the greatest naturalist of any age, the Count de Buffon. It led Cuvier imperceptibly, and seemingly without his being aware of it, to the adoption of some theories or hypotheses still maintained in England, but abandoned everywhere else. One of these was the attempt to prove distinct epochs of zoological formations, called in this country "creations," a word never used by Cuvier. As a strictly scientific man he strenuously opposed the philosophical ideas of Goethe and his school, declaring them to be pantheistic and not scientific; he denied an animal series, and refused to intercalate the extinct with the living world. Species he held to be unchangeable under every circumstance, and, drawing his proofs from monumental and written records, he showed that the living animal kingdom had remained unaltered since the earliest historic period. To man and to the now living world he ascribed a late origin, as compared with the fossil and extinct. Shortly before his death his theory of the fixity of species was called in question by Goethe and Geoffroy St. Hilaire; the animal serial was demonstrated by De Blainville, and the fossil intercalated with the living world; the metamorphosis of forms was proved, beyond all dispute, by embryogeny, and the philosophic and transcendental theories of Goethe came to be accepted for scientific truths, and embryonic forms were supposed to pourtray the extinct or fossil world. But even Cuvier himself was aware that anatomical characters could not in every instance characterise species, and he instanced the genus *Equus*, or natural family of the horse, whose species cannot be distinguished from each other by the anatomical method; he might have mentioned many others. How is it with the natural family of man—with mankind?

As most natural zoological families show affiliations with other families, and do not stand alone, it seems proper to inquire, in the first instance, into the relation of mankind with other kinds, that is, other families of animals. Notwithstanding a tolerably strong resemblance between man and the animals usually, but erroneously, as I think, called Quadrumana, or four handed, there is a sharply-defined and deep gulf between these two great natural families. They differ remarkably in their external characters, and equally so in their osteological; and, although it be true that the brain in these two classes is almost identical in its forms, and that the retina in the apes of the old continent has the foramen of Soemmer-

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ing, a structure, perhaps, peculiar to man, there is yet enough to show that it requires many natural families to bridge over the gulf which exists between them, or, in other words, to fill up the serial. Now, the researches of De Blainville lead us to conjecture, with every show of probability, that the wanting links will be supplied hereafter—(1.) By palæontological discoveries of animals lower than man, yet above the apes; or (2.) By the formation of other species in the course of time, when the existing order of things shall have passed away, following the fate of all its predecessors.

The determination of distinct species in mankind can be made only on the same principles we employ in determining species in other natural families. The characters are either external or anatomical. We have seen that the anatomical method failed in Cuvier's hands when applied to the natural family *Equus*, and De Blainville showed that it also failed in many other instances. Should it fail when applied to man, I shall not be in the least surprised; for, although it be certain, as I think, that the internal structures differ essentially in every species from all others, yet it is obvious that such differences are not sufficiently strong to be readily recognised, and, therefore, are of little value to the zoologist, and of no importance to mankind generally, who ever have, and ever must look to the exterior alone. Thus, Blumenbach was wrong, as I think, when he attached so much importance to the configuration of the human cranium, thus inducing many persons to suppose that a distinctness of species was only to be determined by constant specific differences in the form of that section of the skeleton. That such differences exist I believe; but even if they did not, this were no argument against the specific differences in the races of men, for it is to the external characters mainly that we must look for specific distinctions. Supposing the Jewish race to have become extinct, and no monumental or other artistic productions have recorded their physiognomy; who, from their osteological remains, could have described the race, or guessed at those physical and moral characteristics which distinguish them in so marked a manner from all other races?

The skeleton of the head, usually spoken of as the skull or cranium, encloses and protects the encephalon. It has relations externally with powerful muscles, and its inner table is in harmony with the external surface of the encephalon. The capacity of the cranium, properly so called, may generally be assumed to be the measure of the encephalon, to which, however, even in mammals, there is one exception—certain cetacea. Besides providing cavities for the protection of certain organs of sense, it articulates with the vertebral column, of which it seems but the continuation. Goethe first used the expression "cranial vertebræ," and its correctness is now all but universally admitted. Between its tables we find osseous cavities, with prolongations into them of the mucous membranes of the nose and pharynx; the uses of these sinuses are absolutely unknown. They are also wanting in the cetacea.

Now, when we look at the form of the skeleton of the head in the various races of men, it is easy to observe that they differ remarkably from each other, not so much in the capacity of the cranium as in the shape or configuration of the skull and face, and in the relations of the face to the cranium, differences still more remarkable during life. This difference in form was first observed by Hippocrates, and ascribed by him to artificial pressure of the head of the child, which practice being continued for some generations, the malformations, at last, became hereditary. But the artificially deformed feet of Chinese women have never become hereditary. So that the theory of Hippocrates seems, at least, extremely doubtful. Blumenbach himself doubted if these differences in the configuration of the human skull were constant; the candid Pritchard denied that they were, and he has been followed lately by others,—Williamson, Owen, etc. In respect of the capacity of the cranium, Dr. Tiedemann fancied that he had found in my own museum several crania of African negroes quite as large and as finely proportioned as the highest of the white races. Out of the exceptions he established a law, and in this he has been followed by others. But if such variations in form were frequent and permanent, the race would in a century or two become entirely altered: now this, we know, never has happened. Such varieties extend only to a generation or two, and then cease, the primordial forms returning—those forms, namely, which are in unison with nature's great scheme and with the existing order of things. Not that there is or can be any selection, as Mr. Darwin expresses it. Nature is not an intelligent being, and, therefore, there can be no selection, properly speaking. Again, if varieties in any one race were numerous and frequently occurring, this circumstance surely ought to have told upon races favourably situated in other respects; yet, in so far as I can perceive, in examining the monumental records of Egypt, the Copt and negro have remained unaltered for at least 6000 years. The same law seems to hold good with other races so long as they do not abandon their aboriginal land. When this happens, they perish.

The exceptions so much dwelt on by Pritchard, Williamson, Owen, and others, have been greatly exaggerated. They have no influence over the exterior, and probably none over the intellectual qualities of the race; whilst against the hereditary extension of these varieties stands the physiological law of non-vitality and extinction. Many years ago I remarked that varieties in the distribution of the arteries, implying other varieties in structure, were much more common in the very young than in the adult, implying, as I thought, a want of vitality or of viability in these individuals. Thus, nature checks the extension of all important varieties in structure, the individuals being either non-viable or non-productive. This accidental approximation of the individuals of any race to another seems wholly to be without any real results, otherwise hybrids, amongst such, might be fertile. Now, as I asserted long ago, they never are; and, lately, M. Boudin placed before the scientific bodies of France incontestable proofs of the correctness of my views on this point.

A conformation of the osteological head distinct from all other races characterises the Australian and Tasmanian, the Esquimaux, the Bosjesman, the Kaffir, the negro, the pure Mongol, the Carib, the Peruvian: all these races have race characters more or less marked, and not to be observed in other races. That these races may be converted by education into white men is, I fear, an entire delusion.

The situation of the foramen magnum of the occipital bone is still a matter of dispute. Dr. Pritchard thought it to be "the same in the negro as in the European"; and so it may be, if no allowance be made for the face. The situation of the foramen magnum of the occipital bone is not the same in the negro as in the European. Dr. Pritchard says it is exactly behind the transverse lines, bisecting the antero-posterior diameter of the base of the cranium. Supposing this measurement to be correct, which it is not, it has nothing to do with the *pose* or position of the head upon the vertebral column, which, all must know, depends on the position of the condyles of the occipital bone. A line bisecting the antero-posterior diameter of the skull, and dividing it into two equal parts, passes in the European head through the centre of the condyles of the occipital bone; and the same measurement applies nearly to the antero-posterior diameter of the entire head. Not so in the coloured races. In speaking of the base of the cranium, I am not quite sure to which Pritchard and his followers allude; for very generally in anatomical works the base of the skull, including the upper jaw, is confounded with the true base of the skull.

Now, as regards other measurements. The diameter of the cranium, measured with callipers, between the fronto-parietal sutures and midway between the vertex and the base of the skull, will be found, on an average, to be less by nearly an inch in the dark races than it is in the European. This seems to me an extraordinary difference in the capacity of that portion of the brain which all fancy to be the region of the higher intellectual qualities—of calculation, of comparison, and of reflection.

It is admitted by Mr. Williamson, that in the German the frontal diameter was 5 inches; in the French, Spanish, and English, 4·5; in the dark races as low as 3·6 and 3·7. This is all I contend for. The measurements of the occipito-frontal arch, inter-mastoid, etc., are of no value. The length of the head and face (skeleton of the head) is a true natural motory character, and strongly characterises the fair from the dark races; but the mingling up the two segments of the head leads to confusion and to erroneous inferences. The cranium being divided into two parts by a line (which I presume was perpendicular) drawn from the anterior edge of the foramen magnum occipitale to the centre of ossification of the parietal bones, so as to divide the interior into two chambers, an anterior and a posterior, the respective capacities of these chambers were next ascertained. The results gave,—

Anterior Chamber.

German	51
English	43

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Esquimaux	40
American Indian	32
Tasmanian	32

The numbers speak for themselves.

The remark, that in some crania the ring of the sphenoid does not reach the parietal on one side, was first made by me. I do not attach much importance to it, excepting as tending to illustrate the history of retrogressive development.

Mr. Williamson remarks "that the position of the foramen magnum occipitale was found to be exactly behind the transverse lines bisecting the antero-posterior diameter of the base of the cranium, which is the position in European skulls. The situation of the foramen magnum is, therefore, the same in negro as in European skulls."—Page 24.

But these measurements, admitting them to be correct, which they are not, does not touch the real question at issue, which is the position of the negro head on the vertebral column, as compared with that of the European. Had the measurements been made through the centres of the condyles of the occipital bone, the results would have been very different.

In a report on a collection of skulls of various tribes of men inhabiting Nepâl, collected and presented to the British Museum by Mr. Hodgson, late resident in Nepal, Mr. Owen expresses an opinion "that it is only with regard to the Australian and Tasmanian aborigines that he could feel any confidence in detecting the distinctive characters of a race; that, in fact, negro-shaped skulls occur amongst all races; that the white races have no advantage in this respect over the dark-coloured races."

Now, German and Russian travellers have made similar remarks in respect of the inhabitants of the Caucasus; and I was informed by my esteemed friend, Dr. John Sutherland (of the War Office), that whilst travelling in the Tyrol he found numerous specimens of those models of beauty whose portraits have been placed on canvas by the early Italian painters—women with beautiful oval Greek face and head, combined with fair hair and blue eyes—figures, in short, not to be seen in any Italian race. In troublesome times, nations and races, out of which nations are formed, flee to the mountains, where their descendants long find protection. The country of Nepal describes in some respects the regions to which I have alluded.

Nepâl is in a long and narrow tract of land, bounded to the north by the great mountain-wall of the Himalayas, separating it from Thibet; to the south, extending into the plains, bounded there by Delhi, Oude, Bengal, etc., and extending to the Chinese frontier. Situated between 27° and 31° north lat., it is extremely varied in climate, and presents numerous narrow valleys of great altitude. It has been long known that the numerous valleys are inhabited by a variety of mixed races, which cannot be traced to their origin. The aborigines were probably Tartars or Chinese; they were invaded by the Hindoos about, probably, the fourteenth century; then came the Mohammedan sovereigns of Delhi; the inhabitants fled to the mountains.

All this has been carefully described by Dr. Latham in his admirable work on "Descriptive Ethnology." A small population thus tossed between two, or rather three, overpowering foreign empires, cannot be expected to show the characteristic forms of a purely primitive aboriginal race. In addition to these circumstances connected with Hindoo, Mongol, Chinese, and Arab conquests, must also be taken into account the peculiar social habits of the Nairs—habits the reverse of those of the western world, and of all other races known to me.

ON THE DEFORMATIONS OF THE HUMAN CRANIUM, SUPPOSED TO BE PRODUCED BY MECHANICAL MEANS.

History informs us that in very ancient times a belief prevailed that, by mechanical means applied to the head of the infant, another form might be given to it than that intended by nature. Hippocrates was the first, I believe, who mentions the circumstance, ascribing the practice to certain people who resided near the shores of the Euxine. Like a true professor of the conjectural art, he added theory to the fact (if it really was one), that at first the deformity produced by art required to be practised on each individual child; but that afterwards, the deformity having become hereditary, the mechanical means were no longer required. It is needless for me to remark that artificial deformations never become hereditary, and, therefore, the theory of Hippocrates falls to the ground. But the facts still remain, that is, admitting them to be facts, for there are two, not one. The first is, did there live by the shores of the Euxine a race of men with deformed heads (the Macrocephali)? Secondly, were these deformations produced by mechanical means, or were they mere exaggerations of a peculiarly-shaped skull, to which mechanical pressure might give a more distinctly marked character? I lean to the opinion that such a race existed, more especially since crania have been found near Kertch, in the Crimea, presenting well-marked deformations. So far as I can learn from the reports, they were a flat-headed race, with depressed foreheads and skulls, which bulged out tolerably, and in this resembled the Chenooks and Caribs of modern times. What gives a peculiar interest to the remarks of Hippocrates, and to the discovery of deformed crania at Kertch, is the finding similar crania in Germany associated with palæontological remains of great antiquity. Thus, a flat-headed race seems to have extended in ancient times from the shores of the Euxine, probably not a sea at that time, to the centre of Europe, coeval with races of animals which are now extinct, like the flat-headed race of men themselves. With the area or centre of their creation, the Fauna and Flora of the region have disappeared, and new forms of life, including new races of men, have taken their place; not new creations, but new forms of men and animals adapted to, viable and reproductive in, the media surrounding them. Perhaps the most remarkable of these deformed, flat-headed crania was found in a cave at Engis, near Luthik, in Germany, and geologists do not hesitate to ascribe to it an antiquity equal, at least, to the extinct fossils of the formation. Another cranium was found at Neanderthal, between Düsseldorf and Elberfeld, perhaps quite as old as that from the cave of Engis. I do not think them much more deformed than some crania I have seen picked up on the shores of desert islands in the Pacific ocean, one of which was in my own museum. They have a certain resemblance to the chimpanzee, but not to the gorilla. It is stated also that the limb bones are thicker and broader than those of the present races of men, implying that they retained to their adult condition certain fœtal peculiarities. These facts rest on the authority of Professor Schaaffhausen, of Bonn, and may, no doubt, be entirely depended on. A race of men coeval with that period, having round crania resembling those of the present Lapps, but with a prominent ridge over the eyes, has been described by Lartet; and Danish naturalists speak of a race of Molluscophagi; but I have not seen their observations nor Mr. Lubbock's memoir. They do not, however, belong to the class of deformed skulls, whether by mechanical means or otherwise.

In other regions we find deformed crania, showing that such were by no means confined to the regions I speak of. The Chenook skull has been often described; also the Carib. These are skulls which seem as if they were flattened from before backwards; such also was the case with the Aztec. In his remarks upon the deformed crania of Central America, Mexico, and Peru, M. d'Orbigny has the following observations:—"No head is to be found amongst the present Aynaras. They have the same form of head as the Quichuas, comparable to the flattened skulls of their ancestors seen in tombs in the lake of Titicaca, in those of the province of Muñecos, in the wildest part of Carangas, and in the valleys of Jucua. What proves, if any proof were wanting, that this deformity is owing to a mechanical process, and is not a part of the natural structure of the race, is the fact, that in the same tombs, together with the depressed skulls, others are found of a very different shape."—P. 470, "Pritchard." In this conclusion I do not agree; the fact merely shows that two distinct races occupied the same country. On the other hand, the Peruvian skulls I have examined in this country seem to me to present a quite different deformity than that now spoken of. It consists in a highly irregular-shaped cranium combined with a remarkable want of symmetry, and this extends to and includes the bones of the face. I have observed this to be all but constantly present in Peruvian skulls, whether ancient or modern. Could we accept in *totalité* the views of the excellent Prescott on the civilisation of the ancient Peruvians and Mexicans, we should feel inclined to arrive at the conclusion, that the shape of the cranium, and, by inference, of the brain, has no influence over human civilisation; but against this view there exists a mass of evidence which cannot be readily set aside, even admitting the view I adopt to be the correct one, namely, that all or most races are quite equal to the invention of all the

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social arts, which, originating in necessity, clearly follow the exigencies of each race. But such inventions are no proofs of the capability of the race for that high civilisation which embraces not only the social but the emulative or fine arts, including an ennobled literature, profound science, and abstract philosophy, as was first distinctly placed before mankind by the antique Greeks.

The questions discussed in this memoir naturally lead to others, such as the origin of species, the antiquity of man on the earth, and the development of all living forms from a primitive, original, living molecule—in a word, to the philosophy of zoology, or the system of nature. Prior to Cuvier's great discovery no true philosophy of zoology could ever be imagined; the system most in vogue at present was invented by Goethe; it belongs wholly to him, and probably could not have originated with any other race than that to which he belonged—the race which produced Leibnitz and Kant, Gall and Wolff, Niebuhr and Schelling. Translated into English it has assumed a very plain and practical character, and has even been mistaken for science. But philosophical speculation is not science, nor did Goethe ever mistake the one for the other.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

SAMARITAN HOSPITAL.

FIVE CASES OF OVARIOTOMY—ALL SUCCESSFUL—CLINICAL REMARKS.

(Under the care of Mr. SPENCER WELLS.)

[From notes by Mr. E. PARSON, House-Surgeon.]

In our Number for December 20, 1862, we related four cases of ovarian disease treated in the Samaritan Hospital, and we stated that Mr. Wells had since operated in two other cases, which would appear in a future report. We now publish this report, and add a short account of three other cases, from the notes of Mr. Parson, with some remarks made at the bedside by Mr. Spencer Wells.

Case 1.—Multilocular Ovarian Tumour—Two Tappings—Ovariotomy—Recovery.

A. D., married, aged 50, was sent to Mr. Wells by Dr. Woodhouse, of Hertford, and first admitted on March 13, 1862. A multilocular ovarian cyst occupied the abdomen, the girth of which at the umbilicus was forty-one inches. The uterus was pushed over to the left side by a portion of tumour in the pelvis, and was not movable. She was tapped on March 18, and twenty pints of fluid containg much cholesterine were removed. Groups of secondary cysts were felt to be movable beneath the abdominal walls after the tapping, but the uterus was still drawn up and pushed over to the left side. She was discharged on March 26. The cyst refilled. She was re-admitted on June 23, tapped again, and discharged on the 28th. She filled more slowly, improved in health, and was admitted for the third time October 13, 1862. Great doubt was felt as to the closeness of the connexion with the uterus, and it was decided to make an exploratory incision, and to be guided by the result. The operation was performed on November 17, 1862. Dr. Greenhalgh administered chloroform. Dr. Robert Lee and many other visitors were present. Mr. Wells commenced by an incision, between four and five inches long, midway between the umbilicus and symphysis pubis. The abdominal wall was very thin, and the cyst being covered by a little ascitic fluid was easily exposed. Some slight parietal adhesions were broken down. A large cyst was tapped, and about twenty pints of fluid withdrawn from it. Finding that the pelvic connexions were not intimate, Mr. Wells separated a very strong adhesion between the upper part of the cyst and the thickened suspensory ligament of the liver. He then opened the large cyst, passed his hand into it, and broke down several inner cysts; the outer one being withdrawn, and the abdominal walls being kept so pressed against it that no ovarian fluid could pass into the peritoneal cavity. After separating a small piece of omentum, the tumour was entirely withdrawn, and the pedicle, which was moderately large, was secured by a clamp. A little serum was sponged from the pelvic cavity. The right ovary was healthy. The wound was closed by four deep and several superficial silk sutures.

She soon rallied, never vomited, had two opiate enemata during the evening on account of pain, and for two or three days was troubled by cough, but she made an excellent recovery, and was discharged in good health on December 10. Dr. Woodhouse wrote, on February 21, "She continues quite well."

Case 2.—Ovariotomy—Pulmonary Congestion—Venesection—Recovery.

E. W., single, aged 17 years and 2 months, admitted November 13, 1862, with a very large ovarian tumour, dating only from the previous May. She had never been tapped, and was much emaciated. The ensiform cartilage was pushed forward by the tumour, which filled the whole abdomen, the girth being thirty-nine inches. The uterus was far back, but movable; and a portion of the tumour could be felt between the uterus and bladder, but above the brim of the pelvis, and apparently movable.

Ovariotomy was performed on November 26. Mr. Clover gave chloroform. Dr. Kumar, of Vienna, Dr. Burckhardt, of Berlin, and other visitors, were present. An incision was made from two inches below the umbilicus for four inches directly downwards. The cyst adhered closely all over the abdominal wall anteriorly. Mr. Wells separated it as far as his finger would reach, tapped, and emptied the cyst. He then introduced his hand, and separated some very firm adhesions around the suspensory ligament of the liver and in the right iliac fossa. As the cyst was withdrawn, a large piece of omentum was separated from the upper part and kept outside. The pedicle was secured by a clamp, and the cyst cut away. As the omentum did not appear to be healthy, and was much torn, Mr. Wells cut away a large piece and tied four vessels, which bled freely, with very fine silk, cutting off the ends close, and then returning the omentum. The wound was closed as usual.

She soon rallied and began to perspire; she complained of no pain, but the pulse was 130 at 6 p.m., and 145 at 10 p.m. There was a very troublesome suffocative cough, but no pain. Some four to six ounces of blood had oozed from the surface of the pedicle, which did not seem to be perfectly compressed by the clamp, the cough having disturbed it. Mr. Wells cut away some of the stump to find the bleeding vessel, which he tied, and applied perchloride of iron to the rest of the surface. The loss of blood appeared to relieve the chest, and the pulse, though so rapid, was not feeble. She passed a pretty good night, though the cough was very troublesome at times. The next morning the pulse was 150, not weak. Scarcely any respiratory murmur could be heard in either lung, and the action of the heart was very tumultuous. Perspiration was free, and secretion of clear urine abundant. Some abdominal pain began in the forenoon, and twenty drops of laudanum were thrown into the rectum, after which she slept. During the afternoon the pulse kept up to 150, and at 6 p.m. had reached 160. The lips were parched, and the skin was hot and dry, with occasional suffocative cough. Mr. Wells accordingly opened a vein in the arm, and drew off ten ounces of blood rapidly, stopping as soon as she felt faint. She fell asleep at once, a very profuse perspiration broke out, and within ten minutes the pulse was down to 140. The blood was very much cupped, but the coat of fibrin was not thick.

The pulse gradually fell during the next day from 140 to 130. A little champagne was given occasionally, five grains of carbonate of ammonia every two hours, and the air about the bed was ozonized by iodine; a few grains being placed in chip boxes, the lids of which were replaced by a piece of muslin.

After this, recovery was progressive. There was no abdominal pain whatever. She was discharged December 20, 1860, and has called at the Hospital since in very good health.

Case 3.—Ovariotomy—Albuminuria—Recovery.

E. B., married, aged 42, was admitted December 12, 1862, with a large multilocular cyst of the left ovary, which had probably existed for several years, but had only increased rapidly since the preceding January. The girth at the umbilicus was forty-three inches, and the distance from symphysis pubis to ensiform cartilage twenty inches. The uterus was large and soft, but quite movable. The left broad ligament was depressed. She had never been te-

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Albumen was found in the urine, and this proved not to be due to admixture with vaginal discharge, because, after filtration, it was found in the clear urine, and in urine drawn off by the catheter. But as the deposit consisted almost entirely of urates, and no casts, blood, pus, or any other sign of kidney disease, could be detected, it was considered that the albumen must be due to pressure only, and was no objection to operation. It appeared, also, that the urine passed in the morning was copious, clear, and free from albumen; while towards night it became scanty, concentrated, and albuminous.

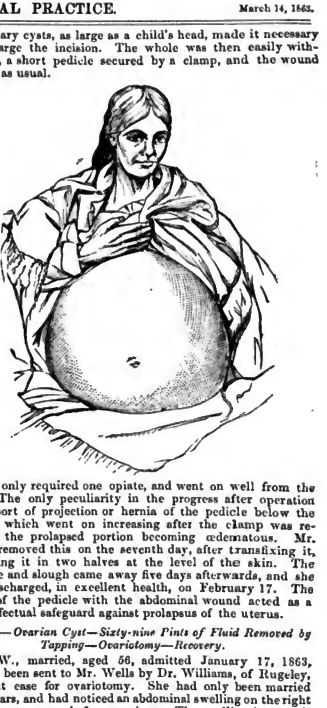
Ovariotomy was performed on December 15. Mr. Clover gave chloroform; Dr. Acland, Mr. Partridge, Mr. S. Haden, etc., were present. An incision, four inches long, was made downwards from two inches below the umbilicus. The adhesions were so close that it was not easy to make out the exact limits of the cystic and parietal layers of peritoneum. But Mr. Wells did so after a little careful examination, and separated some firm adhesions as far as one finger would reach. He then tapped, and removed a pailful of dark fluid, which contained many lumps of fatty fibrinous matter, which became solid on cooling. The lower part of the cyst was then easily withdrawn, but the upper part was held by a piece of adhering omentum, about six inches square, which was separated, and then by a very firm band of adhesion, which extended above and to the right of the umbilicus. This was separated, a long, very narrow pedicle secured by a clamp, and the cyst cut away. One bleeding vessel in the omentum was stopped by torsion. There was rather free oozing of blood from torn adhesions, but no vessel seemed to require a ligature. On examining the right ovary, Mr. Wells found one small cyst on its surface, which burst on pressure, and one distended Graafian vesicle, out of which he squeezed a clot, but, as the ovary seemed to be atrophied, he did not remove it. The wound was closed by deep and superficial silk sutures.

She rallied well, and had a good night; no opium was given, as there was no pain. On the first and second days after operation there was occasional vomiting of watery fluid with greenish mucus, and on the third day there was some sanguineous discharge from the uterus, which was followed by relief. She gradually regained strength, was discharged in good health January 7, and Dr. Acland wrote, on February 20, to say that she was perfectly well.

Case 4.—Multilocular Ovarian Cyst—Seventy-two Pints of Fluid removed by Tapping—Ovariotomy—Recovery.

J. W., married, aged 32, admitted December 20, 1862, with a very large ovarian cyst, dating from the birth of her third child, six years before. Increase in size was slow for the first four years, but more rapid during the last two years. She had been subject to prolapsus uteri before the confinement, and it became more complete afterwards, being at the time of admission irreducible, and complicated by vaginal cystocele and rectocele. She had been greatly distressed by the abdominal distension, and had kept her bed for six months before admission. The catamenia had been regular as to time and quantity ever since the birth of the last child. The annexed cut, from a photograph by Dr. Wright, gives a good idea of the size of the abdomen. The girth at the umbilicus was fifty-four inches, and the distance from ensiform cartilage to symphysis pubis thirty-six inches; while from one anterior-superior spinous process of the ilium to the other it was forty inches. Mr. Wells tapped her on December 30, and removed seventy-two pints of clear, highly albuminous fluid. A movable, multilocular cyst remained. The uterus was then easily returned. She was feeble for a few days after the tapping, and the fluid began to reform rapidly, but she soon regained strength. On the 18th of January the measurements were—girth, thirty-five inches, instead of fifty-four; perpendicular, seventeen inches, in place of thirty-six; and anterior, seventeen inches, in place of forty.

Ovariotomy was performed on January 19. Mr. Clover gave chloroform. Dr. Marion Sims, of New York, Mr. Macilwain, etc., were present. Owing to the extreme looseness of the folds of skin, Mr. Wells made the first incision by transfixing a fold of skin, thus making an opening, six inches long, down from one inch below the umbilicus. The peritoneum was opened, as usual, on a director. Some loose, but extensive, adhesions were separated by the hand. The chief sac was tapped, emptied, and withdrawn; but a mass of secondary cysts, as large as a child's head, made it necessary to enlarge the incision. The whole was then easily withdrawn, a short pedicle secured by a clamp, and the wound closed as usual.



She only required one opiate, and went on well from the first. The only peculiarity in the progress after operation was a sort of projection or hernia of the pedicle below the clamp, which went on increasing after the clamp was removed, the prolapsed portion becoming œdematous. Mr. Wells removed this on the seventh day, after transfixing it, and tying it in two halves at the level of the skin. The ligature and slough came away five days afterwards, and she was discharged, in excellent health, on February 17. The union of the pedicle with the abdominal wound acted as a very effectual safeguard against prolapsus of the uterus.

Case 5.—Ovarian Cyst—Sixty-nine Pints of Fluid Removed by Tapping—Ovariotomy—Recovery.

M. W., married, aged 56, admitted January 17, 1863, having been sent to Mr. Wells by Dr. Williams, of Rugeley, as a fit case for ovariotomy. She had only been married four years, and had noticed an abdominal swelling on the right side about a year before marriage. The swelling increased, and she was tapped in July, 1861, sixty-four pints of fluid being removed. She was not tapped again for eleven months, namely, June, 1862, when seventy-two pints were removed. She was very low for a time after each tapping, and soon began to fill again. On admission, the girth at umbilicus was fifty-seven and a-half inches; ensiform cartilage to umbilicus, fourteen and a-half inches; umbilicus to symphysis pubis, twenty-nine and a-half inches; right anterior-superior spine of ileum to umbilicus, nineteen and a-half inches; left, an inch less. She was tapped, and sixty-nine pints of fluid were removed; the girth being lessened from fifty-seven inches to thirty-four, and the distance between sternum and pubis from forty-four to fourteen. The skin fell into loose folds, and the oblique muscles, hypertrophied by carrying so much weight, were felt as thick bands on either side. No secondary cysts could be felt.

It was not till a considerable quantity of fluid had recollected that it was possible to say whether there was an ovarian cyst or not; but at length there was very marked dullness in the right loin, and equally well-marked resonance in the left, which led Mr. Wells to the diagnosis of a tumour of the right ovary.

Ovariotomy was performed on February 9, 1863. Mr. Parson administered chloroform. Drs. Williams, of Rugeley; Duke, of Chichester; Hoffmann, of Margate, &c., were present. An incision, four inches long, was made midway between the umbilicus and symphysis pubis. Extensive and rather firm parietal adhesions were broken down, the cyst

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tapped, emptied, and withdrawn, the pedicle secured by a clamp, the cyst cut away, the left ovary found to be healthy, and the wound closed by deep and superficial silk sutures, after tying three superficial vessels divided in the first incision.

She rallied well, had two opiate enemata during the evening on account of pain, and for three days was troubled by cough and viscid expectoration. The bowels acted on the fifth day after an enema. From this time she went on perfectly well, only complaining of occasional flatulence, and returned home on the 7th of March.

Mr. Wells made some remarks at the bedside upon these cases, enlarging especially upon the diagnosis between ascites, ovarian dropsy, and ascitic fluid surrounding an ovarian or uterine tumour; but these we must postpone until we are able to publish the particulars of a very interesting case upon which he operated on February 23, removing a large quantity of ascitic fluid which surrounded a small adenoid tumour of the right ovary, deferring the removal of the tumour. The patient has gone on remarkably well hitherto, and is watched with much interest. Mr. Wells said that, in the fourth and fifth cases reported above, he had adopted the practice of tapping two or three weeks before doing ovariotomy. He had some doubts as to the wisdom of the practice, but it had answered well in these cases. In both, the distension was very great; and he feared that the sudden removal of so much fluid at the same time as the cyst would be too much for the patient. The tapping was also useful in clearing up doubtful points of diagnosis. The obvious objection was the danger of the tapping itself being followed by changes which would preclude ovariotomy. He also entered at some length into the question of venesection after Surgical operations, explaining that, in the second case recorded above, he bled in order to afford mechanical relief to the oppressed heart. With a super-fibrinated condition of the blood, there was great danger, especially after bleeding, of fibrinous clots forming in the cavities of a weakened heart. Champagne was accordingly given after the bleeding, and ammonia—the normal solvent of fibrine—to assist in maintaining the force of the heart and the fluidity of the blood. Dr. Richardson's suggestion of iodising, or ozonising the air—by the simple means we have described—has been adopted by Mr. Wells in many cases very successfully. The relief to cough is often remarkable, and the deodorising effect of the iodine vapour is immediate.

MIDDLESEX HOSPITAL.

MULTILOCULAR OVARIAN TUMOUR OF TWO YEARS' DURATION—OVARIOTOMY—RECOVERY.

(Under the care of Dr. PRIESTLEY and Mr. DE MORGAN.)

THE following two cases are reported by Mr. Langford, Obstetric Assistant:—

C. C., aged 46, admitted September 23, 1862. She is tall and well developed; complexion sallow. Has been a washerwoman for the last eighteen years. Was married at 18, and had one child, which died three weeks after birth. She thinks she was injured during the birth of this child, as she did not get about for six months afterwards. Since then the catamenia have always been regular. About two years ago she felt a pain in the left iliac region, and discovered there a small movable tumour, which gradually enlarged. She avers that the suffering and discomfort constantly increase, and that now she is seldom if ever entirely free from pain. Her nights are frequently restless, and her capacity for exertion gradually diminishes.

On admission, a large ovarian tumour, believed to be of the multilocular form, was found occupying the abdomen, and reaching almost to the epigastrium. Its outline was somewhat irregular; and although mobility was rendered difficult by its size and the distension of the abdomen, it gravitated readily towards either side when the patient was placed in one or other lateral position. There was no evidence of pelvic adhesions.

The circumference on October 18 was forty inches and a-half, and it steadily but slowly increased.

The operation was performed on October 28 by Mr. De Morgan, in a small ward in which she was to remain, and from which the other patients had been removed. The ward was warmed up to 70°, and the atmosphere kept moist with steam. Chloroform was used. She inhaled it quietly; but as soon as the first incision was made, violent straining, like efforts to vomit, came on, and recurred frequently during the operation so as to retard it in some degree. The straining usually ceased when she was brought more completely under the influence of the chloroform. An incision of four inches in length, and commencing about an inch below the umbilicus, was made through the skin, tendon, and fascia, when the peritoneum was protruded under the straining efforts by fluid contained in its sac. There was no bleeding. The peritoneum was then opened, and a large quantity of dark coloured ascitic fluid allowed to escape. On introducing the hand no adhesions could be found. The tumour was now tapped with Mr. Spencer Wells' double canula trocar; but only about an ounce of thick curdy stuff escaped. The trocar was then pushed through a deeper cyst-wall; but with no result. As the tumour was not diminished in size by these punctures, and was too large to pass, the incision was enlarged to about an inch above the umbilicus, and the tumour was partly drawn, partly forced by the straining, through the opening, a portion of the bowels being at the same time protruded. This was at once covered with hot flannels. There was no adhesion. The pedicle was short, but not very thick. As the bulk of the tumour and the shortness of the pedicle did not allow their point of connexion to be seen, and some loops of intestine were protruded in the neighbourhood, an attempt was made to lessen the size of the cyst by making a free incision through it; but it was found to be made up of clusters of small cysts, from which very little fluid escaped, and no diminution of size ensued. The clamp was therefore very carefully applied to ensure the absence of any part of the gut, and the tumour was cut away. There was not any hæmorrhage into the peritoneal cavity, nor any escape of the contents of the cysts into it. Some of the peritoneal fluid was removed by means of sponges; but some remained behind. The opposite ovary (the left) was found to be quite healthy, as was also the uterus. The edges of the wound were brought together by silver sutures placed about half an inch from one another, and included half an inch of peritoneum on each side, the pedicle held by the clamp being left outside the wound. When the patient was cleaned and dried, a large casing of doeskin, spread with soap plaster, which extended from the middle of the chest to the hips, was placed beneath her. This case came up on either side so far as to leave about six inches of the front of the abdomen exposed. Bands of broad elastic were fastened to one edge, and buckles to the opposite edge, so that an elastic support could be maintained and regulated over any part of the abdomen. A large linseed-meal poultice, covered with cotton-wool, was applied over the whole abdomen, and the straps buckled over it. She was then placed in bed, and wrapped in blankets. The temperature of the room was maintained to about 65°. The pulse, after the operation, was 100 to 104, irregular, small, and weak; but it soon gained more power, and became fuller. Three hours afterwards she complained of great pain throughout the abdomen; the pulse 96, small and irregular. She was ordered ten grains of compound soap pill.

She passed a good night, and was free from pain next day. She took arrowroot and milk-and-water during the night, and was free from sickness, though complaining sometimes of nausea. In the evening she again had pain, which was relieved by opium. On the whole, she had a quiet night, though not without occasional pain from flatulence.

The clamp was removed on the next day, forty-eight hours after the operation, and the stump was washed with a solution of carbolic acid. The wound was quite quiet, and appeared to have united throughout the deeper part. She was now taking a little wine-and-water.

November 1.—The bowels not having been relieved since the operation, and great griping pain being complained of, she had an enema of castor oil and turpentine, and turpentine fomentations were applied over the abdomen. No evacuation followed the enema. At night the pain was severe, and there was fulness and marked tenderness over the left iliac region. She was ordered a grain of calomel and a quarter of a grain of opium every four hours.

On the 2nd, she was much easier; but the pulse was 112, and sharp. Half an ounce of castor oil was given, which towards evening caused a free action from the bowels twice with great relief.

The calomel was discontinued on the following day, as all the symptoms were so much more favourable. She went on in this way, occasionally suffering much from wind, which

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was generally relieved by opium, chloric ether, and sal volatile, with turpentine fomentations. There was always, however, some tenderness in the old situation, which on the 18th was so much more severe that she was again put on calomel and opium.

Dr. Priestley now made a vaginal examination, and found a decided fulness in the left broad ligament and iliac fossa, and the posterior surface of the uterus was fixed by inflammatory adhesions, so as to interfere with its mobility.

The calomel and opium were continued till the 24th, the tenderness and fulness diminishing day by day. At this time the gums were very slightly affected. From this period she went on improving, and soon began to sit up and to move about. At first she was very weak; but she gained strength steadily, and left the Hospital on December 16. The wound was perfectly cicatrized, and measured only four inches and a-half. The tumour weighed ten pounds, and was made up of one large and pretty solid cyst, and a number of small ones.

CASE OF OVARIOTOMY—DEATH—AUTOPSY.

(Under the care of Dr. PRIESTLEY and Mr. HULKE.)

A country woman, aged 56, was admitted into Prudhoe Ward October 21, 1862, with a large abdominal tumour. The distended belly had a globular shape. Its greatest girth at the navel was forty-two inches. The hypogastric, the iliac, the umbilical region, as high as a horizontal line three fingers' breadth above the navel, and the neighbouring portion of the lumbar regions were dull, whilst the epigastrium, the hypochondria, and lumbar regions behind were resonant on percussion. For a limited space around the navel there was fluctuation, so distinct that the wave was apparent to the eye, and throughout this area, on making sudden and firm pressure with the finger, a solid or very firm resistance was encountered at a certain depth, after the displacement of an overlying stratum of fluid. Below this, about the middle line, in the lower part of the umbilical and upper part of the hypogastric region the tumour felt solid and bossy. On applying the flat hand firmly to the flanks, fluctuation was obscurely felt across through the tumour, across the belly. The liver, not enlarged, was thrust upwards by the tumour, from which it was separated by a resonant space. The abdominal walls could be slid freely upon the surface of the tumour without creaking, and the tumour itself could be readily swayed about. The uterus was movable, independently of the tumour.

The patient stated, that, with the exception of two attacks of jaundice, the second thirteen years ago, she had enjoyed good health, so that till her present illness she had earned her living by hop-picking and field labour. She had had two children, and continued to menstruate regularly until her fifty third year. Soon after the cessation of the menstruation she became aware of the tumour in the lower part of the belly, about the size of a teacup, but she could not say whether it lay at first more on one side than the other. It increased in spite of treatment, and had latterly caused her much distress by its weight and bulk, and constant pain. Her health was evidently fast failing; she had a worn, anxious expression, and rather sallow complexion; the pulse was irregular, and the lower extremities, and also the pubic and inguinal regions, were œdematous. The heart sounds were normal; the urine free from albumen, its specific gravity 1010.

Diagnosis.—An ovarian tumour, probably multilocular, and in great part very firm or solid, and the solid portion chiefly in front in the lower part of the umbilical and upper part of the hypogastric region; probably no adhesion, or but slight ones; the fluid around the navel probably contained in a thin superficial cyst, overlying the more solid mass of the tumour, its restriction to the highest part of the belly, and its absence from the flanks behind, shown by their resonance, being against the supposition of ascites.

As the usefulness of tapping was excluded by the apparent solidity of a great part of the mass, and it was evident that the tumour would before long destroy life, the applicability of ovariotomy was considered by the staff and confirmed.

The œdema of the extremities appearing to be mechanically produced by the tumour, was not considered a contra-indication. The patient was very desirous for the operation, and clearly understood her risk.

December 2, at 2 o'clock p.m., the operation was performed in the ward in a moist atmosphere, at a temperature from 65 to 70. A cut in the middle line, began just below the navel, was carried downwards for nearly four inches, towards the pubes. On dividing the peritoneum, several translucent, yellowish vesicles bulged through the wound. These so closely resembled the small pendulous secondary cysts sometimes seen within the larger cysts, that for the moment it seemed as if the ovarian tumour had been inadvertently opened; they were, however, only the thinned omentum pushed outwards by ascitic serum, and on throwing them aside the white, glistening ovarian tumour came into view. At the lower angle of the incision a thick vertical fold of peritoneum passing between the ovarian tumour, and the abdominal wall, slightly to the left of the mesial line, came into view. By prolonging the incision downwards this fold was found to reach the back of the pubes, and end near the summit of the bladder; it was so strong that it could not be torn through. The tumour was soon tapped, and ten pints of a chocolate-coloured fluid drawn off; particular care was taken to prevent any of this getting into the peritoneum, and as it flowed off, the tumour, a unilocular cyst, was pulled out through the wound; the pedicle, long, and not very thick, was clamped and divided; and, lastly, the thick peritoneal fold was detached from the cyst with some trouble, on account of its great strength; it bled so freely from so many points that it appeared more safe to put a second clamp on this than to tie each vessel separately. The wound was closed with interrupted wire stitches, the peritoneum being included.

At 8 o'clock p.m., pulse 76, firm; patient restless; pain in right flank eased by pressure. Orderd tinct. opii. ♏xxx., followed by sleep till 2 p.m., when sick.

December 3, 8 a.m.—Pulse 76; sickness continues. Tongue moist and clean; less pain in flank; none about the wound; no tenderness on pressure. 2 p.m., pulse 68; more pain in flank, relieved by a turpentine stupe; less sickness. 10 o'clock p.m., belly rather swollen with flatus, but not tender, except over transverse colon.

4th, 9 a.m.—Less restless night; pulse 100; thirst; belly less swollen; wound looks well; tenderness still in situation of transverse colon; less sick. Her strength is failing. Champagne ℥iss. every two hours. A rigor this morning; passed a small hard stool; the clamps were removed. 12 o'clock.—Pulse 108; panting, pain, and tenderness in epigastrium; sickness worse. 10 o'clock p.m.—Pulse 116; restless; features pinched; free from all pain; hiccough.

5th, 2 a.m.—Vomited two lumbrici. 7 a.m.—Great restlessness; death.

Post-mortem Examination.—The abdominal cavity contained about two pints of turbid serum; the intestines and omentum were glued together with recently effused lymph. The capsules of the liver and spleen presented smooth white patches of tough fibroid tissue, sequelæ of former inflammation; and in the interior of the latter organ, near the hilum there was a pultaceous deposit enclosed by condensed tissue. There was an entire absence of extravasated blood. The greater part of the wound had united; the pedicle was glued to its lower angle; the fallopian tube had not been included in the clamp; the sub-peritoneal cellular tissue at the fundus of the uterus was hyperæmic and œdematous. Death was evidently due to peritonitis; and this seemed to have its focus about the lower end of the incision, where the two clamps had been lying, and to have thence extended to the viscera.

KING'S COLLEGE HOSPITAL.

SUCCESSFUL CASE OF OVARIOTOMY.

(Under the care of Mr. FERGUSSON.)

[Reported by Mr. SMITH, House-Surgeon.]

EMMA R., aged 26, single, a pale, delicate, but not unhealthy-looking woman, was admitted into King's College Hospital, under Mr. Fergusson, February 2, for ovarian dropsy.

History.—About four years ago she noticed a slight swelling in the abdomen, which rapidly increased, but without much pain. For this she applied to a medical man at Scarborough, who tapped her, but she does not know how much fluid was drawn off. The swelling quickly returned, and the operation was repeated five times. When last tapped, January 20, 1863, seven gallons of fluid were drawn off. She began to menstruate when between 15 and 16 years of age, and has continued to be regular until lately, when she has menstruated at varying intervals; during the last month she has menstruated twice.

There is, upon examination, a large swelling in the abdo-

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men, extending from the pubes to the sternum, and bulging a little at the flanks; the tumour, she says, has rapidly increased since she was last tapped. No solid matter can be felt, and the cyst was thought by Mr. Fergusson to be unilocular. The circumference of the body was forty-eight inches. On February 13, Dr. Tanner saw the patient, and considered, with Mr. Fergusson, that it was a fit case for ovariotomy. The dangers of the operation were fully explained to the patient before she left the country, but she was most anxious to have the tumour removed.

Operation.—February 21.—The patient was brought into the theatre and put under chloroform. Mr. Fergusson began his incision about an inch and a-half below the umbilicus, and extended it downwards for about three inches and a quarter. A rapid but cautious dissection was then made through the abdominal walls, and the fibrous coat of the tumour exposed. An examination was then made to discover whether any adhesions existed. A few were found about the neighbourhood of the incision; but these were slight and very easily torn. The tumour was then tapped with a large trocar, to which was attached a long flexible tube by which the fluid contents of the tumour were emptied into a receptacle placed under the table. Three and a-half gallons of a pale, thick viscid fluid were drawn off. After the cyst had been emptied of this, Mr. Fergusson again introduced his hand, passed it round the whole surface of the bag of the tumour, and found that it was quite free, and bound down by no adhesions. The sac was then drawn out without any difficulty, and the pedicle, which was long and narrow, was secured by the ordinary clamp. After the tumour had been removed, the margins of the incision were brought together by ordinary silk sutures, and a large compress and bandage applied. The patient was immediately removed to the ward, and a pill of two grains of opium was given.

The operation lasted about a quarter of an hour. The tumour, when examined, was found to consist of a thick fibrous cyst, springing from the inside of which, on the right side, were three smaller cysts about the size of a hen's egg, each containing thick fluid.

6 p.m.—She has vomited a little since the operation, but this has now ceased. She feels comfortable, and complains of very little pain. Skin moist; pulse 93. She has taken some brandy. Ordered to suck ice, and to take five grains of the compound soap pill every three hours.

10 p.m.—She feels comfortable; pulse 126.

22nd —11 a.m.—Has slept pretty well during the night, and this morning looks cheerful. Has had no vomiting since yesterday. There is no tenderness in abdomen. The tongue is a little dry; pulse 126. To continue the soap pills.

10 p.m.—Feels pretty well; pulse 120; tongue moist. Since operation has taken eleven grains of opium. Pills to be discontinued.

23rd.—10 a.m.—Has passed a quiet night; pulse 128. Complains this morning of a little pain in abdomen. Ordered five grains of compound soap pill to be taken immediately.

10 p m —Going on well, but during the evening the pain in the abdomen has returned. Pulse 124. Tongue a little dry. Pil. sapon. co. gr. v. h. s. s. Still free from vomiting.

24th.—10 a m.—Has not had a good night, and complains this morning of a great deal of pain on the right side of the abdomen. Pulse 128. The pill to be repeated.

10 p.m.—Since the morning has been very comfortable. The incision has now quite united, except by the side of the pedicle, and the sutures were removed to-day. The clamp was not interfered with. She has been a little purged to-day, but this has given her no pain. Ordered, pil. sapon. co. gr. v.

25th.—Going on well. Pulse 120. Her bowels have been during the day very much relaxed, but she has no pain. Ordered five grains of soap pill at bed-time. Tongue moist.

26th.—Still going on well. Pulse 120. Five grains of soap pill at bed time.

27th.—She says that she feels quite well, and would like to get up. Pulse 102. Evening.—She does not feel quite so well, has a cough, which harasses her very much. Ordered fifteen minims of the liquor morphiæ.

March 3.—Since the last date she has been doing very well. The cough has now ceased. The pulse has been varying, ranging from 90 to 126. She has been occasionally relaxed in her bowels, with sharp, griping pain, but this has always been relieved by some opium. To-day the clamp was removed. The pedicle had contracted adhesions, and did not retract.

4th.—To-day the slough formed by the portion of pedicle included in the clamp came away, and a small granulating surface is left, which is rapidly healing over. The patient feels very well. Has a moist, clean tongue, and pulse 98.

8th.—Has gone on well since last date, and without any complaint. To-day she was allowed to get up, and sit for two hours by the fire. This evening feels quite well. Tongue clean. Pulse 93.

12th.—The patient still keeps well.

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Medical Times and Gazette.

SATURDAY, MARCH 14.

ROYAL MARRIAGES.

The universal national rejoicing called forth by the marriage of the Prince of Wales, on Tuesday last, naturally draws our attention to the subject of royal marriages in general. The conditions under which such marriages are contracted differ so greatly from those which prevail in less exalted walks of life, that we often find that the tone adopted by English people, when royal marriages are in question, is one in which a feeling akin to pity has no small share. The limitation of choice by political and religious considerations, the want of previous opportunity for free social intercourse, the fact of the high contracting parties being in most cases natives of different countries—all these, and many other circumstances, concur to make many people look upon a royal marriage which produces domestic happiness as the exception rather than the rule.

This feeling can exist probably in no other country but England, since in no other country are marriages of affection so often made as here, though it has even been gravely argued by more than one writer that, on the whole, the amount of matrimonial felicity is not greater in England than in those countries where, as in France, marriages are determined upon rather as a matter of business by parents than as one of sentiment by the parties more immediately concerned. This question, however, is one which we can afford to leave to our non-professional contemporaries, but we think it will not be uninteresting to our readers if we take the present opportunity of reviewing slightly the history of some few royal marriages, with a view of seeing how some of their circumstances have affected the condition and character of their offspring — matters which have a somewhat nearer affinity to those hygienic questions which it is our ordinary province to discuss. In so doing we shall confine ourselves chiefly, though not entirely, to instances comparatively modern; for though it might be interesting to investigate some of the conditions of such unions as that by which Edward II., the first Prince of Wales, was ruined, or that by which the crown of Henry VI. was almost saved against his will; or those, again, which led to the extinction of the male descendants of Charles V., and fixed the Bourbons on the throne of Spain, yet the manners—and, we hope, the morals, too—of those times are so remote from our own that such investigation could be little more than curious, even if our space permitted it, or the materials at hand were such as could be trusted.

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Let us consider, then, what are the causes to which infelicitous marriages are commonly supposed to be due, bearing in mind that we are concerned with the hygienic, not the social, aspect of the question, and see how far they can be supposed to affect the unions of kings and queens in a greater or less degree than those of their subjects. They may be enumerated as follows:—

(1.) Want or deprivation of the necessaries of life. (2.) Unhealthy employments. (3.) Unwholesome dwellings. (4.) Vicious and intemperate indulgence. (5.) Blood relationship between the husband and wife. Of these it is plain that the first two are practically excluded from all influence in the cases under discussion by the ordinary conditions of modern civilised life. No royal personage in Europe, we suppose, since the time of Charles XII. of Sweden, has ever been placed in a situation involving personal privation. The third cause, too, we might have been equally disposed to eliminate, had we not all but too sad reason to remember that even palaces are subject to the evils of imperfect drainage; and that, if we are to believe the most recent doctrines on the subject, the greatest national loss which England has deplored for many a year was due to this very fact. The two last items on our list are, however, beyond a doubt those which are popularly supposed to exercise most frequently a baneful influence upon royal and princely marriages, or upon their issue. Let us see how far recent history tends to support or invalidate this time-honoured popular belief.

From the time of the Restoration to the accession of George III., our readers will remember that royal mistresses were almost as much an institution in England as they were during a somewhat longer period in France, and though such a fact bears in itself a somewhat closer resemblance to the polygamy of eastern nations than to what is ordinarily understood by vice, it may be taken as an indication of a prevailing standard of social ethics by no means high. Accordingly, we find that both the father and grandfather of George III., though much more really attached to their wives than to their mistresses, are represented as having led very irregular lives in their youth; yet their legitimate children were respectively eight and nine in number, and most of them survived their parents, and were therefore presumably of fair average health. A little earlier than this, however, James II. may perhaps be considered as affording an instance of an opposite kind, since of thirteen children, the issue of his two marriages, three only survived him, and the third generation saw the extinction of his race. It is curious that of the five cases, during the last 300 years, in which the Sovereign of England has left no legitimate descendant, four are scarcely to the point. Elizabeth never married; Charles II. avoided the society of his wife; Mary II. and Anne, though themselves most virtuous and dutiful wives, were daughters of James II. It would appear, therefore, that it is impossible to show any constant relation between the immoral lives of some of our kings and the fate of their offspring, unless the case of James II. and his family, which we have just noted, be considered an exception.

We pass on to consider in the last place the other supposed cause of degeneracy in royal stocks, by marriages of consanguinity. And here the first remark which suggests itself is that, frequently as it may be repeated as a commonplace that by this time all the royal personages in Europe are cousins of each other, any one who takes the trouble to investigate the subject will be surprised to find out both how difficult it is to discover what the relationships actually subsisting are, and how very much more remote they are than is commonly supposed. The whole question of the effects of marriages of consanguinity upon their issue is still *sub judice;* this, indeed, is literally true, inasmuch as a commission of the French Academy of Sciences is sitting upon it; and within the last twelve months a large number of papers have been contributed both to French and English scientific periodicals supporting severally the most opposite views. We do not therefore commit ourselves in the present state of the discussion to a decided opinion upon it, but we may say without hesitation that the history of the marriages of the English royal family within the last few generations will not help the argument much either way. It is idle to speak of a marriage beyond the degree of first-cousinship as a marriage of consanguinity at all. Two kings of England only have, in recent times, married their first-cousins, viz., George I. and George IV. In each case the marriage was unhappy, and the number of children small; but in each case neglect and misconduct on the part of the parties themselves was the cause of the unhappiness; and in neither does the mental or bodily health of the offspring appear to have suffered in the smallest degree. It is to ancient times that we must look for the most remarkable historical instances of marriages of consanguinity in a royal race. We mean, of course, those afforded by the long line of Greek kings of Egypt—the Ptolemies. Niebuhr, it is true, speaking, in his Lectures on Ancient History, of their habit of marrying their own sisters with that horror and repulsion which such a custom of necessity excites in the mind of a civilized man, says that they degenerated both in body and mind; but it is a remarkable fact, and one hard to reconcile with his view, that the dynasty of the Ptolemies continued in an unbroken line for nearly 300 years, and was brought to an end in the person of the celebrated Cleopatra, a princess almost as famous for the extent of her learning (she is said to have conversed in seven languages) as for the perfection of her personal beauty.

The only conclusion which can be drawn from any historical survey of Royal marriages is, that if they differ in any respect from those of subjects, it is in their social, and not in their physiological or hygienic circumstances, and if only the former are as they should be, there is little fear of any ill effects resulting from the latter. In the case of the particular royal marriage which has suggested these reflections, we can but re-echo the voice of all our contemporaries and of the nation at large. From no point of view can we discover a cloud upon the horizon, and can heartily join in the universal strain of hope, and congratulate the Prince and Princess of Wales on commencing their married life with perhaps the very brightest prospects which ever opened even upon a royal pair.

ENGLISH AND DANISH.

> "For Saxon, or Dane, or Norman we,
> Teuton, or Celt, or whatever we be,
> We are each all Dane in our welcome of thee,
> Alexandra!"

So has written the poet laureate; but we doubt whether a ten-thousandth part of the countless multitudes who on Saturday last assembled to welcome the fair daughter of Denmark to the heart and home of the English nation had anything like a just conception of the intimate ties of relationship which bind the race of her fatherland to the inhabitants of these islands. Even highly-educated men—ethnologists and historians—are commonly in error in giving undue, and almost exclusive prominence to the Anglo-Saxon element in our nationality, whilst the infusion of Scandinavian blood, which, from the close of the eighth century to the Norman conquest, constantly reinvigorated and regenerated the nation, giving it strength and acuteness, nerve and muscle, self-reliance and daring, has had scant justice paid to it in the common accounts of the formation of the English race and character. It is not generally acknowledged or believed that the Anglo-Saxon strain, pure and unmixed, had notably degenerated during the early centuries which succeeded the introduction of Christianity; that they were no longer the manly, hardy, energetic race who had won the kingdoms to which they gave their names; and that they could no more have been progenitors of the English nation, with its qualities

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of brain, heart, and hand, than could the Britons whom they had expelled.

But we cannot here glance at historical evidence. It would be foreign to the complexion we wish to give this article. Let us look at the facts ethnologically, the deductions to be fairly drawn from language, *physique*, and the genius of the people. First, with regard to *physique*. It is a trite observation that the modern English are a mixed race. Cropping up on all hands we find veins of population in whom can be detected the marked features of various stocks. But it is equally true that in different parts of the British Isles different types are found to prevail, and we believe that in England itself the population of the Midland and Northern districts, the agricultural tracts and country towns north of the Watlinga-street, revert more closely to the Scandinavian type than they do to any other. The somewhat broad face, with slightly projecting cheek bones; the nose inclined to be broad and to turn a little upwards; the light eyes, and hair with a warm, reddish tinge; the strong, compact frame, not over tall, mark the Yorkshire or Northumbrian farmer, as they equally characterised the followers of the Danish and Norwegian Viking. Danish travellers tell us that in the Midland and Northern parts of England faces every moment present themselves closely resembling those they have left at home,—faces which, if they saw in Denmark, they would not for a moment suppose to be foreign.

Such evidence is valuable as far as it goes, nevertheless it must be acknowledged that the general resemblance of the Northern races of Europe is considerable, and in the case of a nation with the historical antecedents of the English, it may be said that we are trenching on slippery ground when we base an argument upon mere likeness. The main conclusion must rest on the part which the Danish element has borne in the development of the English tongue and character. The names given to places are probably the most enduring part of any language. The Saxon has left his stamp on all towns the names of which end in "ton," "ham," "bury" or "borough," "forth" or "ford," and "worth." Such terminations are most common in the south of the island. But the numerous towns, villages, and localities ending in "by," "thorpe," "thwaite," "ness," "ey," "with," "toft," "beck," "tarn," "dale," "fell," "force," "haugh," or "how," "garth," and many others, are all Danish. Sheerness, Dungeness and Holderness (næss, a promontory) have retained the names given them by Jarls and Vikings; and the islands along our coast—Sheppey, Anglesey, Orkney, still in their terminations keep the Scandinavian ey or öe, (an isle), by which they have been known since the barks of the northern invaders anchored in their bays. The second city of England, York, was a Danish capital, and its name is the modern rendering of the Danish "Jorvik." Altogether, 1373 places in England alone, exclusive of Scotland and Ireland, are Danish-Norwegian; of these 292 are in Lincolnshire, and 409 are in the three Ridings of Yorkshire. The evident conclusion to be drawn from such facts is, that the Danish colonisation and settlement of England was but little inferior in importance to that of the Anglo-Saxon.

Take, again, the names of families. Surnames ending in son or sen are Danish. The termination is never found in Saxon patronymics. Johnson is as comparatively common in Iceland, colonised by the same stock, as it is with us; and our greatest naval hero, Nelson (Nielson), bore a name which there can be little doubt he inherited, together with the high qualities of his race, from some Scandinavian sea-king. The valour of Havelock was celebrated by the Northmen in song nearly a thousand years before a scion of the stock saved the Indian Empire of Great Britain. Coningsby, Normanby, Danby, Ashby, Crosby, Thorpe, Sibthorpe, Willoughby, Scoresby, Derby, Selby, Wilberforce, and a hundred others, familiar as household words, all revert to that original stirps whence we all hope is to bourgeon a long succession of English princes.

How near is the affinity between the spoken languages of the two countries is proved by the fact that Chaucer's "pure well of English undefiled" is made his own by an educated Dane, who has no knowledge of modern English, with comparative ease. Numbers of our most common words are Danish, and most of the northern provincialisms have the same origin. The words dough (*Dan.* deig), thatch (thack), loft (loft), reek, smoke (*Dan.* Rög), mirk or murk (*Dan.* mörk), bower, a lady's apartment (*Dan.* buur), neat cattle (*Dan.* Nöd), crib, manger (*Dan.* krybbe), muck (*Dan.* Mög), are a few examples. Of all the dialects of the Danish, that spoken in Jutland approaches nearest to the English. Just as the Englishman uses the article "the" before words, the West Jutlander prefixes "œ." The Jutland dialect contains many words which are not only essentially the same as in English, but they are pronounced similarly. Such are—fowl (*Jut.* foul), cow (*Jut.* kow), food (*Jut.* fued), stood (*Jut.* stued), drown (*Jut.* drown), forenoon and afternoon (*Jut.* forenoun and atternoun), cock (*Jut.* kok), want (*Jut.* want).

But we will not load our readers with details. It must be remembered that the Norman invasion was only a fresh infusion of the same Scandinavian blood. It was the crowning act of the great drama of Northern victory. The effect of Northern admixture on the English character is not easily over-estimated. We have derived from it much of our love of personal freedom, our intrepidity, our perseverance, and our poetry. The pure, unmixed Anglo-Saxon race, we believe, would never have colonised America, Australia, and New Zealand, have conquered India, or have attained the maritime supremacy of the globe. The old Danes were merchants as well as fighters. The Danish merchants settled in London—for whom a large part of the borough of Southwark (Sudrvirki) and the parish of St. Clement Danes were set apart—were numerous and powerful enough to influence the election of English kings. The fleets of the Scandinavians traded to Iceland and Greenland, and discovered the far-off shores of America centuries before it had been visited by any other nation of Europe. The passion for individual liberty which is inherent in all the Northern races had well-nigh died out in Saxon England, when it was revived and nurtured by the men whose characters had been formed amid the storms and dangers of the Northern Atlantic. It is believed by many that we English owe one of our best safeguards of freedom—trial by jury—to Danish settlers, for it is found that the earliest traces of it are to be discovered in the "Danelag." The Danish word "husting" survives, whilst its Saxon synonyme "gemot," is merely remembered by antiquaries, and every time a municipal or corporate body enacts a "bye-law," it is indebted for the name of the enactment to the same source.

But here we must stop. Ethnology is fairly a collateral science with medicine, and we therefore offer no apology for our present observations. They have been suggested by an event which our profession, in common with all our countrymen, regard with feelings of the warmest satisfaction. We hope that from the advent of the last Royal Dane who has conquered the hearts of the English people, will result a closer intercourse between the two countries. We owe to Denmark a fresh debt of gratitude. As ethnologists, we may try to repay it by acknowledging, in a fuller measure than we have hitherto done, the obligations of bygone centuries.

The son of our beloved queen, himself descended lineally from the conquering Northman, has transplanted into our midst the fairest flower of Scandinavia. Science and history equally join in bright auguries. May she live amongst us to be instrumental in dispelling the cloud of sorrow that has shrouded the most revered of royal houses, to influence to high purposes and noble aims the proud nation that has adopted her, and to be the mother of a dynasty that shall eclipse all kingly races in kingly virtues,—all historic lines in universal blessing!

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THE WEEK.

THE MEDICAL OFFICERS OF THE ARMY.

(Copy.)

"Horse Guards, August 28, 1862.

"H.R.H. the General Commanding-in-Chief, in concurrence with the Secretary of State for War, is pleased to direct that soldiers sentenced to be discharged with ignominy, and marked with the letters B.C., shall be so marked by the Hospital Sergeant of the Regiment or Depôt to which the offender belongs, *under the direction of a Medical Officer*: the marking to be effected prior to the man's committal to a Civil prison, and to be carried out after the present mode of marking with the letter D. "By command,

"JAMES YORKE SCARLETT, Adjutant-General."

The above is one among the very many objectionable duties required of an Army Medical Officer. Nothing can be more reprehensible nor ill-advised than that those employed about the sick soldier should be called upon to perform duties of this kind. A Medical officer is armed with neither military nor other legal authority to execute the sentence of court-martial, and when such is required to be carried out, it ought to be done on parade, under the command of a combatant officer, and in the presence of a Medical officer, or a *South Sea Islander*, who would probably be better able to tattoo his subject indelibly without any chance of outrage to his self-respect!

DEATH FROM THE VAPOUR OF NITRIC ACID.

MR. STEWART, a master in the Edinburgh Educational Institution, in Queen-street, and a porter in the same establishment, died last week from inhaling the fumes of nitric acid. Mr. Stewart was in the laboratory of the school preparing for some chemical experiments, and while carrying a jar of nitric acid across the room, it fell on the floor and was broken. He called the janitor to his assistance to wipe the floor and to endeavour to save a portion of the fluid. In this effort both unwittingly inhaled the fumes. Mr. Stewart went home to dinner unconscious of having received any injury. After an hour or two he began to experience difficulty of breathing, and sent for Medical advice, but he very rapidly became worse, and died at two o'clock on Wednesday morning, about ten hours after the accident. The janitor was also taken ill, and, though he rallied for a time on Wednesday, he afterwards sank, and died at five o'clock on Thursday morning. In the year 1854 a similar occurrence took place at Sheffield, and it is worth remarking that the victim in that case, Mr. Haywood, a chemist, experienced no great uneasiness until three hours after the accident, when difficulty of breathing came on. In this respect the effect of the vapour of the acid is in marked contrast to that of ammonia.

DR. JOSEPH BROWN'S "MEMORIES OF THE PAST AND THOUGHTS ON THE PRESENT AGE."

THE venerable Dr. Joseph Brown, of Sunderland, has just issued a volume of "Memories of the Past, and Thoughts on the Present Age." (a) He begins with his recollections of the flight of Louis XVI., and the horrors of the French Revolution, and entertains his readers with a series of reflections on the moral bearing of political events since that time, with more especial reference to the present civil war in America. He treats also of prison discipline, and of the difficult subject of that line of demarcation which separates "the extreme of depravity from insanity." With regard to murder committed under an "irresistible impulse," by an insane man, he says, another question must be asked, "How has this insanity originated? Is it a disease which may be termed 'a visitation of Providence,' or has the accused, by hugging evil passions to his breast, or by a long course of sensual indulgence, produced his own malady? Has he by his own misdeeds passed the narrow line which separates the extreme of depravity from insanity? Has he been, in fact, the author of his own insanity?" Dr. Brown thinks that the quiet, tax-paying part of the community deserve protection, and that even weak men should be made to feel the necessity of curbing their evil propensities by the knowledge that if they should gloat over their evil thoughts until insanity overtake them, they will not therefore go unscathed. On questions of religious controversy, which are needlessly introduced, Dr. Brown is feeble in logic; but the greater part of his work deserves respectful attention.

(a) Longmans.

THE MURDERS AT PORTLAND, AND WALDITCH.

THESE murders are exactly alike in circumstance. In each a young man, of some little eccentricity, and with some ill-defined history of previous bad health, deliberately, publicly, and in open day commits a murder. Ffooks, a farmer of Walditch, shoots his first-cousin in the open street. He had long been on bad terms with him, had evidently been brooding over some causes of animosity, and had often said that he would shoot him. Preedy, a convict at Portland, stabbed Evans, a warder, with the knife which had been given him to eat his dinner with. In court during his trial he behaved like a wild beast or a demoniac, and was obliged to be manacled heavily before the trial could go on with safety to those about him. Sullenness and violence had been his characteristics in early life, but there was no evidence of insanity. It was remarked that his conduct in Dorchester Gaol after the murder was influenced by reasonable motives; he became less violent when promised that he should not be placed in solitary confinement if quieter. He was fond of tame sparrows, *tended a lame bird affectionately, and wept at its death.*

DR. BROWN-SÉQUARD'S LECTURES.—LECTURE IV.

DR. BROWN-SÉQUARD'S fourth lecture, delivered February 26, was opened by some remarks on the treatment of what he designated "that peculiar symptom," namely, muscular ataxy, or want of co-ordinating power. The lecturer observed that if the affection were a disease it would need uniform treatment, but being regarded by him as only a peculiar symptom, he recommends that the treatment should be varied according to the nature of the disease with which it may happen to be associated. When connected with lesion of the posterior columns, and with many other affections of the spinal cord, including epilepsy, where no inflammation exists, nitrate of silver in doses of one-tenth of a grain each will prove of the greatest use. If this medicine be given in these doses, and omitted occasionally for a week during the course of the treatment, it will induce no discoloration of the skin. This result may be equally avoided by giving the oxide of silver in doses of from three-quarters of a grain to five grains, three or four times a day. Being enabled to exhibit two additional cases of wasting palsy on this occasion, Dr. Brown-Séquard recurred to that disease. One of the patients was an elderly labouring man, who, when striking some hard substance with a pickaxe, experienced a rebound from the instrument which seriously injured his hand. He lost the use of it, and a year afterwards was attacked with erysipelas, which was followed by wasting both of the hand and arm. There is great pain in the palm, which was the seat of the injury; the pain also extends up the arm and along the shoulder. The first phalanges are drawn backwards, the palmar interossei seeming to have wholly lost their power The pectoral muscles exhibit that peculiar quivering described by Dr. Brown-Séquard, when lecturing on this disease, as characteristic of wasting palsy. He observed, however, that such quivering may exist without wasting, and adduced in support of his statement two instances, occurring in his private practice, one of a man who had quivering twelve years, and another fifteen years, without any wasting in either case being observable. The second patient whom he exhibited

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as illustrative of wasting palsy, was an intelligent, cheerful-looking woman, about 35 years of age, who, in consequence of her affliction, supports herself by keeping a school, that being, as she thinks, the only occupation possible to her, as she cannot use her hands. There is extensive wasting of both fore-arms, and almost total loss of power. The muscles of the chest and legs quiver, and the disease seems to be extending over the whole body. She describes her health as being perfectly good in every other respect, and certainly her mental liveliness and activity indicate that the brain is in excellent condition. The utmost that Dr. Brown-Séquard hoped to be able to do in this case was to prevent, or at least to retard the further progress of the malady. The next case to which the attention of the audience was directed was that of a woman who had suffered from meningitis, from which she had completely recovered. The inflammation in this case was mainly restricted to the part of the cord, and to the roots of the spinal nerves at their exit, between the shoulders. The affection was accompanied by pimples, bullæ, tingling, burning, jerkings, and pain in the back. It is very important to know that meningitis, even when it has continued for a considerable time, as in this case, may be perfectly cured; but, if in the beginning, the disease be allowed to go on, it extends, the membrane secretes an abundance of serum, and even in some cases of pus; the whole cord becomes compressed, and general paralysis supervenes. The pains extending all over the body in such cases are generally regarded as rheumatic. The treatment should consist in repeated applications of "temporary or flying blisters" between the shoulders and on the nape of the neck, and in giving three-grain doses of iodide of potassium, or when the patients are feeble or cachectic, six-grain doses of iodide of ammonium three times a-day, together with some alkaline salt or bitter tonic. The amount of blood circulating in the cord should also be lessened by means of ergot of rye, belladonna, Indian hemp, stramonium, aconite, or conium. Some patients who cannot bear a double dose of belladonna, which may not unfrequently be desirable, will bear a full dose of each of the other narcotics taken together. In treating neuralgia, the intense pain of which often necessitates recourse to large doses of narcotics, the knowledge that a given quantity of each of them taken together may be thus borne, while the same quantity of one only could alone be tolerated, is of the highest practical importance. The lecturer next adverted to a "somewhat puzzling" case of paralysis, that of a woman, to whom he directed the attention of his audience. She is in good general health, but her upper extremities have been paralysed for several years. Their strength began to diminish five years ago. There is no paralysis of the legs, there is no marked wasting of the arms, and there are no hysterical symptoms; but as no organic cause of the malady can be detected, the lecturer held himself justified in calling the paralysis hysterical. The absence of paralysis of the legs certainly excludes the idea of disease in the brain or spinal cord. The patient is subject to headache, is not unfrequently depressed, and often sheds tears. Although the malady from which she suffers may be held as a sufficient cause for the latter symptoms, they are nevertheless a slight indication in the direction of hysteria, and this opinion receives confirmation from the fact observed at the close of the lecture, that she moved her left arm somewhat more than it had been seen to move before. She herself admitted that she thought there was a very slight increase of power in it. *Apropos* of this case, the lecturer remarked that though her limbs are in no degree wasted, this fact must not be regarded as indubitable evidence of hysterical paralysis. It is true that the limbs of patients suffering from this affection are usually not wasted, or, at least, not so beyond what would be the result of simple inaction; but, in other cases, wasting occurs, and that in a very marked degree. The next case shown by the lecturer illustrative of this disease was an in-patient of the Hospital, a girl, who, eight years ago, had hysterical clavus on the right side of the head and tenderness of the part. About a year ago she lost the power of her right leg, and soon afterwards that of the left. Then extreme stiffness of both supervened, the adductors of the thighs being powerfully contracted. Referring to the strength of these contractions, the lecturer mentioned a case in which fracture was the result of an attempt to force the limbs apart. In the case shown it was impossible for a long time to separate the knees so far as to be able to insert the hand between them. In the course of the malady, the sphincters became paralysed, and in succession the right and left arms. There was difficulty of swallowing, tremulousness of the muscles of the neck and arms; the sight was a little affected; the other senses, as well as the muscles of the face and of the chest, continued normal. The circulation was sluggish, and the skin, which was habitually cold, exhibited partial anæsthesia. There was no tenderness of the spine. This symptom, though very common in hysteria, is by no means invariably present. The patient is already much improved; though the arms still tremble, they have regained considerable strength; the knees are now separable; and the sphincters have wholly recovered their power. Concerning the essential nature of hysteria, as well as of trembling palsy, Dr. Brown-Séquard here confessed that he knows nothing. Some symptoms, however, may be explained,—the absence of the sense of touch, for instance: if a cupping glass be applied to a part of the insensible skin, so as to redden it by drawing blood into it, the anæsthesia immediately ceases; in like manner, if an attempt to draw blood by cupping or by leeches be successful, there will be no longer anæsthesia of the parts acted upon. These facts prove that the anæsthesia is not due to a centric cause, but wholly to the want of circulation at the periphery. Referring to the morbid volition, Dr. Brown-Séquard mentioned a case of a young lady (one of his private patients) whose right arm had been completely paralysed for six years. She had evinced other symptoms of hysteria, and her mother was also liable to this malady. He requested his patient to hold her arms to her sides, and, while doing so, to bend the body forwards. The body having been thus inclined, the right arm remained close to it. Of course, had the paralysis been due to a structural cause, the arm, instead of being retained in its position, would have fallen forwards. Another similar case was that of a girl having a violently shaking hand. Dr. Brown-Séquard stood before her, and said, "I am sure I shall soon be struck by her"; and very soon a movement beyond the ordinary shake occurred, by which he was struck, thus proving the power of the will over the limb. He also described a very singular case of persistent shaking, affecting each part of the body in succession: if, for instance, the arm actually shaking were forcibly held still, the other arm would immediately begin to shake; if the two arms were held, a leg would carry on the movement; if that also were secured, the other would begin; that being also held, the head was violently agitated. If the four limbs and head were all restrained, then the body itself was powerfully shaken. Another curious manifestation of hysteria was spoken of, consisting of swinging the arm round four or five times, then striking the chest with it, the two motions being continued alternately. The affection began immediately after the subject of it had received bad news, and ended as suddenly. The lecturer insisted strongly that hysteria is a very real, and often a very serious, disease. He expressed the opinion that, out of ten hysterical cases, eight would never completely recover, and that even the remaining two would, on some rare occasions, exhibit remnants of the malady. Sometimes muscular atrophy, together with complete and permanent stiffness of joints, follows, and results from hysterical attacks. Calling the attention of his audience to a case of hysterical hypochondriasis, with slight aphonia, the lecturer observed that the malady in this instance was due to poverty of the blood, which, as Dr. Todd has already insisted, is a very frequent

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cause of hysteria. The appetite of hysterical patients, occupying a good social position, often fails, and thus induces the malady where the tendency to it exists. The more we know of nervous complaints, the more convinced we become of their intimate relation to each other. When transmitted from one generation to another, it frequently happens that they are not transmitted directly, but, as Morell and Pritchard have asserted, a parent having one nervous disease will transmit another [to his child, while the several children of one parent will often severally exhibit a distinct form of nervous disease. Not unfrequently one person will present a blending of several forms, as evidenced by a girl whom the lecturer introduced to his audience. When eleven years of age she had scarlet fever, resulting in albuminuria and dropsy. There was extensive ulceration of the neck, and this was followed by a deviation of the spine. There is now a forward and a slight lateral curvature. She was subsequently attacked with what was called rheumatic gout, and at present has great pain in the right arm, but no swelling. In July, 1861, she had hysterical fits, which reappeared some months afterwards, and finally merged into genuine epilepsy. She has also a slight choreic movement of the arm and hand. The movement is not tremulous, and the will seems to have some share in it. The eyes protrude a little; both pupils are large; and, owing to an irritation of the sympathetic nerve, one is larger than the other. Another case, exhibiting a like blending of nervous diseases, was also shown: a man, aged 33, who had convulsions when three or four months old, preceded by hæmorrhage from the bowels, afterwards became paralysed on the left side, where the convulsive movements had been most powerful. Epilepsy supervened, and was followed by jerkings and twitchings of the limbs, and a peculiar contorting spasmodic movement, which still continues, of the arm and hand. The arm has been more affected from the first than the leg, and is considerably shorter than that of the other side. The hand and fingers may be extended if the force be applied gently; but on its withdrawal the original position is immediately resumed. The treatment in this case simply consists in the application of circular blisters to the arm, in the hope of producing a modification of nutrition in the nervous centre. This lecture was closed by some remarks upon infantile paralysis; but as they were resumed in the following one, we reserve them until our next report.

FOREIGN CORRESPONDENCE.

AMERICA.

(*From our Special Correspondent.*)

CAMP NEAR FALMOUTH, VA., February 16, 1863.

EVERYTHING has remained quiet along the line of the Rappahannock since I last wrote you (about six weeks ago), at least so far as fighting is concerned. About the middle of January we had a move, and expected a bloody battle to take place, but the elements interfered and surrounded us with mud, through which we found it impossible to move onwards and difficult to return; this latter, however, by the end of three days was accomplished, but not without severe suffering being entailed on the troops by this exposure to the storm.

We have now been occupying the same ground, I may say, for three months, yet owing to effective drainage, and well policed camps, acute dysentery and low fevers, though to be seen amongst us, are by no means prevalent. Deaths, indeed, seem to be no more common among the members of this army than among the adult citizens of any populous town. Scarcely a trace of scurvy can be discovered; indeed, the army is in as robust a state of health as it has ever enjoyed.

For the sick that we do have we have every accommodation, tents and stores, with food fit for sick men; for since we became stationary here we have enjoyed opportunities of obtaining many little delicacies that to an army in motion are ungetatable. The U.S. Sanitary Commission, for instance, have established a depôt at the railway terminus near Falmouth, and from them the Medical officers can obtain for their sick preserved soups, chicken, fruits, condensed milk, arrowroot, &c.

A general Hospital within the last few weeks has been established near Aquia Creek—a handsome village it is of white tents, cosily furnished with stoves and iron bedsteads, and since it is within half-a-dozen hours' sail of Washington, everything that a government, careless of expense, can procure for its sick is readily obtained.

Dr. Swinburne's (Medical Director of the New York State troops) report on the Medical service at the battle of Fredericksburg, has been made public lately. He says that on proceeding to the Army Field Hospitals he found that the wounded had been rendered as comfortable as possible within the shortest periods, and that afterwards they were removed rapidly from these temporary accommodations to more pleasant ones at Washington, Alexandria, etc.; so promptly, indeed, had this end been effected, that one week after the fight only 800 remained, and these were severe cases, which, at the time, it would have been injudicious to attempt to remove. He then goes on to disabuse the public mind of false impressions concerning "bad Surgery," "horrible butchery," propagated by the newspaper reporters, who, their unprofessional eyes being unable to see the necessity in many cases for operation, characterise the acts of the Surgeon as "butchery," etc.

Next, he makes a somewhat lengthy apology for the suggestions he deems it necessary to make, and which may be briefly summed up as follows:—

He allows that this army is furnished with a vast amount of professional talent, but he would suggest that that talent is not laid out to the best advantage. The time and talents of an eminently good Surgeon are thrown away in providing for the "inner man" of the wounded. The labour is not apportioned so that the task of each officer is that for which his qualifications peculiarly fit him. Seniority, he complains, is everything, merit nothing. Next, he suggests that conservative Surgery should be more extensively practised than heretofore. He does not believe that there were more than a dozen cases of resection performed after Fredericksburg. He only saw two—whereas it is now an established fact that the upper extremity should rarely be amputated for any bullet wound. This he attributes to what he complains of above—the misapplication of talent. The operator feels himself incompetent to resect, and so amputates, while the conservative Surgeon is superintending the manufacture of the soup. In addition to the ordinary arguments in favour of conservative Surgery, he looks at the case financially. Government pays fifty dollars for an artificial limb, and gives a yearly bounty of 200 dollars to the mutilated soldier. Conservatism can keep this money in the public treasury.

In order to remedy the effects springing from the above cause, he would propose—1st. That an agent should follow the army, carrying with him tents for a thousand wounded, four thousand stretchers for beds instead of hay, than which they are better and cheaper, together with some readily-made form of food. Now, this is a suggestion, the propriety of which is self-evident. In my last, you may remember, I told you how much the wounded suffered from the want of food and shelter. 2nd. He proposes that a staff of pre-eminently accomplished Surgeons should accompany this agent, some of whom should be called into consultation before the performance of every capital operation. This, methinks, is but a clumsy remedy for evils arising from the misapplication of talents already in the service.

AUSTRIA.

CARLSBAD, December 11.

THE CONGRESS OF GERMAN NATURALISTS AND PHYSICIANS.

I TO-DAY conclude my reports of the proceedings of the above Congress, by mentioning some of the more important communications made to the sections for gynæcology and clinical Medicine.

Professor Braun, of Vienna, whose name is probably known to your obstetric readers as the inventor of a key-hook for the decapitation of the fœtus in utero, read a very interesting paper on the "Statistics of Puerperal Diseases as observed in the Vienna Lying-in-Institution," which is con-

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nected with the University. Only a small wing of this Hospital is set apart for private cases, the most considerable part of it being devoted to clinical instruction. Within the last ten years the average annual number of births in the private department amounted to from 300 to 400, and in the public portion to from 7000 to 8000. There are two separate schools in the institution, one of which is destined for Medical students, and the other for midwives. The former consists of eighteen wards, which are spacious and well aired. The rooms for sick, lying-in, and pregnant women are somewhat deficient as regards comfort; there are 479 beds for lying-in patients, each ward containing about 26 beds. The clinical instruction is continued all the year round; there are about 250 to 300 students annually in the first, and about 200 midwives in the second school. Within the last twelve years, the highest mortality occurred in 1854 and 1855, when it amounted to 8·5 and 6·3 per cent.; the lowest in 1858 and 1859, when it was only 1·6 and 1·5 per cent. Washing the hands with chlorine-water produced no perceptible change, as in 1856, when only soap was used, the rate of mortality was just as favourable as in previous good years. The year 1861 seemed at first a very promising one. In summer, there were only a few cases of erysipelas migrans; but from the latter part of October numerous cases of puerperal diseases occurred. In the last week of that month there fell ill on the first clinique 50 women out of 65, of whom 22 were dead by November 1. There was no overcrowding; the greatest cleanliness was preserved, ventilation was good, and the drains satisfactory. Every woman who fell ill was at once separated from the rest; the midwives did not come in contact with them; every room was, ten days after a confinement, emptied and thoroughly aired; before every examination the hands were well washed with soap. From November 1, Professor Braun enjoined the following rules:—Only nurses and no students were allowed to examine the women; the clinical instruction and the courses of operations on dead bodies were discontinued; almost all patients were transferred into other rooms, and fumigations with nitrous acid, chloride of lime, essential oils, and vinegar were used. In spite of these measures, however, which were persisted in for six months, the mortality rose to 6 per cent. per annum; and if those were included who had been transferred from the lying-in institution to the general Hospital, the number was even 9 per cent. In the second clinique there died, of 365 women who came in during November, altogether 19 per cent., and yet not a single post-mortem examination had been made there, nor did the Physician-Accoucheurs once enter the dissecting-room.

One of the last and best papers read was that by Professor Jacksch, of Prague, on "Disturbances of the Function of the Peripheral Nerves," and in which he adverted principally to anodynia and cutaneous anæsthesia. In the former affection the nerves had lost the power of transferring the perception of pain to the encephalon, so that the prick of a pin, blisters, and Faradisation, by means of wire-brushes, remained unperceived; while in the latter the sense of temperature, pressure, and locality were wanting. There were different degrees of both affections; the anæsthesia was either complete or incomplete. With regard to its extent, there was the greatest variety. Anodynia frequently occupied only one half of the body, but it sometimes extended beyond the median line; in other cases it was confined to a very small circumference. Anodynia of the tongue was often associated with that of the skin. The sensibility of the muscles was only seldom increased, but generally diminished or entirely gone. This affection might be likewise either partial or general, and did not follow certain courses of nerves; as, for instance, the trapezius might be affected, while the sterno-cleido-mastoid remained in its normal condition. The electro-muscular contractility and the voluntary movements were, generally, not impaired; sometimes, however, he had seen them deficient, especially in the lower extremities. The mucous membranes might be affected in a similar manner; there might be loss of smell and taste, anodynia of the Schneiderian membrane, of the mucous membrane of the aërial passages, the vagina, and the rectum, anæsthesia of the retina, etc. The duration of the affection varied from several days to several years. It generally ensued after emotion, and sometimes disappeared after cold aspersions. Amongst the diseases most frequently associated with anodynia, Professor Jacksh had observed chorea, epilepsy, catalepsy, somnambulism, melancholia, paralysis, and contractions, fits of laughing, vomiting, neuralgia, dysphagia, Brodie's tumour of the subcutaneous cellular tissue, and paroxysms of apparent ague. The affection was more frequent in females than in males, more in Jews than in Christians, and was chiefly observed in persons between twelve and thirty years of age. The prognosis was not very favourable, as relapses were frequent. The medicines chiefly to be employed were zinc, quinine, secale cornutum, morphia. Cold aspersions, the douche, etc., were also serviceable; but by far the best remedy was Faradisation, especially if paralysis, contractions, and neuralgia were at the same time present.

Dr. Stamm, of Berlin, then spoke on the annihilation of epidemic diseases generally, and of plague especially. He said the highest aim of the Physician was not to cure diseases, but to search as closely as possible for the causes of their origin, and to endeavour to annihilate these latter. The chief questions to be settled were, what single or concurrent circumstances had afforded special aid to the propagation of disease; how and whereby a disease was propagated; what circumstances were originally, or at the present time, in existence favouring the development of disease; what measures should be taken in order to prevent the spreading of diseases; and how it was possible to annihilate the causes of their origin? He then entered into a description of the chief symptoms of plague, and showed the failure of all remedial methods which had been tried for it; as in almost all epidemics, whatever might have been the treatment followed, about two-thirds of those affected had succumbed. The country in which plague originated was Egypt, and he had, during his stay in that country, in 1844, satisfied himself that in most epidemics Cairo and the neighbouring villages of the Delta of the Nile had been first invaded, and had most intensely suffered. In 1844, no case of real plague came under Dr. Stamm's notice beyond the boundaries of Egypt, although he searched for them in Constantinople, Broussa, Damascus, Acca, Nazareth, Jassa, and Jerusalem. He, therefore, concluded that plague had disappeared from the other parts of the Turkish Empire, because it was no longer propagated to them from Egypt, where only a few cases of a mild character occurred. Further investigations showed, that in the same degree as plague had become rarer in Cairo it had more and more disappeared from the whole of Egypt. The question, therefore, arose, how it was that Cairo and its neighbourhood, which had been the focus of infection for the whole of the Turkish Empire, no longer caused plague in the present time? The town had several hundred thousand inhabitants. Before the introduction of irrigating and cleansing the streets, it was full of dirt and mire; the interments of dead bodies were made in the most negligent manner, the corpses being often left in the houses themselves, and only slightly covered with earth. The town was intersected by a canal, which received the sewerage, and the neighbourhood of which had always been considered most unwholesome and most invaded by plague. Epidemics of plague had generally commenced when the water receded, in the beginning of the year, and disappeared in June with the heat of summer. Dead fish, vegetable matter, etc., were decomposed by the sun after the river had fallen, and thus miasms were produced. There were, moreover, the gases arising from the decomposition of the badly-interred dead bodies. It seemed obvious that the more careful interment which had been insisted upon by the Government of Mehemet Ali, had gone far towards diminishing plague; but neither the origin nor the gradual disappearance of the epidemic could be well accounted for by this circumstance; for even after the sanitary police had already done good work in Cairo, plague would, nevertheless, appear; and Dr. Stamm found that, in 1844 and 1845, superficial and negligent interments were still adhered to in the smaller towns and villages of Egypt; but, nevertheless, no plague was developed. He, therefore, was struck by the idea that some change must have occurred in the locality of Cairo itself, and found, by comparing maps of the place and questioning the inhabitants, that the town had formerly been surrounded by a much more extensive chain of hills, by which it had been almost entirely enclosed. These hills had an elevation of from 450 to 600 feet, and prevented the access of the winds and of the dry air of the desert. Dr. Stamm is of opinion that the levelling of these hills, which was done by the command of the Viceroy, Mehemet Ali, for the purpose of filling up the low marsh land and embellishing the neighbourhood with gardens and plantations, has caused the gradual disappearance of plague. He found, indeed, that, as the work men-

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tioned progressed, and the winds and the air of the desert were allowed free access to the town, plague gradually disappeared, not only from Cairo, but from Egypt and the whole of the East, and that from the time when these works were finished not a single case of true plague has ever occurred.

GENERAL CORRESPONDENCE.

THE ARMY MEDICAL DEPARTMENT.

[To the Editor of the Medical Times and Gazette.]

Sir,—I was glad to perceive, in your last number, that you have adverted to the subject of the discontent existing among the members of the above department.

It is deplorable that the opening of the Medical School at Netley should be under circumstances like the present—a cloud of gloom and discontent in the department, and great unpopularity of the service in our Medical journals and universities. In every way that can be done, the authorities have apparently endeavoured to disgust the present members of the Medical branch, and to prevent the entrance of others. The present position of a Medical officer is so ill-defined, his duties so onerous, and sometimes so menial, that it would be better for those who value their self-respect to discard at once any idea of becoming candidates for so unthankful and unprofessional an office.

What with returns, correspondence, case books, figures, circulars about jelly, confidential reports, *the superintendence of the marking of soldiers with "D." and "B. C."*, useless attendances at reviews and rifle practice, there is left no room for the cultivation of one's profession.

A Medical man is respected in the army by the possession of the self-same qualities that gain him this out of it, viz., his gentlemanly bearing, general education, and social qualities, of which all can judge, and his professional attainments, which officers and men are not slow to discern.

It was to entice men possessing these qualities into the service that Lord Herbert and others laboured. They knew that of material such as this anything could be made; but to obtain it matters had to be put upon a very different basis to what they once were and now are. I, for one, wish that there could be some other plan devised than that of relative ranks for fixing the position and allowances of the Medical officers, since no step can be taken by them apparently without treading upon the sensitive corns of the combatant officer and invoking the jealous dislike of the Horse Guards.

There is no good to be obtained from concealment or exaggeration, and it is possible that here and there a member of the department may not have been perfectly blameless in the way he availed himself of these privileges of relative rank. I am certain, however, that the great body of the Profession in the army is desirous of acting with proper delicacy and right feeling in these respects, and it is unjustifiable that the whole department should be visited with the presumed sin or defect of an individual member. We are treated as if we were naughty schoolboys instead of intelligent members of a profession, and P. M. O.'s are converted into monitors, furnishing confidential reports to the head schoolmaster. Under such a system the reward is to be "time-server," and the punishment to the independent and zealous man.

No doubt the Warrant of 1858 has been all but cancelled, and the Horse Guards neglect no opportunity for curtailing the remnant that remains of it. But, Sir, the department has sunk so rapidly of late that one naturally tries to discern some defective elements in its own organisation. We have not to go far, I am sorry to say, to indicate where this has been. The position and prospects of the Army Medical officer have taken so steady a retrograde movement since the death of Mr. Alexander that one is compelled to follow the inference suggested by the facts. I am, &c.

March 9. A Well-wisher to the Department.

POISONING BY MORPHIA.

Letter from Dr. Morell Mackenzie.

[To the Editor of the Medical Times and Gazette.]

Sir,—The case of poisoning by morphia related by Dr. Anstie, in your Number for February 7, though interesting in many respects, is scarcely sufficient in itself to "confute signally the notion which unaccountably (?) prevails, that opiates do not act so powerfully when given per anum, as when given by the mouth."

In considering the relative effects of the two different methods of administering opiates, the case has undoubtedly a certain value, and tends towards a certain conclusion—a conclusion, however, which is opposed by the inexorable logic of a considerable number of facts.

Common observation notices that wine, brandy, and nutritive enemata generally, do not produce nearly the same effect when administered per anum as when taken in the ordinary way. Structural examination of the two absorbent surfaces yields a scientific explanation of that, which is a matter of familiar experience. If opium is exceptional as regards absorption, as perhaps it may be, on account of dialytic laws, the *onus probandi* certainly rests with those who take up that position.

Dr. Anstie's case can only be looked at as a unit in the arithmetic of the question, and one which will certainly be cancelled by the following case, which occurred last year in one of the Metropolitan Hospitals:—A young woman, who was suffering severely from phlegmasia dolens, was ordered a liniment for external use, which contained two ounces of tincture of opium, and two ounces of soap liniment; at the same time a common enema was prescribed. By mistake, the liniment (which contained the two ounces of tincture of opium) was injected per anum, and the whole was retained. The patient became very drowsy towards evening, the enema having been administered in the afternoon, and remained in a semi-comatose state the whole of the next day. The pupils were contracted to a pin's point. The feeble condition of the patient rendered it impossible to adopt the ordinary treatment. She, however, recovered without any artificial means having been employed to "keep the brain in a state of activity."

Many of the cases on record, in which everything has been done to stimulate the nervous powers, have proved fatal; whilst others, which have been left to themselves, have recovered. The question arises whether the nervous system, already overpowered by the poison, is not still further exhausted by the ordinary treatment.

I am, &c.

London. Morell Mackenzie, M.D. Lond.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Anniversary Meeting, March 2, 1863.

Dr. Babington, President, in the Chair.

The annual general meeting of this Society took place on the 2nd inst., and was attended by a large number of the Fellows. After the ballot for the election of the officers and Council for the ensuing year had been declared open, the Treasurer's Report for the year 1862, and the Report of the President and Council were read, from which it appeared that the Society continued in a state of great and increasing prosperity. The total number of Fellows, resident and non-resident, in the last Report was 630, and they now amounted to 642. The total ordinary income was £1343 13s. 11d. against an expenditure, ordinary and extraordinary, of £1090 9s. 4d., leaving a balance of £253 4s. 7d., which, added to a previous balance of £47 0s. 2d., and the amount of composition fees in lieu of further subscriptions, £57 15s., gave an entire balance of £357 19s. 9d. in the hands of the Society's bankers. There had been a loss of six Fellows by death and of four by resignation, and the Society had received an accession of twenty new Fellows, thirteen of whom were resident, and seven non-resident. The Report referred to the excellent results which had followed the appointment of Scientific Committees by the Society, as shown in the valuable Report of the first Committee on Suspended Animation, and mentioned that the Council had recently appointed a second Committee on the Uses, Effects, and Modes of Administration of Chloroform. The Council considered that the state of the income of the Society appeared to offer a further encouragement to extend as widely as possible the usefulness of the Society, and more particularly the labours

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of the scientific committees already so auspiciously commenced; by such means increasing the dignity of the Society, and realising the highest aspirations of the distinguished members of the Profession who founded it, and of those who had since watched over and fostered its growth. It was stated in the Librarian's Report that 266 new works (independent of journals and continuations) had been added to the library, and, an increase of room for journals and serials being required, that shelving had been added, capable of containing 1800 additional volumes; also that a new feature had been added to the library, at the suggestion of one of the Fellows, Dr. H. G. Wright, in the shape of portfolios containing photographs of subjects of professional interest. A hope was expressed that Fellows possessing copies of such photographs would present them to the Society.

The adoption of the Report was moved by Dr. Burrows and seconded by Mr. Curling. On being put from the chair, a discussion ensued, in which Dr. Greenhow, Mr. Charles Hawkins, Dr. Barker, Dr. Webster, Mr. Hilton, and Mr. Arnott took part.

Dr. Greenhow drew attention to what he considered the still imperfect state of the ventilation of the meeting-room, notwithstanding the alterations introduced the year before last, and hoped that further steps would be taken to bring it to that state of perfection which a Society embracing so many Officers of Health amongst its members was entitled to expect.

Mr. Charles Hawkins thought that the only remedy would be the enlargement of the room, which had been proposed at several previous anniversaries of the Society, and for which plans and estimates had already been made.

After some discussion, in which differences of opinion were expressed as to the real financial *status* of the Society, as shown by the balance-sheet, an amendment was moved by Mr. Charles Hawkins, and seconded by Dr. Stewart, "That a meeting of the Society should be called on the subject, and that the plans and estimates obtained should be laid before the Society."

The President took the sense of the meeting on the amendment, and declared it to be lost.

After some further remarks, in which the speakers congratulated the Society on its flourishing condition, financial and otherwise, and more particularly on the successful introduction of the appointment of scientific committees, which were considered a most valuable addition to the Society's means of usefulness, the original motion for the adoption of the Report was put and carried.

The President then addressed the meeting, and after a few introductory remarks expressive of his regret at taking leave of his colleagues and of the Society, from whom he had received such courtesy during his term of office, proceeded to a biographical notice of those Fellows who had been removed by death since the last annual meeting. These were six in number: Mr. Eusebius Arthur Lloyd; Dr. George Darling; Mr. Edward Stanley, F.R.S.; Sir Benjamin C. Brodie, Bart.; Mr. Peter Bossey; and Mr. John Gunning. He then alluded to the abortive attempt which had been made at the commencement of his Presidentship to effect an amalgamation of the Pathological, the Obstetrical, the Epidemiological, and the Royal Medical and Chirurgical Societies; and stated that, as a substitute for this proposed change, a new function had been bestowed on the Society, in the formation, by its council, of scientific committees for the investigation of subjects of special interest and importance. He eulogized the report drawn up by the first of these scientific committees, to which was allotted the subject of "Suspended Animation;" and augured favourably of the working of a second committee on "Chloroform," whose labours had just commenced. He characterised the creation of these new functions as a move in the right direction; and indicated two other modes in which, in his opinion, the flourishing state of the funds would permit the Society to promote the object for which it was founded—namely, the advancement of Medical and chirurgical knowledge. These were—first, to present medals, under due regulations as to time and value, to professional men who should prove themselves most deserving of such distinctions; and, secondly, to aid by grants persons who needed funds for the publication of valuable works, or the prosecution of useful researches. He also made favourable mention of the suggestion of one of the Fellows of the Society, that a new order—namely, that of Corresponding Foreign Fellows—should be created, and gave reasons why such an order had become necessary. The President stated that the question of either changing altogether the locality of the Society or enlarging the present premises had been under consideration, but that neither the one proposal nor the other had been approved; that arrangements, however, had been made for the accommodation of more books by putting up new shelves; and that an improved system of ventilating the meeting room had been adopted. He finally craved permission, ere he took his leave as the oldest President who had ever occupied the chair, to avail himself of his character of a veteran, and advert to the impassioned tone of address which on some rare occasions he had observed speakers to adopt at the meetings, and to recommend that in future discussions those personalities, those ebullitions of emotion, those impugnments of motives, which were so unnecessary and so out of place in the consideration and discussion of scientific questions, should be avoided. After enlarging somewhat on this topic, he concluded by expressing his great satisfaction at being succeeded in office by a gentleman whose high talents and prominent station rendered him so eminently qualified for those important duties which he would be called on to perform.

At the conclusion of the President's address, the proposed new bye-laws relative to the scientific committees were (with a few technical alterations moved in an amendment by Dr. Balfour) adopted. Thanks were then voted to the members of the Scientific Committee on Suspended Animation—namely Dr. C. J. B. Williams, Dr. Kirkes, Dr. Harley, Dr. B. Sanderson, Dr. Brown-Séquard, Dr. Hyde Salter, Mr. Savory, and Dr. Sieveking—for the able and zealous manner in which they had carried out their investigations; and also to the authorities of University College, the Royal Humane Society, and the Royal National Life-Boat Institution, for their courtesy and assistance in advancing the inquiry. The thanks of the Society were also voted unanimously to the retiring President for his able conduct in the chair, and for his admirable address; and to Mr. C. H. Moore, Secretary, and the other retiring officers of the Society, for their valuable services during the time they had been in office.

At the conclusion of the meeting, the result of the ballot for officers and council for 1863 was announced by the President as follows:—President: Mr. Partridge. Vice-Presidents: Dr. Hodgkin, Dr. West, Mr. Hilton, and Mr. Fergusson. Treasurers: Dr. Pitman and Mr. Dixon. Secretaries: Dr. Sieveking and Mr. J. Birkett. Librarians: Dr. Stewart and Mr. Henry Lee. Other members of Council: Dr. Cotton, Dr. Gream, Dr. G. Johnson, Dr. Markham, Dr. Sibson, Mr. G. V. Ellis, Mr. Barnard Holt, Mr. Holthouse, Mr. E. Newton, and Mr. Toynbee.

THE PATHOLOGICAL SOCIETY.

Tuesday, February 17.

Mr. Prescott Hewett, President, in the Chair.

Dr. Peacock exhibited specimens showing the

STATE OF THE HEART IN PHTHISIS; AND DISEASE OF THE KIDNEY, URETER, BLADDER AND PROSTATE, AND OF ONE SUPRA-RENAL CAPSULE.

The first specimen was removed from a man 46 years of age, a patient at the Victoria-park Hospital, under the care of Dr. Birkett, who had been seriously ill for four months, and ailing for some years. In this case the heart weighed 9 oz. and 14 drachms, indicating some degree of hypertrophy, and the cavities also were considerably increased in size. The other specimen was from a man, 26 years of age, who died of acute phthisis, and in this instance the heart weighed only 7¼ oz., and all the cavities were small, especially the left ventricle, the walls of which were increased in thickness. Dr. Clendinning, in a paper published in the *Medico-Chirurgical Transactions*, stated that the heart was increased in size in phthisis. This opinion was not, however, strictly correct. In cases of phthisis of long duration, and especially in those which supervene on bronchitis, or are complicated with bronchitis, the heart is often found hypertrophied and dilated, as in the specimen first exhibited. When, however, the disease runs its course more rapidly—is more purely a disease of nutrition—the heart is very generally diminished in weight, and not unfrequently the cavities are small, and the walls, especially of the left ventricle, increased in thick-

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ness. This condition constitutes one form of what has been termed concentric hypertrophy very incorrectly, for it is simply that the cavities are small from the diminution in the amount of blood which they receive, and the walls contract in proportion. Of this condition, the second heart shown to the Society formed a characteristic example. It appears, however, that the heart does not, in these cases, emaciate to an equal degree with other parts of the body,—the tendency to diminished nutrition being modified by the increased exertion which the organ has to undergo to maintain the circulation. In the first case, there was also strumous pyelitis of the right kidney, with entire obliteration of the corresponding ureter as far as the bladder, and complete destruction of the corresponding renal capsule. The base of the bladder was thickened and ulcerated, and there was an abscess in the left lobe of the prostate, which had opened into the neck of the bladder. The left kidney, ureter, and supra-renal capsule were healthy. The patient had been of a dingy colour during life.

Dr. Leared showed a specimen from a case of obstruction of the bowels:

LOOP OF INTESTINE STRANGULATED IN A SLIT IN THE MESENTERY.

A boy, 14 years of age, in apparent good health, suddenly complained of pain in his abdomen, lay down and writhed in agony. He died in twenty-four hours. At the autopsy it was found that a loop of intestine had passed through a slit in the mesentery. There were no signs of peritonitis. In reply to Mr. Gay, Dr. Leared said that the edges of the slit were rounded. It had been one of the boy's duties to exercise a large dog. The dog had once thrown him down, and then dragged him on the ground.

Dr. Bristowe showed a specimen of

RUPTURE OF THE ASCENDING ARCH OF THE AORTA.

A young man, who had been considered healthy, one Saturday afternoon, after carrying a ladder, had what appeared to be a slight degree of faintness. He went home, and then had pain in his back, which was treated for lumbago. On Wednesday he now and then had pain in the chest, and the pain in the back was worse. He also had dyspnœa, and died two or three hours after this aggravation of the symptoms. The ascending arch of the aorta was found dilated and thin, but not diseased. There was a rent in it an inch and a-quarter long, and a smaller one, half an inch. There was blood in the cellular tissues around the aorta. The pericardium was full of blood. No doubt the first symptoms corresponded with the effusion of blood into the coats of the vessel, and those just before death with effusion in the pericardium.

Mr. Holmes exhibited a specimen of

PARTS AFTER EXCISION OF THE HIP-JOINT.

The patient, when 4½ years old, was admitted into the Children's Hospital for disease of the hip-joint of two and a-half years' duration. Mr. Holmes excised the joint, and child recovered completely. In six months the parts were soundly healed. The child afterwards returned to the Hospital, and died of double pneumonia, probably from cold. The bones were connected by fibrous bands, and Mr. Holmes thought, if the child had lived, a false joint would have been formed.

Mr. Nunn remarked on the change in the shape of the acetabulum.

Mr. Holmes said that this was probably due to gouging at the time of the operation.

Mr. Maunder thought that the specimen ought to encourage Surgeons to operate more frequently in such cases.

Mr. Holmes said that he could not agree with Mr. Maunder, as, of six cases in which he had operated or had watched carefully, this was the only one in which the slightest benefit had been derived.

Mr. Gaskoin showed a specimen of

RUPTURE OF THE AORTA, WITH EFFUSION OF BLOOD INTO THE PERICARDIUM.

A woman, 65 years of age, was found dead in bed. At the autopsy, the pericardium was found to be full of blood. The aorta was found to be atheromatous, and there was a small vertical rent in its coats, just above the aortic valves. From this opening the blood had escaped into the pericardium. The loose cellular tissue about the roots of the great vessels was infiltrated with blood. There was disease of the aortic valve.

Dr. Peacock was appointed to furnish a report on this specimen, and on Dr. Bristowe's.

Mr. Maunder exhibited a portion of the anterior abdominal wall containing the

INCISION WHICH HAD BEEN MADE FOR THE REMOVAL OF AN OVARIAN TUMOUR.

It was shown—First, in order to record the fact, that the patient, 25 years of age, had died of acute peritonitis on the fifth day; and secondly, that in order to secure perfect coaptation of the edges of the incised peritoneum it was not absolutely necessary to include that membrane in the suture; in this specimen the sutures were still *in situ*, were quite superficial to the serous membrane, and yet the original peritoneal wound presented a linear cicatrix, excepting at the point at which the pedicle intervened. This case appeared to be in all respects favourable for operation, but having terminated fatally, Mr. Maunder deemed it more desirable to record that circumstance rather than the success of the operation, supposing the facts to have been reversed.

Mr. Spencer Wells said that when ovarian tumours were not closely connected with the uterus—in other words, when the peduncle was long—they often moved from one side of the abdomen to the other, as the patient moved from side to side. Of course there would be corresponding movements of intestines, and necessarily variations in the situation of dulness and resonance on percussion. When a loop of intestine adhered between an ovarian cyst and the abdominal wall, the extent of resonance would vary with the contents of the gut. In some large ovarian tumours the movements are so free that the pedicle has been found twisted round upon itself, and in more than one turn. He (Mr. Wells) had seen one case in which death resulted from gangrene of a cyst, its supply of blood having been cut off by such a twisting of its pedicle, and of the vessels contained in the pedicle.

Mr. Maunder said that in the case he had mentioned the tumour was very large, and adherent to the anterior abdominal wall.

Mr. Spencer Wells exhibited

FOUR OVARIAN TUMOURS REMOVED BY OVARIOTOMY.

The first was removed last January, from a patient upon whom ovariotomy had been performed, in the previous May, by another surgeon. Mr. Wells did not enter into the details of the case, as he was about to bring it before the Medico-Chirurgical Society. The second tumour was removed, on the 19th of January, from a married woman, 32 years of age. The largest cyst had contained seventy-two pints of fluid, and the pressure had caused complete prolapse of the uterus with bladder and rectum. Extensive adhesions had to be separated, but the patient recovered well, and left the hospital on the day of the meeting. The third tumour was removed from a single lady, 25 years of age, on the 3rd of February. It had consisted of a large cyst holding twenty-five pints of fluid, and of masses of adenoma. Sections of the latter were shown, and portions of the wall of the large cyst, to show how small cysts are developed between the layers of larger ones. The patient died, two days after the operation, of exhaustion. The fourth tumour was removed from a married woman, in her 57th year, on the 9th of February. The largest cyst contained sixty-nine pints of fluid. There were large groups of secondary cysts, and extensive adhesions, but the patient was convalescent. This case made fifty-five in which Mr. Wells had performed ovariotomy, with a result of thirty-seven recoveries to eighteen deaths—and one case, in which he had done it for the second time, the result being fatal. If this case were classed by itself, there were only two deaths in his last twenty cases to eighteen recoveries.

Mr. Spencer Wells presented a

FIBROUS TUMOUR OF THE UTERUS REMOVED BY GASTRO-HYSTEROTOMY

on January 12 from a single lady, 35 years of age. It weighed seventeen pounds after one or two pints of serous fluid had drained off from imperfect cysts or cavities observed in the interstices of the fibrous layers of which the tumour was composed. The uterus from which it had been removed was also shown. The connexion between the tumour and the uterine parietes was not very intimate, so that after dividing the parietes it was detached without much difficulty. In some places a very thin stratum of uterine tissue and the peritoneum were the sole coverings of the tumour. It had formed in the right half of the body and fundus of the uterus,

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and had been accompanied by hypertrophy of the uterine tissue on the left side of the body, with atrophy of the cervix. Mr. Wells said that he brought this case forward, not as an example, but as a warning. He thought it would only be under most unusual circumstances that he would again remove an interstitial fibrous tumour of the uterus. A peritoneal outgrowth, or an ingrowth towards the uterine cavity and vagina, offered far more probability of successful removal than an interstitial tumour. In undertaking the operation he knew perfectly well that the risk must be great. He and Dr. Stewart had explained to the patient that the risk was an "unknown risk;" but she had begged to run any risk in hope of a cure. The tumour had been noticed for several years, and its growth had been accompanied by profuse menorrhagia; but it had only attained a very large size during the last four years. Since then her life had been repeatedly in danger from profuse hæmorrhage, and she had become quite unable to earn her living as a governess. A very accurate diagnosis had been made, and the patient was advised to try and obtain admission to the Hospital for Incurables; but she was most anxious to avoid such an end, and careful consultations were held as to the possibility of removing the tumour, and the best means of doing so. The impracticability, or very great danger, of removal by the vagina being evident, it was thought that removal by a sort of Cæsarian section offered the best hope of a good result. Accordingly, Mr. Wells laid open the abdomen, as in ovariotomy, and pressed the uterus and tumour outwards. He then cut through the uterine wall, and detached the tumour by his hand from its connexion. The uterus at once contracted. There was very free bleeding at first, but it soon stopped. Two ligatures only were used, and the opening in the uterine wall was closed by the uninterrupted suture. The abdominal wound was closed in the usual manner. The patient never rallied, and died four hours after operation, death being attributable partly to loss of blood, partly to shock, and partly to the effects of chloroform. There was no bleeding after the close of the operation, and no blood was found in the uterine sac, or peritoneal cavity, after death.

In reply to Dr. Gibb and other speakers, Mr. Wells repeated that peritoneal outgrowths, more or less pedunculated, had been successfully removed by the abdominal incision—as by Dr. Grimsdale and Mr. Fletcher, of Liverpool—and that ingrowths towards the uterine cavity and vagina were sometimes detached spontaneously, and had been often removed successfully after division of the mucous membrane, but that *interstitial* fibrous tumours of the uterus, like that now before the Society, were under much less favourable conditions for the Surgeon.

Mr. Gay exhibited a specimen of

CONGENITAL TUMOUR, REMOVED FROM THE SOLE OF THE FOOT OF A CHILD.

Mr. Gay first saw the child when he was seven months old. The tumour was elastic, and appeared to be unconnected with the deep tissues. He removed the tumour, with part of the tarsus and the metatarsus. The meshes of the tissue of the tumour were filled up with large fat cells, containing also crystals of margaric acid. The patient recovered.

Dr. Harley was requested to examine the tumour, and to report thereon to the Society.

Mr. Holmes showed a specimen of

CONGENITAL TUMOUR, REMOVED FROM THE OCCIPITAL REGION.

It was removed by the écrasseur. The child recovered, and there was no contraction of the neck, although the wound was a large one.

The President said that he once removed a small fibrous tumour from an infant two hours old. It projected from the upper jaw into the mouth, so that the child could not suck.

Mr. Shillitoe exhibited a

CONCRETION PASSED FROM THE BLADDER OF A WOMAN.

She had consulted him for symptoms like those of stone in the bladder; but on examining her, dilating the urethra, and passing the finger into the bladder, he could not find any stone. The substance passed consisted of phosphates coated over a thin metallic substance.

The President doubted whether it had been passed from the bladder.

Dr. Leared believed it was a deposit from a kettle.

Mr. Shillitoe thought that Dr. Leared's explanation was the correct one. This patient also consulted him for swelling of the end of one of the fingers, for which she could give no cause. It was removed at the first joint, but soon the stump inflamed, and another piece was cut off. He had recently heard that a third operation had been performed in the country.

M. Spencer Wells asked Mr. Shillitoe if the lady had brought an action against him for breach of promise of marriage.

The President then related a case of simulation of symptoms of uterine disease.

Dr. Harley then exhibited a

CONCRETION FOUND IN THE ABDOMEN.

Concretions might occur in any part of the body, but when consisting entirely of inorganic matter they were rare in serous cavities.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on the 11th inst.:—

John Thomas Gilson, of Chelmsford, diploma of membership dated September 3, 1825; William Cabbrow, Weymouth-street, Portland-place, November 5, 1830; Benjamin Barrow, Ryde, Isle of Wight, June 27, 1836.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, March 5, 1863:—

John Lacey, Wyle Cop, Shrewsbury; Robinson Boustead, Buckingham-street, London; William Irving Page, Ulster-place, Regent's-park, N.W.

APPOINTMENTS.

Anderson, William, M.D., has been appointed Resident Physician and Medical Tutor to the Birmingham General Hospital.

Falconer, Hugh, M.D., has been elected Foreign Secretary of the Geological Society.

Jones, J., M.R.C.S. Eng., has been appointed House-Surgeon and Secretary to the Isle of Wight Royal Infirmary.

Knagge, Samuel, M.R.C.S. Eng., has been elected Surgeon to the Huddersfield Infirmary.

Newett, Robert H., L.R.C.S. Ed., has been elected Resident Surgeon to the Belfast Union Workhouse.

Newton, H. W. Priestman, has been appointed House-Surgeon and Dispenser to the Chesterfield and North Derbyshire Hospital.

Ollard, John F., M.R.C.S. Eng., has been appointed one of the Honorary Medical Officers to the Isle of Wight Royal Infirmary.

Peacock, Albert L., L.S.A. Lond., has been elected Assistant House-Surgeon to the Sheffield Public Hospital and Dispensary.

Pinsiger, Broome, M.R.C.S. Eng., has been appointed one of the Honorary Medical Officers to the Isle of Wight Royal Infirmary.

Pope, J. Robinson, M.R.C.S. Eng., has been elected Surgeon to the East Sussex, Hastings, and St. Leonard's Infirmary.

Priestley, William O., M.D., has been elected Professor of Midwifery at King's College.

Rhodes, George W., M.R.C.S. Eng., has been elected Surgeon to the Huddersfield Infirmary.

Sanderson, John B., M.D., has been appointed Assistant-Physician to Middlesex Hospital.

Shepherd, Philip Candler, M.R.C.S. Eng., has been appointed Assistant Medical Officer to the Three Counties Asylum, Stotfold, Baldock.

Witham, J., has been appointed House-Surgeon to the Male Lock Hospital, Dean-street, Soho.

DEATHS.

Boyd, William, at Edinburgh, on March 1.

Dallas, J. I., M.D., at Hamilton, Upper Canada, on January 24, aged 46.

Haywood, R., M.R.C.S. Eng., of Locust-cottage, Landport, Portsea, late Surgeon R.N., lately.

Horsfall, William, M.D., at Boulogne-sur-Mer, on March 6, aged 86.

Houghton, Frederick W., M.R.C.S. Eng., at North End, Portsmouth, on February 25, aged 27.

McMath, Alexander, M.D., Q.U.I., at Benin, West Coast of Africa, on December 2, aged 33.

Metcalf, George, M.R.C.S. Eng., at Richmond-road, Dalston, on February 26, aged 33.

Mitchell, John, L.F.P.S. Glasg., at Kilmarnock, Ayrshire, on February 14, aged 46.

Newton, Thomas, M.R.C.S. Eng., at Knayton, Thirsk, Yorkshire, on February 22, aged 66.

O'Brien, Charles G., L.F.P.S. Glasg., at Lymm, Cheshire, on February 26, aged 70.

Simpson, Thomas, M.D. Edin., at Minster-yard, York, on February 28, aged 75.

Williams, Thomas, M.R.C.S. Eng., at Temple-row, Birmingham, on February 26, aged 53.

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ACADEMIE DE MEDECINE.—The recent election into the section of Hygiene and Legal Medicine has terminated in favour of M. Lélut, who obtained 43 votes, 66 electors being present

NON-INFLAMMABLE FABRICS.—MM. Westermann and Oppenheim, at the last meeting of the *Académie des Sciences*, laid on the table several specimens of articles of clothing rendered uninflammable. They state that they communicated their researches to a society as far back as 1859; but that they do not attach any importance to this priority, as they were only following in the footsteps of Gay-Lussac. As the result of their experiments, they find that three salts unite the requisite conditions,—cheapness, facility in their employment, and harmlessness to the tissue itself or the colours which cover it. These are the sulphate and posphate of ammonia, and the neutral tungstate of soda. The last is preferable to the others when the articles have to be frequently washed. It is mixed in water in the proportion of 20 per cent., and the solution is used as in starching.

BIRDS AS DESTROYERS OF INSECTS.—A distinguished naturalist, M. Florent Prévost, conceived the idea that it would be a matter of great interest to collect, at different periods of the year, the stomach of every description of bird he was enabled to procure, and to examine and preserve its contents. This collection, commenced thirty-five years since, has now reached a considerable size. The stomachs, opened and dried, together with their contents, are fixed on cardboard, upon which are inscribed, besides the name of the species of the bird, the indication of the locality and the date of its death, together with the names of the animals or plants which have been recognised as forming part of the contents of its stomach. It results from these researches that birds are in general far more useful than hurtful to the agriculturist, and that the mischief done at certain periods by the gluttonous species is largely compensated by the consumption of insects they effect at other periods.

THE POPULATION OF GREECE.—RACE r. FAITH.—"Nationality cannot exist on the sole basis of a common creed. Even the scattered Jews, in many leading features the first-cousins of the so-called Greeks, combine race with religion, and we fix nationalities by the test of race, not of faith. But in Greece we find the bullet-headed Albanian without an occiput; the flat-face and heavy-limbed Sclavonian; the sharp-eyed and hooked-nose Sciot, betraying the orientalism of his origin; the comparatively fair and handsome Islander, whose features remind us of Genoa and Venice; the dark and sombre Cephalonian from Acarnania; the piratical Marieot; the Italianised Zantiot,—all utterly different in physical conformation, speaking brokenly a broken language, or idioms of it so varied as to be scarcely intelligible to each other, and the early habits and education of whom have been widely different. This heterogeneous mass, collected under one common banner, and held together by no stronger tie than that to them very loose one of superstition to which the Oriental Church has become practically degraded by the channels through which its stream has flowed—this spontaneous concourse of atoms presumes to dub itself a nation. In such a nation there can be no feeling of patriotism, even according to its lowest definition, no community of feeling or interest, no unity of action. It is a continuous struggle of man against man, for every man is of a different race and of different associations. Centuries must pass before such elements will be, if ever they can be, amalgamated. However unwillingly, we must abandon all hopes of a nation without nationality, and which has no claim to our regard but that of being the recent occupiers of a once classic soil."—*Standard.*

NOTES, QUERIES, AND REPLIES.

Be that questions much shall learn much.—*Bacon.*

A. B. C.—1. It is not usual for Medical men to take fees of each other. 2. We doubt whether such a claim could be legally resisted.

We are informed that Mr. Propert has made no further communication to Mr. Adams or his friends in explanation of his alleged encouragement of the Russells. The heaviest charge against Mr. Adams was that of *indiscretion*—of allowing himself to be imposed upon in a manner derogatory to a man of sense, accustomed to the world, and having the dignity of a Profession to support. We regret that Mr. Propert should lay himself open to a similar charge.

We have received the two first numbers of "L'International," a cheap family French newspaper, published in London, and devoted to free trade and liberal ideas of the Imperial cast. We wish it all success.

The following lines will be recognised as proceeding from the pen of one of the most popular and accomplished Physicians of the day:—

"THE MARRIAGE OF THE PRINCE OF WALES WITH THE PRINCESS ALEXANDRA OF DENMARK.

"After the darkest night comes glorious morning,
When sunbreak bursts from out the golden sky,
With every beauty the fresh Earth adorning,
The glittering sea, and glowing clouds on high.
A night of sorrow on our land has reaped,
But now the coming day is seen to dawn;
The heart is not of its regrets dressed,
Although a veil o'er its regrets be drawn.

"The morning opens cloudless and all glorious;
The shadows of the night fast fade away;
Love, Hope, and Joy o'er every all victorious,
The nation holds high jubilee this day.
With love and loyalty each heart o'erflowing,
All hail the Nuptials of the Royal Pair;
Deepest devotion to our Sovereign showing,
While Denmark's Daughter weds with England's Heir.

"Hail, Alexandra, first of Denmark's daughters,
Hail, lovely Princess, now Great Britain's pride;
Welcome a Danish fleet in British waters,
That brings to England's shore our Prince's Bride.
Joy to thee, youthful Prince! May truest glory
Around thy Royal brow be ever seen,
Until thy name shine forth in future story
Worthy of thy Great Sire and our Good Queen.

"A Jubilee of Nations! Each rejoicing
As with exultant shouts we rend the air,
Or join in reverential tone our voices,
To ask for blessings on that youthful Pair.
Each joy of Earth be granted without ceasing,
Each gift that Heaven on mortals can bestow,
Until, their happiness each day increasing,
No more is left to wish for here below.

"May England's Star, still glorious and ascendant,
In Freedom's frontlet ever foremost shine,
Showing to all who would be independent
How Law with Liberty man must combine.
A nation, as one brotherhood, united,
Who guard a Regal Right even as their own;
A Land where Wrong is still by Justice righted,—
A People bound by Freedom to the Throne.

"Torquay, March 10, 1863." "R. T. E.

THE MEETING IN THE CASE OF RUSSELL v. ADAMS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I shall feel obliged by your allowing me to correct an error in your report of the meeting respecting the case of Russell v. Adams in your impression of Saturday last.

At the close of the offensive observations of Dr. Rogers, you state that "the speaker was called to order by the chairman." Such was not the case. It was because he did not do so, and that the offensive observations were tacitly sanctioned in the meeting, that I felt called on to make the remarks I did. That the chairman did not call Dr. Rogers to order is proved by the fact, that in interrupting me he said, that if the allusions "had been made with a personal application he would have called the speaker to order."

I feel bound to state that after the close of the meeting I received the hearty congratulations of nearly three-fourths of those present. In justice to me I hope you will give insertion to this note. I am, &c.

30, Upper Montagu-street, W., March 4. WILLIAM O'CONNOR.

THE CASE OF HUGH RANKIN.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Seeing a brief notice in your valuable paper of the 7th inst. respecting the case of Hugh Rankin, of this place, who was convicted at the last assizes at Newcastle for a criminal assault on Mary Brister, a child, 11½ years of age, in which you desire to know if what examination the stains on the filthy garment produced in court had been subjected, I am induced to forward this communication to you.

I was employed to examine the prisoner, and of course had no opportunity of examining the child's linen, but the Medical witness for the prosecution distinctly stated that he was unable to say whether the stains were produced by gonorrhœa or from a disease to which female children were liable from natural causes. When I examined the accused, about ten days after the alleged assault was said to have been committed, instead of finding him suffering from gonorrhœa (disease which he was said to be labouring), I merely observed a slight moisture at the mouth of the urethra, and a little redness around its lips. This led me to suspect that he was afflicted with stricture, and on requesting him to urinate, saw at once, from the forked character of the stream of water, that he had an obstruction in the passage.

As the prisoner had been some years in India with his regiment, I was led to believe that the stricture might have been of several years' standing, and that it was exceedingly doubtful whether he could have communicated disease to the child, whose evidence was given in such a bold, immodest manner, that I cannot but regret that the accused was condemned on testimony apparently so little deserving of credit.

As it is a matter of the greatest importance, will you kindly give your opinion, whether you consider a man in the situation of Hugh Rankin capable of communicating gonorrhœa; for if the testimony of a precocious child is taken as evidence of guilt, no man will be safe. I am, &c.

Alnwick, March 10. THOS. BRADLEY.

THE PERTON SPA WATER IN PSORIASIS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have just had my attention directed to a letter in the *Medical Times and Gazette* of the 24th of January last, from the pen of Dr. Moriarty, giving the history and treatment of a case of psoriasis inveterata, in which the following passage occurs:—"From long observation I have come to the conclusion that the only medicines deserving of a trial in this disease, as well as lepra, are Fowler's solution and quinine."

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Having lately had a case of psoriasis inveterata, or lepra vulgaris (which I prefer to call it), under my care here, which I have successfully treated with the Purton sulphated and bromo-iodated saline water, it may be interesting to Dr. Moriarty and many of your readers if I briefly relate the history of the case, which I prefer to do in the words of the patient himself, who is a gentleman of high position and scientific attainments:—I am fifty-eight years of age, and have always enjoyed pretty good health. I have never suffered from dyspepsia. It is twenty years ago that I first observed some red, scaly spots on my arms, and some months after this they appeared on my legs and thighs, and subsequently on my back, particularly my shoulder-blades and buttocks. The scalp of my head then became involved. It has gone on spreading, but more particularly during the last twelve months, and now the greater part of my person is affected with this scaly eruption. From the commencement of the disease till I came to Purton I have had the best of Medical advice, in France as well as England, without deriving benefit. I have taken sarsaparilla, then on to dulcamara, arsenic, with vegetable tonics, arseniate of potash and soda, iodide of potassium, chloride of mercury, oxysulphuret of antimony, etc. He was advised by H. W. Rumsey, Esq., of Cheltenham, F.R.C.S., to go to Purton and try the mineral water, which he commenced to do in June last and by the middle of the month of December the disease had entirely disappeared; and I am pleased to say that he remains well at the present time. He has just written a pamphlet, entitled, "Six Months at Purton Spa, etc.," published by Hamilton, Adams and Co., London.

I am, &c.

Purton, Swindon, Wilts. SAMUEL C. SADLER, F.R.C.S.

THE TREATMENT OF SKIN DISEASES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Knowing the extensive circulation of your valuable journal, I take this opportunity of placing before the members of the Profession, through its columns, certain facts, in order that those whose province it may be to treat cutaneous diseases may have an opportunity of testing the correctness of the statements, and reporting accordingly.

Case 1.—Psoriasis Palmaris, of Five Years' Duration, Cured by Vaccination, November, 1861.—A. B., aged 25 years, robust conformation of body; temperate habits; not the subject of scrofula; has had psoriasis palmaris for a period of five years, subject to occasional improvement of the disease under various methods of treatment, but never entirely free from the disease, which presented the annulated character,—red, dry, cracked, and exfoliating, and extending from the wrists to the fingers. During a sojourn in the Southern states, the action of various alteratives, such as iodide of potassium, bichloride of mercury, iodide of iron, as well as the triple solution of mercury, iron, and arsenic had been well tested. As a *dernier ressort*, I resolved upon vaccination, in order to observe the alterative effect of the vaccine virus upon his system, not without previous consideration, but with a firm conviction that, under certain circumstances, vaccine introduced into the system is one of the most powerful blood-purifiers we possess. The operation was successfully performed, the pustule passing through the various stages from incubation to its separation. Having carefully observed its progress, I found that, as it advanced from the third to the seventeenth day, the disease on the hands and fingers gradually receded, and, on the twentieth day from the date of vaccination, the parts recovered their natural appearance and continued so. Was successfully vaccinated when a child.

Case 2.—Tinea Nummularis seated on the right fore-arm; boy, aged 13 years, of florid complexion, vigorous habits of body, and healthy parentage. This disease existed over two months, and covered a space about two square inches near the front aspect of wrist-joint. Vaccinated on the opposite arm; operation successful. About the seventeenth day the disease disappeared, no other treatment having been adopted. Was previously vaccinated when one year old.

Case 3.—J. S., aged 25 years, a somewhat stout man, with fair skin, temperate habits, and non-scrofulous aspect. States that three months ago he had an indurated chancre, and eight weeks afterwards observed an eruption on the face, and more or less over the entire body. December 15, 1862, came under my charge, when the case was well marked "tubercula syphilitica," round, small, and of a copper colour, and possessing more or less density and elevation. Vaccinated on the arm successfully, and on the fourteenth day afterwards the tubercles over the whole body flattened down, and at the end of four weeks only a slight discoloration of the skin, at several points where the eruptions were worst, could be observed. From this date he went on gradually improving in general health under the influence of tonics.

Case 4.—Psoriasis Lepræformis.—S. G., aged 24 years, married, and the mother of four healthy children. July, 1862, first observed what was termed a "rash" on the elbow-joints, subsequently on the knee-joints, from which points, within a period of three months, it extended more or less over the entire body, even to the roots of the hair. November 10, 1862, I was first consulted, and placed her under the action of the usual alteratives for three weeks without any marked improvement. January 2, 1863, vaccinated successfully over a clear part of the skin on left arm. As the pustule passed through the successive stages, the eruption gradually disappeared, and the skin recovered its previously healthy aspect, about four weeks having elapsed from the date of vaccination to the disappearance of the disease *in toto*.

Various other cases illustrative of the effect which vaccine produces upon the system, as an alterative, might be cited. However, on the present occasion I consider the above cases sufficient evidence that the simple process of vaccination should not be confined alone to its protective influence against small-pox, but also extended to the treatment of many cutaneous diseases, not of parasitic origin, but arising from irritant poison, generated in the organism or in that vital fluid, the blood. Over such existing impurities, vaccination, beyond a doubt, possesses a powerful influence. Such facts prove nothing unfavourable to the claims of vaccination as a protective agent against small-pox; they prove only that which each day's experience tends to corroborate, namely, "that man has still much to learn."

Trusting that this point may merit the attention of the leading dermatologists, to whom we Canadians look forward for an expression of opinion such as can alone be formed from an enlarged experience,

I am, &c.

JAMES A. GRANT, M.D.,
Graduate of McGill College, Montreal; Attending Physician General Protestant Hospital, Ottawa City; Physician to the County of Carleton Prison; Corresponding Member of the Botanical Society of Canada.

Ottawa City, Capital of Canada, February 20.

COMMUNICATIONS have been received from—

PARIS; DR. HILLIER; MR. SAMUEL C. SADLER; MR. T. HOLMES; DR. JAMES ARMSTRONG; DR. JAMES A. GRANT; DR. JOHN WARD COUSINS; DR. H. WEBER; DR. FRANCIS T. BOND; DR. O'CONNOR; DR. JOHN O'REILLY; MR. SAMUEL HIGHLEY; THE SECRETARIES OF THE HARVEIAN SOCIETY; S. A.; PORTSMOUTH; MR. J. Z. LAURENCE; DR. SMART; DR. BIRKBECK NEVINS.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 7, 1863.

BIRTHS.

Births of Boys, 957; Girls, 875; Total, 1832.
Average of 10 corresponding weeks, 1853-62, 1886·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	699	671	1370
Average of the ten years 1853-62	672·4	651·2	1323·6
Average corrected to increased population ..	..	..	1456
Deaths of people above 90	..	..	5

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	2	12	5	3	8	6	4
North ..	618,210	12	8	22	3	8	14	..
Central ..	378,058	9	4	11	4	9	5	2
East	571,158	13	1	12	..	7	18	3
South ..	773,175	6	13	17	3	22	19	6
Total.. ..	2,803,989	42	38	67	13	49	62	15

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·561 in.
Mean temperature	47·3
Highest point of thermometer	64
Lowest point of thermometer	35·2
Mean dew-point temperature	41·2
General direction of wind	S.W. & S.E.
Whole amount of rain in the week	0·24 in.

APPOINTMENTS FOR THE WEEK.

March 14. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Max Müller, "On the Science of Language."

16. *Monday*.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Clinical Discussion—The President, "A Case of Successful Excision of the Elbow-joint;" Dr. Greenhalgh, Dr. W. Abbotts Smith, Dr. Gibb, and Mr. Henry Lee; and other Communications.

17. *Tuesday*.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ETHNOLOGICAL SOCIETY, 8 p.m. Robert Swinhoe, Esq., "Ethnological Notes on Formosa." John Crawfurd, Esq., "On the Commixture of Races—Western Asia."

PATHOLOGICAL SOCIETY, 8 p.m. Meeting.

ROYAL INSTITUTION, 3 p.m. Professor Marshall, "On Animal Mechanics."

18. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 p.m. Lumleian Lectures—Dr. Chambers, "On Formation of Mucus and Pus."

19. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

HARVEIAN SOCIETY, 8 p.m. Dr. Sanderson, "On Asthma."

ROYAL INSTITUTION, 3 p.m. Dr. E. Frankland, "On Chemical Affinity."

20. *Friday*.

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 p.m. Lumleian Lectures—Dr. Chambers, "On Formation of Mucus and Pus."

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON, 8 p.m. Mr. Rouse, "On Rheumatic Iritis."

ROYAL INSTITUTION, 8 p.m. Balfour Stewart, Esq., "On Magnetic Forces."

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BY HER MAJESTY'S ROYAL LETTERS PATENT
AND BY SPECIAL APPOINTMENT TO HER MAJESTY
AND THE ROYAL FAMILY
THE EMPRESSES RUSSIA & FRANCE
&c. &c.

JOHN WARD

5 & 6, LEICESTER-SQUARE, LONDON.

No. 12, Ward's Patent Albert Lounging Chair, the most simple and luxurious extant, is fitted for the Drawing Room, Boudoir, Cabin, or Camp; is made in Wood, Iron, or Brass, and folds into a small compass for shipment. From 4½ Guineas.

No. 17, a Four-wheel Victoria Pleasure-ground Chair, mounted in a very light Iron-framed Carriage, upon C and patent India-rubber Springs, is either drawn by Hand or Animal, and is the most elegant and easiest Chair made.

No. 16, a ditto, upon three wheels, mounted same as four wheels, on C and India rubber Springs

No. 19, a Bath Chair, with Leather Hood, and Folding German Shutter.

No. 18, a Sofa Britzka Spinal Carriage, with the inside Tray made to take out and in, on which an Invalid may be taken from her room to the carriage.

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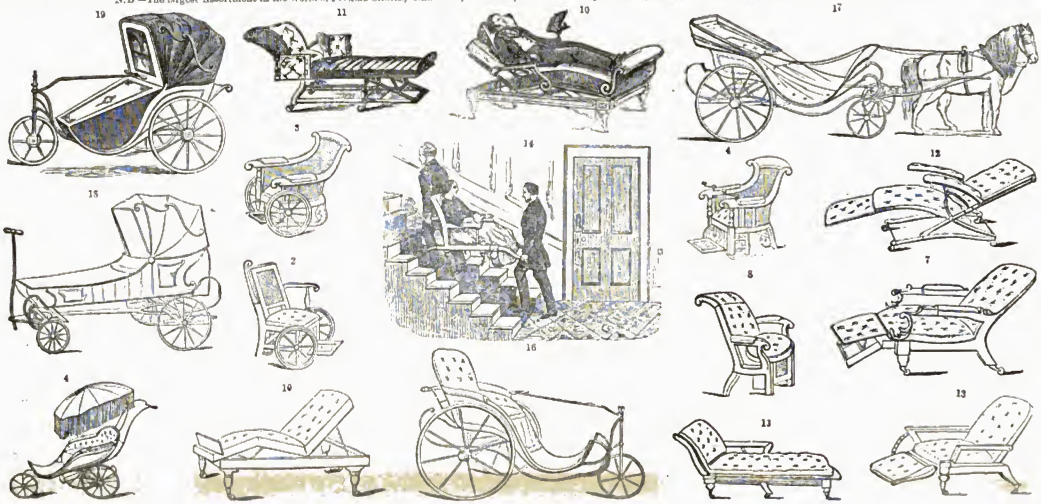

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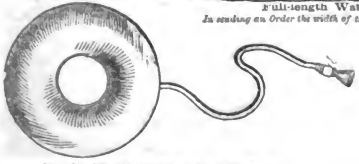

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ORIGINAL LECTURES.

PROFESSOR HUXLEY'S LECTURES

AT THE

ROYAL COLLEGE OF SURGEONS.

Lecture II.

(Being the First of Six Lectures on Classification.)

(Continued from page 262.)

The next group upon our list is the division of the Infusoria; and here, again, within the last few years, most prodigious strides have been made in our knowledge of the subject. Although the Infusoria have been favourite studies for many years, still it is only within the last few that our knowledge of the complete cycle of life of these animals has been made known, and that we have become acquainted with the true sexual process as it occurs in them.

Fig. 4.

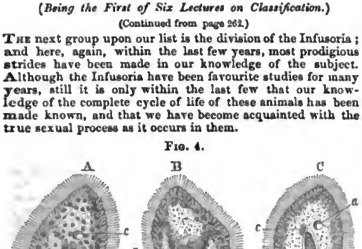

Fig. 4.—*Paramæcium bursaria (after Stein)*: A, The animal viewed from the dorsal side; *a*, cortical layer of the body; *b*, "nucleus;" *c*, contractile space; *d d'*, matters taken in as food; *e*, chlorophyll granules. B, The animal viewed from the ventral side; *a*, depression leading to *b*, mouth; *c*, gullet; *d*, "nucleus;" *d'*, "nucleolus;" *e*, central sarcode. In both these figures the arrows indicate the direction of the circulation of the sarcode. C, *Paramæcium* dividing transversely; *a a'*, contractile spaces; *b b*, "nucleus" dividing; *c c'*, "nucleoli."

The different species of the genus *Paramæcium* are very common among the microscopic inhabitants of our fresh waters, swimming about by means of the vibratile cilia with which the whole surface of their bodies is covered; and the structure which essentially characterises these animals is that which is common to the whole of the Infusoria, so that a definition of the leading structural features of *Paramæcium* is, in effect, a definition of those of the group. Imagine a delicate, slipper-shaped body enclosed within a structureless membrane or *cuticula*, which is formed as an excretion upon its outer surface. At one point (Fig. 4, B *a*) the body exhibits a slight depression, which leads into a sort of little funnel (*b c*) lined by a continuation of the same cuticular investment, which stops short at the bottom of the funnel. The whole of the bag formed by the cuticula is lined by a soft layer of gelatinous matter or "sarcode," which is called the "cortical" layer (Fig. 4, A *a*); and then inside that, and passing into it quite gradually, there being no sharp line of demarcation between the two, is a semifluid substance, which occupies the whole of the central region of the body. Neither in the cuticle, the cortical layer, nor the central substance has any anatomist yet discovered the slightest differentiation into cellular layers, nor any trace of that histological composition which we meet with in the tissues of the higher animals; so that here is another case of complex vital phenomena proceeding from a substance which, in a histological sense, is structureless. At two points of the body (Fig. 4, A *c e*) the substance of the cortical layer exhibits a remarkable power of contraction and dilatation. If you watch one of those points, the sarcode suddenly seems to open like a window, and for a while a clear space is visible, which then quite suddenly shuts again. After a little time the same diastole and systole are repeated. As the systole takes place, it is possible occasionally to discern certain radiating canals, which extend from the cavities into the surrounding sarcode, and then disappear again before diastole occurs. There is no doubt that the clear space is a chamber filled with fluid in the cortical layer, and as good observers maintain that there is an aperture of communication through the cuticula between this space and the exterior, this fluid can be little more than water. Perhaps the whole should be regarded as a respiratory or secretory apparatus. It is an organ which in one shape or another is eminently characteristic of the Infusoria. Besides this singular apparatus, there is embedded in another part of the cortical layer a solid mass, of an elongated ovpat shape (Fig. 4, A B *d*), which has been called the nucleus (though it must be carefully distinguished from the "nucleus" of a cell). Then upon one side of this there is, as it were, stuck on to it, a little rounded body (Fig. 4, B *d'*), which has received the name of the "nucleolus." The animal swims about, driven by the vibration of its cilia and whatever nutriment may be floating in the water is appropriated by means of the current which is caused to set continually into the short gullet by its cilia.

But it is a most singular circumstance that you have here an alimentary canal consisting of a mere gullet, open at the bottom, and leading into no stomach or intestine, but directly into the soft central mass of sarcode. The nutritious matters pass down the gullet, and then into the central more fluid substance, become surrounded by a spheroid of clear liquid (Fig. 4, A *d*), consisting apparently of the water swallowed with them, so that a well fed *Paramæcium* exhibits a number of cavities, each containing a little mass of nutritious particles. Hence originally arose the notion that these animals possessed a number of stomachs. It was not unnaturally imagined that each of the cavities in question was a distinct stomach, but it has since been discovered that the outer layer of the sarcode is, by means of some unknown mechanism, kept in a state of constant rotation, so that the supposed stomachs may be seen to undergo a regular circulation up one side of the body and down the other. And this circumstance, if there were no other arguments on the same side, is sufficient to negative the supposition that the food-containing spaces are stomachs; for it is impossible to imagine any kind of anatomical arrangement which shall permit true dilatations of an alimentary canal to rotate in any such manner. Fæcal matters are extruded from an anus which is situated not far from the mouth, but is invisible when not in use. It is an interesting and important character of the *Infusoria* in general that under some circumstances they become quiescent and throw out a structureless cyst around their bodies. The infusorium then not unfrequently divides and subdivides, and, the cyst bursting, gives rise to a number of separate infusoria.

The remarkable powers of multiplication by fission and gemmation which many of the group possess are well known; but within the last two years the investigations of Müller, Balbiani, Stein, and others, have shown that these minute creatures possess a true process of sexual multiplication, and that the sexual organs are those which have been denominated nucleus and nucleolus. The nucleus is the true ovary—the nucleolus the testis, in *Paramæcium*. At particular times the latter increases very much in size, and its substance becomes broken up into rod-like bodies, which represent spermatozoa. Two infusoria in this condition become conjoined, and the nucleolus (now become a spermatic capsule) of each passes into the body of the other. The spermatic filaments are said to enter the nucleus, which then enlarges, and either divides into, or gives off, a number of rounded germs, which become oval ciliated bodies provided with long processes. These make their way out of the body, and, it is believed, are metamorphosed directly into young *Paramæcia*. But, perhaps, further information is required before we can be quite certain on this point.

In giving an account of these lowest forms of animal life, I have substituted for a definition of each class a description of the structure of some particular member of that class, or of the organic features which are most obviously characteristic of the class; because, in hardly any group has the structure of many and widely different members been thoroughly and exhaustively worked out.

I entertain little doubt, however, that the main features of the description of *Spongilla* might substantially be taken as a definition of the *Spongilla*, and those of the description of *Paramæcium* as a definition of the *Infusoria*. On the other hand, we possess no such complete knowledge of the vital cycle of any *Gregarina* or *Rhizopod*, and neither description nor defini-

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tion of the corresponding classes, of a thoroughly satisfactory kind, is attainable.

No such difficulties beset us in studying the next class, the *Hydrozoa*, which may be defined with as much precision as any group in the animal kingdom.

All the *Hydrozoa* exhibit a definite histological structure, their tissues primarily presenting that kind of organisation which has been termed cellular. Again, the body always exhibits a separation into at least two distinct layers of tissue—an outer and an inner—which have been termed respectively *ectoderm* and *endoderm*. The endoderm is that layer which lines the inner cavities of the body from the mouth inwards; the ectoderm is that which forms its external covering.

These two layers are shown in the accompanying diagrammatic sections of the leading forms of *Hydrozoa*, the ectoderm being represented by the thin line with the adjacent clear space, the endoderm by the thick dark line.

Fig. 5.

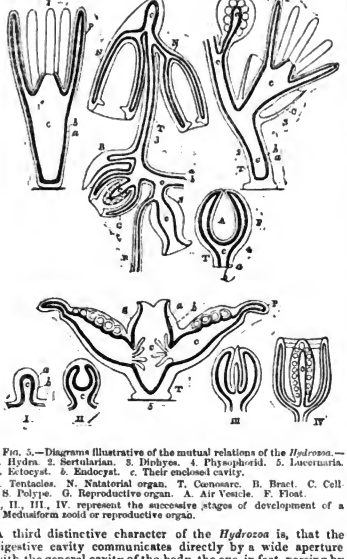

Fig. 5.—Diagrams illustrative of the mutual relations of the *Hydrozoa*.—1. Hydra. 2. Sertularian. 3. Physophoroid. 5. Lucernaria. *a*. Ectocyst. *b*. Endocyst. *c*. Their enclosed cavity.
P. Tentacles. N. Natatorial organ. T. Cœnosarc. B. Bract. C. Cell. S. Polype. G. Reproductive organ. A. Air Vesicle. F. Float.
I., II., III., IV. represent the successive stages of development of a Medusiform zooid or reproductive organ.

A third distinctive character of the *Hydrozoa* is, that the digestive cavity communicates directly by a wide aperture with the general cavity of the body, the one, in fact, passing by direct continuity into the other. Furthermore, the digestive sac is not in any way included in the substance of the rest of the body, but stands out independently, so that the outer wall of the digestive cavity is in direct contact with the water in which the animal lives, and there is no perivisceral chamber; and the like is true of the reproductive organs, which may vary very much in form, but have the common peculiarity of being developed as outward processes of the body wall, so that their outer surfaces are directly in contact with the surrounding medium.

No nervous system has yet been discovered in any of these animals. The majority of them seize their prey by means of tentacula developed either around the mouth or from the walls of the digestive cavity, or from the body wall, and these tentacles, as well as other parts of the body, are provided with those peculiar weapons of offence which have been termed "thread-cells."

A CLINICAL LECTURE

ON THE

DIAGNOSIS OF HERNIAL AND OTHER TUMOURS OF THE GROIN AND SCROTUM.

DELIVERED AT THE

Westminster Hospital.

By CARSTEN HOLTHOUSE,

Surgeon to the Hospital, and Lecturer on Surgery in the Medical School.

(Continued from page 131.)

Gentlemen,—The tumours in the scrotum which bear some resemblance to hernia are hydrocele, hæmatocele, varicocele, sarcocele, and other solid tumours of the testis; and in the labium cysts and chronic abscesses. Although at first sight it would seem almost impossible to confound any of these diseases with hernia, experience proves the contrary; and what has happened before may happen again, so I will briefly call your attention to the chief points which should engage your attention in forming a diagnosis.

Recollect, in the first place, that most herniæ are reducible; it is only irreducible herniæ, therefore, which are liable to be mistaken for the diseases just mentioned. And first as to hydrocele. This is so common and so simple a disease that it is usually one of the first which a student learns to diagnose, and the fluctuation and translucency of the swelling, its pyriform shape, and its commencing at the bottom and not at the top of the scrotum, are at once pathognomic of the affection. But this *ensemble* of symptoms is not always present, nor are they always unequivocal; the patient's evidence, for example, as to whether the swelling began at the bottom or the top of the scrotum, can rarely be implicitly relied on. The fluctuation, likewise, as I told you in my last lecture, may be simulated by certain solid tumours, or may be so obscure as to afford us little aid in diagnosis; even the translucency is not invariably present, nor, when present, is it always indicative of fluid. A thickened condition of the tunica vaginalis, or the dark colour of the contained fluid, may interfere with the transmission of light; while a knuckle of intestine may be so distended with flatus, and the skin of the scrotum so thin, as readily to transmit it. Arnaud and Teale both relate cases of scrotal enterocele which, from these causes, were as translucent as an ordinary hydrocele. But there is another source of fallacy: if the hydrocele be so large as to extend into the inguinal canal, not only will it resemble a hernia in shape, but it will also have an impulse communicated to it on coughing, because the part within the canal will be compressed between the abdominal muscles. A hydrocele, then, may be so large as to resemble a hernia in its shape, and in having an impulse communicated to it on coughing; its coats may be so thick, and so tense as neither to transmit light nor to fluctuate; while its history may be so doubtful as not to be depended on. None of the symptoms of hydrocele, then, which are usually enumerated, are in every case so unequivocal as to be absolutely pathognomonic of the disease; but there is one other sign which, taken in conjunction with those already mentioned, renders its diagnosis certain, and that is, dulness on percussion. It seems extraordinary that this simple test of percussion should not have been pointed out by any English author; yet, with the exception of Teale, no English Surgeon even alludes to it as a means of distinguishing hydrocele from scrotal enterocele, or the reverse.

I will now give you an example of a scrotal hernia which was mistaken for hydrocele and punctured, which came under my notice a few years ago:—J. C., aged 43, was admitted into this Hospital, in 1856, with a large scrotal tumour. He complained of having some pain in it, said his bowels had not been opened for three or four days, and that he had had vomiting. His face was pale; his pulse 120, and feeble. Two strips of plaster, placed X in front of the scrotum, concealed a puncture which had been made by a Surgeon prior to his admission. Some fluid, he says, came away, and some dark-coloured liquid was afterwards injected. He died thirteen hours after his admission, gradually exhausted by repeated vomiting. The post-mortem examination revealed a perfectly healthy condition of all the viscera, except those within the hernial sac. This contained the cæcum, and from two to three feet of the lower end of the ileum, glued together and

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to the walls of the sac by recent lymph; this likewise covered the whole of the inner surface of the sac, but did not extend to the abdominal peritoneum. No portion of the bowel which formed the hernia was in any way constricted, nor had it any marks of strangulation, nor had it given way at any part. In fact it was obvious to all present, that the poor fellow had died from the effects of injecting tincture of iodine into his hernial pouch under the supposition that it was a hydrocele. Had the simple test of percussion been had recourse to in this case, the patient's life would not have been sacrificed. Hæmatocele, as you know, differs from hydrocele in blood being the fluid which is effused into the tunica vaginalis, and its symptoms will differ from a hernia according as the latter is composed of bowel or omentum. In the former case the tumour would be lighter than a hæmatocele, resonant on percussion, and have an impulse on coughing; in the latter case, the tumour, although heavy, non-translucent, and dull on percussion, and therefore so far resembling an hæmatocele, would differ from the latter in its history, in its not fluctuating, and in its occupying the inguinal canal as well as the scrotum. This last symptom, however, requires investigation, because a hæmatocele, when large, will also extend into the canal, as we saw was the case with hydrocele under the same circumstances. As a further aid to the diagnosis of hydrocele, hæmatocele, and scrotal epiplocele, you should also bear in mind the following facts:—Hydrocele and scrotal epiplocele are essentially chronic affections; hæmatocele is acute, and generally due to traumatic causes. An epiplocele would take some time to reach the bottom of the scrotum, and a hydrocele some time to reach the top so as to distend the inguinal canal; a hæmatocele, on the contrary, commences at the bottom, and rapidly ascends till it reaches the inguinal canal.

A patient was admitted under the care of Dr. Radcliffe, on November 23, 1858, suffering from chronic bronchitis and ascites; he had also hydrocele of the left tunica vaginalis, and a varicose condition of the hæmorrhoidal veins, and of the superficial veins of the leg. On December 7, at the request of Dr. Radcliffe, I tapped the hydrocele, and drew off about twelve ounces of fluid. A week afterwards some blood was observed to come from the puncture, and the scrotum, which, after the operation, had much diminished in size, had become larger than it was before the tapping. Fœtid gas also escaped from the aperture on pressure. Under these circumstances, I made an incision an inch and a-half long through the anterior wall of the scrotum, and turned out a large quantity of clotted and decomposed blood. This, and the application of ice to the scrotum, did not prevent the re-accumulation of the blood, which also became effused into the right vaginal sac, filling it to distension. The whole scrotum was now very large, and both inguinal canals very prominent, so that any one unacquainted with the case would, in all probability, have pronounced it a double scrotal rupture, which, indeed, it very much resembled. The sequel of this case is not less curious:—On December 26 the patient died; but, three or four days previous to this event, the scrotum had resumed its normal size and aspect, and the walls of the abdomen had become perfectly flaccid, all traces of fluid having disappeared both from the vaginal and peritoneal cavities. No post-mortem examination was permitted.

A varicocele is one of those diseases said to resemble hernia, though I cannot say I ever saw them confounded with each other, nor do I think they could be by any but a mere tyro in the Profession. The particular form of hernia supposed to bear a resemblance to varicocele is scrotal epiplocele. Now you know that this would be situated *in front* of the cord and testis, and would not have that "bag of worms" feel which is so characteristic of varicocele; nor could it descend again into the scrotum, after reduction, so long as pressure was kept up over the external abdominal ring. If the hernia were irreducible, which I am all along assuming, the position of the patient would exercise no influence over it, while a varicocele would disappear when the patient was recumbent, but reappear when he stood up, notwithstanding pressure were made over the external abdominal ring.

Enlargements or tumours of the testicle may be distinguished from herniæ by their solidity and weight, by their history, by the absence of all other structures from the scrotum, and by the undistended condition of the inguinal canal.

Hitherto I have assumed that you had to deal with one of the diseases I have named uncomplicated with any other, and I have pointed out to you how you are to distinguish such cases from hernia; but you would be wrong in supposing these diseases are always met with in this simple form. It is by no means unfrequent to find two or more of these combined in the same patient,—hernia and hydrocele, for instance, sarcocele and hydrocele, or hydro-sarcocele, as it is termed; and these combinations sometimes make it difficult to form a certain diagnosis at first sight, so that you are obliged to rest satisfied for a time in determining what the tumour is not, rather than what it actually is; this negative evidence is, however, often of great value, especially where an operation is in question. If, for instance, some of the symptoms of strangulated hernia were present in connexion with a tumour in the scrotum, could it be determined that, whatever might be the nature of the tumour, it was certainly not a hernia, a great positive advantage would be gained,—the advantage, namely, of not subjecting the patient to a needless and dangerous operation. And here I must go a little out of my way to caution you against being in too great a hurry to operate. I do not mean in the cases just alluded to, where the nature of the tumour was doubtful, but in many cases even of undoubted hernia. I was called up by a Surgeon a few nights ago to see a case of strangulated hernia, and was requested to bring my instruments with me, as he thought there was no time to be lost. I found a tolerably large scrotal rupture; it was tense and somewhat sensitive to handling, and attended with a sensation of dragging in the abdomen. The patient had been the subject of hernia for many years, but had always been able to reduce it till about fourteen hours before I saw him; from this time all the efforts both of himself and his Surgeon had proved unavailing. I put him under chloroform, and tried the taxis for about fifteen minutes, but was not successful in returning the rupture. I declined, however, to operate, because there were really no symptoms of strangulation present; the hernia was for the time irreducible, but it was not strangulated; a pill of two grains of opium was therefore prescribed, and ice was directed to be applied to the tumour. Before eight o'clock the next morning the hernia had gone back of its own accord.

Another case bearing on this practice, and also illustrating some of the difficulties which occasionally beset the diagnosis of scrotal tumours, is the following:—J. S., aged 54, was admitted into Henry Hoare Ward, on the morning of the 8th of October, 1859, for a supposed strangulated hernia. A large, tense, and slightly red swelling, which was somewhat tender on pressure, occupied the scrotum and inguinal canal on the right side; the bowels had not acted for two days, and there had been slight sickness the day preceding, and also on the morning of his admission. The patient stated that he had been ruptured since the age of 14, but had worn no truss till after the age of 30, when, on raising a heavy weight, the rupture suddenly increased in size, and was returned with difficulty; since then he had constantly worn one. A few days before admission, the swelling became much larger than usual, which the patient attributed to having over-exerted himself in raising timber. There could be no doubt of the existence of a rupture in this case, and it was now irreducible and apparently inflamed; but, as there was no constitutional disturbance, and the symptoms were not urgent, I determined to wait awhile before operating, apply ice to the tumour, and watch the case. The patient had no sickness after his admission, and on the same evening his bowels acted spontaneously. The subsequent history of this case is not less instructive, and is as follows:—After the subsidence of the more active inflammatory symptoms, the scrotum was found to contain a considerable quantity of fluid, in addition to the solid mass which before and now occupied its cavity; and on the 5th of November I punctured it, and drew off six ounces of a clear, straw-coloured fluid. On the 16th of the same month, the operation was repeated, the fluid this time amounting to ten ounces four drachms, similar in appearance to the last, and containing some fibrin and much albumen, with a small quantity of bile. I was now enabled, for the first time, to make a satisfactory examination of the solid portion of the swelling. It was oblong in shape, reaching to the bottom of the scrotum below, and into the inguinal canal above; it was uniformly hard throughout, and the lower part could be distinctly recognised as the testicle, though neither the epididymis nor spermatic cord could be felt. The upper part of the tumour was obviously omentum, but it could not be

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separated from the testicle, not did it yield to attempts at reduction. A week after the last tapping, the scrotum was as distended as ever; I therefore decided, instead of again letting out the fluid, to rub in the dilute mercurial ointment for ten minutes night and morning, with the view of acting on the solid contents of the scrotum, and on the 29th the whole tumour had sensibly diminished, both as regards the quantity of fluid and the size of the solid portion. On December the 10th the note is—"The whole of the fluid has been absorbed, but the body of the testis continues very large and hard. The epididymis cannot be distinctly made out, and appears to be blended with the hard substance (omentum) which occupies the upper part of the scrotum and inguinal canal." The friction with the mercurial ointment was continued daily till the patient's discharge on the 24th, when the following note was made:—"The testis is now smaller and softer than the patient ever remembers it to have been. The epididymis can be felt distinctly and also the cord, an omental hernia, quite soft, occupies the upper part of the scrotum, and is apparently adherent to the globus major and the testis."

The interpretation of the symptoms which characterised this case is probably the following. The man had been for many years the subject of an irreducible serotal epiplocele, and had worn a truss for it; the pressure of the pad of this instrument upon the upper part of the hernia must have impeded the return of venous blood from that portion which occupied the scrotum, and also from the testicle, producing therefore chronic congestion and some enlargement of these parts. This being the ordinary condition of things, inflammation is suddenly set up in the tumour, followed by a great increase of its size and a commensurate increase of constriction of its upper part; the effect of this would be to impede still further the return of venous blood from the scrotal portion of the tumour, and hence give rise to passive effusion into the vaginal sac, or, in other words, to hydrocele; and so we had a hernia, orchitis, and hydrocele combined.

Hernia in the female is less common than in the male, and the only variety with which cysts and chronic abscesses of the labium are likely to be confounded is the pudendal; for the inguinal, though it may descend into the labium, can only do so through the inguinal canal and external abdominal ring, whereas the course of a pudendal is by the side of the vagina into the middle or lower part of the labium, leaving its upper half and the above-named passages free. Chronic abscesses usually originate in some part of the pelvis, and may descend by the same route as is taken by a vaginal or pudendal hernia; but the history of these collections of pus, the grave symptoms which generally accompany them, and the fluctuation, sufficiently distinguish them from hernia. Cysts are more likely to be mistaken for herniæ than abscesses, inasmuch as they not only occupy the same position as a pudendal hernia, but they have the same feel; they are also unattended with pain or other constitutional symptoms; they differ, however, from herniæ in having no impulse communicated to them on coughing, and in not being reducible by pressure or position. When the hernial tumour consists of a portion of the urinary bladder instead of intestine, cystocele as it is termed, its resemblance to an ordinary cyst is very close; but the latter cannot be emptied by pressure, whereas the former can, the act of pressure producing at the same time a desire to micturate, which the handling of a cyst does not give rise to. All doubts, however, on this point may be cleared up by desiring the patient to empty her bladder, and then refilling it with warm water; a mere cyst will remain unaffected by these proceedings; a cystocele will partially disappear and reappear, or alter its dimensions under this treatment.

ORIGINAL COMMUNICATIONS.

CLINICAL MIDWIFERY.

By FRANCIS H. RAMSBOTHAM, M.D.

Physician-Accoucheur to the London Hospital, etc.

(Continued from page 236.)

The following seven cases of puerperal convulsions occurred in my practice during the last nine months of the years 1843 and 1844:—

On April 16, 1843, I was sent for to a patient whom I was engaged to attend in her first labour, and who had been the subject of epileptic seizures for some few years. She possessed a contracted pelvis, and I was compelled to deliver by the crotchet. About two hours after her delivery she was attacked by a convulsive fit. She recovered, and I have twice brought on premature labour for her since, in each case the child being born living. I have already detailed this among the craniotomy cases of this series of reports. Case 133.

Convulsions before and after Delivery.

Case 183.—On April 24, 1843, at 4·30 p.m., a Medical friend requested me to visit Mrs. R., a stout, young woman, living at Pentonville, after the birth of her first child. She was taken in labour at 7 a.m., and soon after the pains had commenced a copious hæmorrhage took place from the uterus, sufficient to occasion syncope and pallid countenance. As a draining continued after the first eruption had ceased, my friend ruptured the membranes at 12 noon, and gave some ergot. This put a stop to the discharge, and increased the strength and frequency of the pains. At four o'clock, when the head was on the perineum, she was attacked with a very strong convulsion fit, which lasted five minutes. A dead fœtus was soon after expelled; but she continued comatose with stertorous breathing. Twelve or fourteen ounces of blood were drawn, and I was sent for. I found her sensible, but very drowsy. She did not complain of any pain. I ordered the head to be shaved, and a cold lotion to be used, twelve leeches to be applied to the forehead and temples directly, ten grains of calomel to be given at once, and a tablespoonful of a strong purgative mixture frequently. I recommended also, should another fit occur, that ten or twelve more ounces of blood should be abstracted. She continued much in the same state until 7 p.m., when another strong fit took place. Ten ounces more blood were taken, and an enema injected, which acted copiously. After this she had no more fits, and at my visit at 2·30 next day, I found her quite sensible, and she had slept comfortably. The bowels had acted six or seven times, and she had passed water; but the uterus was exceedingly tender on pressure. I recommended fomentations to the lower abdomen, and that some leeches should be applied if the tenderness did not abate. It, however, gradually disappeared, and she was speedily convalescent.

Convulsions coming on Six Days after Labour.

Case 184.—Mrs. N., High-street, Shadwell, was delivered by a friend of mine of her ninth child, after a very good labour on June 2, 1843, at 9 p.m. She nursed her infant, and went on exceedingly well without a check till the 8th at 9 p.m., when, without any assignable cause or the least warning, she was attacked with a violent convulsion. The fits recurred frequently through the night, and in the intervals she lay in a state of coma. I saw her at 9·30 the next morning, the 9th. She was then quite insensible, with the pupils widely dilated. She had been bled to fourteen ounces, and ten leeches had been applied to the temples. I ordered ten more leeches, the hair to be removed, and a cold lotion applied, and although the bowels had acted freely since the labour, I directed her to have ten grains of calomel and a turpentine enema. At 5·30 p.m. she was still quite unconscious, and had been constantly throwing herself about the bed; but she had not had any convulsions since the morning. The pupils were widely dilated and immovable. On the 10th, when I saw her at 1·30 p.m., she was quite maniacal; she had had no sleep, her head was hot, and she was talking incessantly. I directed one-third of a grain of morphia to be given every hour till she slept. She went to sleep after four doses, and slept six hours. When she awoke at 5 a.m. she was quite rational, and complained of great pain in the head. She could not bear the light, and the pupils acted well. She continued to improve during the 12th and 13th. On the 14th, after a very good night, she was seized with convulsions again about 9 a.m. without any warning, and they continued more or less frequent all day. More leeches were applied, and mustard poultices to the feet and pit of the stomach. The fits ceased before night, and she again slept; but on the 15th we remarked that she was paralysed on the right side, while the left arm and leg and left side of the face were the subjects of frequent twitchings. She again became gradually insensible, and died on the 16th. An inspection of the body was not permitted. I learned that mania supervened after her first child was born, sixteen years before.

Convulsions after Delivery.

Case 185.—On October 28, 1843, at 8 a.m., I was requested by a Medical friend to see Mrs. D., Old-street-road, a strong,

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plethoric woman, aged 28, who had just been delivered of her first child naturally after a labour of two days and nights. Immediately after the placenta had passed she was attacked by a violent convulsion fit. I found her comatose, with stertorous breathing; when shaken or spoken loudly to she could just be roused to look up, and she muttered something unintelligible. She was bled to twenty ounces, and had ten grains of calomel and a purgative administered. She had only that one fit; at 1·30 she was rational, knew the people about her, and answered questions sensibly. Finding the bladder distended, I drew off nearly a quart of urine. It was loaded with albumen, but contained less urea than usual. From this time she recovered without a bad symptom, complaining only of a slight pain in the head. In a week she was sitting up. The urine then did not contain a trace of albumen. Eventually she recovered well.

N.B.—Shortly before this time my attention was directed to the fact of the urine in women who became the subjects of convulsions in labour containing more or less albumen, sometimes in considerable quantity; and I have found in my own practice this to be the case in about every five cases out of six where I have been able to make the observation. But, as the patient is recovering, it gradually becomes less and less, and it has almost entirely disappeared at the end of twelve or fourteen days, sometimes earlier, though occasionally it persists for a longer time. Some pathologists imagine that the presence of albumen under such circumstances indicates granular disease of the kidneys, and therefore attribute the convulsive seizures to those bodies having become the seat of that particular organic change. On the contrary, we are told by M. Blöt and others that the excretion of albumen by the kidneys in small quantity is not an unusual occurrence in pregnant women. If organic disease of the kidneys was present in all cases of puerperal convulsions, how could we account for the disappearance of the albumen so soon after delivery,—we should expect it to remain permanently. The following is the explanation which has occurred to my own mind:—We know that the fibrine is in excess in the blood of pregnant women, we have reason to believe that the albumen is in excess also; and from the observations of M. Blöt, that a part of that excess is got rid of by the kidneys, we may easily imagine that if there is a much greater quantity formed than healthy blood ought to contain, the superfluous albumen may excite the apoplectic seizure which is the occasion of the fits; and that thus the connexion between albuminous urine and puerperal convulsions as cause and effect is manifest.

Convulsions before Delivery.

Case 186.—On Monday, April 1, 1844, at 9.30 a.m., I was sent for by a Professional friend to a poor woman in Rosemary-lane, in the last month of her sixth pregnancy. She was a "teetotaller." At 2 p.m. on the day before she was seized with a strong convulsion. She had complained of violent pain in the head for five or six days, which was not attended to. She had had fifteen fits in all, and had never spoken since the first seizure. She had been bled to sixteen ounces shortly before I saw her. I found her perfectly comatose; and her hands, feet, and legs were as cold as marble; indeed, she was dying. As the os uteri was dilated to the size of a crown-piece, and it is one of my maxims never to let a woman die undelivered, if the child can be removed without injury, I introduced my hand and turned the child, extracting it by the feet. I found the membranes had given way, but the delivery was not difficult, and she was quite unconscious during the operation. The placenta was readily extracted also. The child was putrid. She died in the course of the day.

N.B.—This woman might probably have been saved if blood had been taken when she complained of the pain in her head, or even when she was first attacked by the fits; but the lancet was used much too late, and indeed doubtless hastened her death.

Convulsions before and after Delivery.

Case 187.—On the same day, April 1, 1844, at 2 p.m., a Medical friend requested my opinion in the case of Mrs. R., Mile-end New Town, in labour of her seventh child. She seemed going on very favourably, when at 8 a.m. she was seized with a convulsion, and had had five, one each hour, since; the last was at 1 o'clock. At first she continued sensible between the fits, but at my visit she was comatose. She mumbled something when she was spoken to; but when I tried to rouse her, she began rolling about the bed, and very soon went into another fit. Another followed almost immediately after. I took twenty ounces of blood from the arm at once. The os uteri was then almost entirely dilated, and the head was in the pelvis, but the people about her did not know that labour had commenced. The pains continued, and the child was born in an hour dead. She had four more fits between her delivery and 8 p.m., for which her hair was removed, and cold was applied to the head. She took also ten grains of calomel, and a tablespoonful of a purging mixture frequently. The fits gradually became less severe as the bowels acted; she became conscious during the night, and from this time gradually recovered.

N.B.—It will be observed that I was sent for to these two last patients on the same day, and that two other of the cases just detailed happened within a few days of each other. Smellie and Denman both remark that it is not uncommon for three or four cases of this kind to occur quickly after each other in a particular district; and that women seem more predisposed to such attacks in some seasons than in others, attributing this predisposition to the "constitution of the atmosphere." My father says puerperal convulsions are more frequent "when there is thunder in the air;" Andral has more recently given expression to the same sentiment, and I entertain a similar opinion myself.

On December 26, 1844, I delivered by craniotomy, under puerperal convulsions, Mrs. C., Bucklersbury, which case I have already detailed among the craniotomy cases in this series of reports. It is marked case 139.

It will be thus seen that during the five years between January 1, 1840, and the last day of December, 1844, I treated nineteen cases of serious cerebral disturbance in labour, and that four of these proved fatal,—a larger proportion than my practice generally would show. But it must be recollected that one of these cases was pure apoplexy, without any convulsive movements, which I believe in labour invariably proves fatal; and that in another case the woman was dying when I first saw her for want of having been bled early enough. In fifteen of these cases the fits came on either before or during labour, and in four after the child's birth. Three were twin cases, in one of which both children presented with the feet, which were brought down artificially; in another both were delivered by forceps. One child was delivered by turning, five by craniotomy, and twelve passed naturally.

8, Portman-square.

(To be continued.)

HYDROCYANIC ACID IN THE TREATMENT OF INSANITY.

By KENNETH McLEOD, M.D.

(Continued from page 264.)

Case 2.—Mania, of an Extremely Restless and Incoherent Character—Amaurosis—Cachexia—Emaciation—Improvement under Hydrocyanic Acid—Renewed on Three Separate Occasions—Gradual Weakening and Wasting—Death—Structural Lesion of Brain, Lungs, Heart, Liver, Kidneys, Capsules, and Spleen found.

A. J., aged 53, a widow, admitted June 4, 1862; belongs to a very low order of a town population; has always lived in poverty and dissipation; had syphilis several years ago; no hereditary tendency ascertained; husband died eighteen years ago; has been more or less affected mentally since that event; has lived in great poverty; obliged to send her children out to beg; sight has gradually failed; has become latterly quite amaurotic; has been extremely excited and unruly during last three weeks. "Violent shouting, singing, spitting, and biting" have been the most prominent symptoms.

Symptoms on Admission.—Is a woman of strong, arthritic diathesis, but in a feeble physical condition; wasted, weak, and anæmic; has melasma around eyes, and dilated capillaries on cheeks; a few small nævi on different parts of body; is in very delicate health; vital processes feebly performed; completely amaurotic; has a soft systolic murmur at the apex of the heart, left side; pulse weak, beats generally at 80; liver enlarged; labours under mania; characterised by incessant muscular motion of every possible kind,—of tongue, feature, and limb,—but usually of a rhythmical and repeat[illegible] kind; shouts, screams, rubs, knocks, sings, etc.; sen[illegible] normal; attention and memory wanting; is utterly de[illegible]

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cannot converse at all coherently; has not, during the day, a moment's repose; is exceedingly restless and noisy during the night; to have a nutritious diet, and Oj. porter, with gr. j. morph. mur., at bedtime. ℞ Vin. rub. ʒiv., in dies.

July 9.—No improvement whatever; is rather worse; more noisy, and restless; is incessantly in motion; constantly shouting, screeching, etc.; tosses off the clothes; gets out of bed whenever she is left alone; no sleep at all last night. To have—℞ Acid. hydrocyani dil. ♏iv., every hour in ʒss. aq. camph.

10th.—Almost immediately after the first dose became quiet and still; effect sustained during the whole of the afternoon; slept well last night, a very marked contrast to several nights preceding; is much more settled this morning; does not shout or scream, although conversation is unconnected and rhapsodical; takes her food better.

12th.—Improvement still sustained; is much more manageable; eats her food better; is cleaner in habits; keeps her bed; ward generally quiet.

14th.—Is not so well; rather more restless and noisy; is still affected for the better by the hydrocyanic acid, but not so much as formerly.

The acid was about this time discontinued from failure of the supply of it, and she relapsed to nearly her former condition, being unaffected by large doses of hyoscyamus and morphia. It was resumed again towards the end of June, and again she improved amazingly; was able to get up every day; was generally quiet, but occasionally became excited; her physical condition, notwithstanding the administration of wine, porter, and a generous diet, gradually declined; she emaciated more and more; feet became œdematous, and bones every day got more prominent. She again became disorderly and acutely maniacal on remission of the drug, and was a third time habitually quelled by it.

She lingered on till August 16, an attack of pneumonia accelerating her death, and died almost a perfect skeleton.

On post-mortem examination, the optic nerves were found completely atrophied, the optic tracks partially so, and only the posterior transverse bands of the commissure remaining. Brain showed signs of meningeal irritation, and was the subject of chronic congestion throughout. There was no softening or any other structural change. The liver and kidneys were very gravely degenerated; capsules and spleen softened, and heart dilated; right lung solidified.

Case 3.—Maniacal Melancholia Coincident with Anæmia and Cachexia—an Acute Paroxysm Treated Successfully by Hydrocyanic Acid—Gradual Improvement under Tonics and Dietetics—Recovery.

H. S., aged 29, married, admitted December 12, 1861. No history, except the facts contained in the reception order. They are—Labours under a second attack of four months' duration. The first occurred at the twenty-eighth year of her age. Cause not known. Is suicidal and dangerous to others. In the latter part of October attempted suicide by cutting her face and neck with a razor. Imagine her domestic affairs are disordered. Has not slept for more than an hour at a time during the last six months. Is restless, incoherent, and occasionally very desponding.

Symptoms on Admission.—Patient inclines in diathesis to a strumous type. Is in very delicate general health, anæmic, and melasmic. Has not menstruated for months. Labours under maniacal melancholia, deploring with tears and lamentations the loss of everything; contrasting former comfort and happiness with the blighting ruin which involves not only her own affairs but every object in the world. Trees are withering, houses falling, property destroyed, cattle dying, etc., she the cause of all.

April 5, 1862.—Treatment since admission has been tonic, sedative, and dietetic. Has not improved much. Is very much pre-occupied with delusion; will not work at all; repeats the same expressions, conduct, and acts every day, without the slightest variation. 2 p.m.—Is in a state of frantic and unrestrainable excitement—shouting, struggling, and throwing herself about with great violence; crying aloud in her usual strain, but with greater intensity. Is exceedingly emotional. Pulse 144. ♏ij. dilute hydrocyanic acid was administered instantly, but no effect appearing, the dose was repeated in five minutes. This was followed by a very well-marked gradual amendment. Screaming, struggling, emotion, etc., disappeared by degrees. In ten minutes she was left alone, and in fifteen minutes became perfectly quiet. Pulse 120. In thirty minutes she continued silent and still, looking quietly out of the window. Medicine was continued every hour. She remained perfectly quiet during the afternoon; pulse falling to 96.

October.—No such paroxysm as that related above has occurred again. Patient is now very much better; cheerful, industrious, stout, and ruddy. Change for the better induced principally by means of tonics, iron and quassia, and generous diet.

Case 4.—General Paresis—Extreme Excitement Rapidly Quelled by the Use of the Hydrocyanic Acid—Habitual Quietness secured by Prolonged Treatment.

W. D., a tall, stalwart man, of arthritic diathesis, middle-aged, by trade a gas-fitter, was admitted June 3, 1861, labouring under the general paresis of the insane. On admission the physical signs of paresis were slight and mental, consisted in an incapacity for work, a bouncing manner, self-complacency, and self-confident, boasting familiarity, with occasional emotional paroxysms. The disease became soon more intense; vocalisation became more impaired; appetite voracious. He became liable to excitement, stole, accumulated, repeated, and began to entertain extravagant optimistic delusions.

June 9, 1862.—Disease has become very much more acute. He is liable to the most fearful paroxysms of excitement, when, with raised look and frantic gesture, he rushes about screaming, and shouting incoherently of his wealth, power, position, importance, means, etc. Property he has without limit—40,000 guineas, ship-loads of parrots, an inconceivable quantity of anything that can possibly be imagined. Deeds he performs of the most miraculous description,—"goes to Italy and knocks down the rocky mountains;" does wonders "at the Crimean war;" talks of marrying Mary Magdalene, the mother of God, etc. His nights are most boisterous and disturbed. He gets out of bed, tosses his bed and bedding about, knocks at the door, and shouts incessantly.

10th.—Had a most dreadful night; shouted and screamed during the whole of it; got out of bed and battered at the door with might and main; besmeared himself with fæces; could not be pacified by the night attendant. ℞ Acid. hydrocyanic dil. ♏iv. every hour.

11th.—Became perfectly quiet towards the afternoon; was obviously affected by the first dose of his medicine, and decidedly quelled by the second. Slept soundly all night. Is quite another man this morning; sits quietly on his seat, and does not talk except when addressed.

13th.—Continues to improve. The change of conduct during the night is most wonderful. He lies in bed and sleeps. No less remarkable is his altered demeanour during the day.

September 24.—The acid was on one occasion discontinued, when the patient reverted to his former violence of manifestation. Under prolonged treatment by it, he has become habitually quiet and tractable. Nothing similar to the former excitement has at all appeared.

October 22.—Continues much the same, disease making slow progress. The excitement appeared again, but was promptly dismissed by another administration of prussic acid.

November 1.—No recurrence of excitement. Is somewhat stouter; looks better. Occasions no disturbance, and gives very little trouble.

Case 5.—Congenital Imbecility with Epilepsy—Severe Paroxysm of Excitement—Subcutaneous Injection of Hydrocyanic Acid—Immediate Effect—Another Paroxysm Treated Successfully by its Oral Administration.

J. S., aged 16, admitted June 2, 1862. A congenital imbecile and epileptic; harmless and ineducable till within a few weeks ago, when he began to manifest excitement, which has recurred paroxysmally with considerable violence.

Symptoms on Admission.—Is a stout, strong, well-developed youth, of fair complexion and hair, blue eyes, rounded face and features, microcephalous, ears small, thick, and deficient in lobule. Appears to enjoy excellent health. Is very deficient mentally; slow of impression, ideation, and expression. Stock of thoughts and words exceedingly limited.

June 4.—Has manifested no excitement until to-day; was out during the afternoon in the airing-yard; attempted to escape; got over the wall; overtaken by an attendant; resisted being brought back most desperately; had to be carried into the house by four men; roared loudly and incessantly, kicked, struggled, bit, scratched, etc. Excitement continued

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without abatement, the efforts of four men hardly sufficing to keep him on his bed, until 8·30 p.m., when five minims of dilute hydrocyanic acid were introduced beneath the skin by Wood's syringe. A very slight change only being manifest, the dose was repeated in five minutes, when he became perfectly quiet, gave over his violent actions, and was asleep in about fifteen minutes. He slept well during the whole of the night.

10th.—No further excitement until to-day, when he had a severe fit, followed by very great excitement, roaring, kicking, tossing about floor, etc., which lasted till 6.30 p.m. He was then ordered mjv. hydrocyan. acid. dil. every hour. After the first dose he calmed down almost instantaneously, rose up off the floor, and had a drink of water; went to bed quietly; seen lying awake, but perfectly still, in bed at 10; slept shortly after.

November, 1862.—Has had several fits of sulkiness since last report, but no paroxysm of excitement. Does a good deal of work, both indoors and outside. Mental condition unaltered. Is, for the most part, cheerful and happy.

(To be continued.)

CASE OF OVARIOTOMY—PERITONITIS—DEATH ON THE NINTH DAY.

By EDWARD CHARLES HULME, F.R.C.S.

Surgeon to the Great Northern Hospital, and to the Central London Ophthalmic Hospital.

Mrs. S., aged 38, married, a spare, but healthy woman, had one child fifteen years ago. Within the last two years her attention was drawn to a tumour, commencing on the left side of her abdomen, which rapidly increased, and for the symptoms attendant upon this increase and inconvenience she consulted Mr. Harding, who diagnosed ovarian disease. The symptoms had assumed such extreme urgency by March, 1862, that Mr. Harding proposed tapping, which I performed on March 5. Twenty-eight pints of thick, coffee-ground-looking albuminous fluid were evacuated, which was followed by immediate relief, and a complete cessation of all the urgent symptoms. The abdomen became quite flaccid, and on careful examination no solid substance was detected. She began gradually to fill again, and on October 31, before the symptoms became so painfully distressing as in March, I relieved her again by tapping, and evacuated the same quantity and quality of fluid.

Being an intelligent person, and having obtained some knowledge of the nature and treatment of her complaint, she resolved to try pressure after her own fashion, and accurately moulded to the flaccid abdomen thin leaden sheets, altogether amounting to near 4 lbs in weight. This she wore constantly by day and night. For the first month no perceptible increase took place, but during December her abdomen began to enlarge. She could no longer bear the pressure of the weight, and by January, 1863, having passed the intervening time in the country for the benefit of her health, she was as large as ever, with a commencement of the same distress as before. Having had the operation suggested to her, as the case seemed in every way favourable for it, with a full conviction of its risks, she quite determined to abide the chance of success, and freely assented to its performance. After several careful examinations (at one of which I have to thank my friend Dr. Greenhalgh for his opinion), we came to the conclusion that it was a single cyst, no solid substance present; that the uterus was perfectly free and movable on the introduction of the sound; that ascitic fluid was present, and that in all probability there were no extensive adhesions. I therefore determined upon operating early in the month; but her menstrual period having come on a week before its proper time, it was deemed prudent to wait. During this delay a sharp attack of pain, attended with still further increase of size, supervened, and the well-defined circumference of the tumour was lost at its upper part; this increase was evidently due to the sudden effusion of ascitic fluid; the secretion of urine being at the same time much diminished. Treatment by hot applications, morphine, and mild aperients allayed these symptoms; and on January 27 I operated, assisted by my friends Drs. Greenhalgh, Murray, Meadows, Messrs. T. Carr Jackson, and Harding.

The abdomen measured forty inches round the umbilicus. The usual precautions having been taken as to heat of room, etc., etc., and chloroform having been administered by Dr. Meadows, an incision, about three inches long, was made, commencing about one inch below the umbilicus; on the peritoneum being opened, a profuse quantity of ascitic fluid gushed out; numerous adhesions existed on the abdominal surface of the tumour, and the incision was enlarged to about four inches, to enable my hand to be passed in to break down adhesions which were numerous, but slight, and generally readily yielded. The cyst was tapped, brought forward, being free from any pelvic adhesion, and the clamp placed upon the pedicle, which was short, but well-defined from the tumour; gentle pressure evacuated the remains of the ascitic fluid, and the intestines were not exposed during the operation. Five waxed twine sutures were inserted through the whole thickness of the abdominal parietes, with two or three sutures through the skin, the pedicle remaining at the bottom of the wound, with the clamp outside. The patient was thirty-five minutes under chloroform; she was sick for a few hours after, but the vomiting was allayed by sucking ice; and the pulse, which was 120 after the operation, fell to 90 that evening. She passed a quiet night without opiates. Slight dragging pain at the back, with nausea and some retching was experienced on the following day. She, however, retained her iced milk and beef-tea. Pulse 105. Tongue clean. The sickness, with vomiting of green, bilious, acrid fluid, had increased on the third day; and the abdomen became tympanitic, with slight tenderness on the left side. Pulse 115. Hot turpentine fomentations were constantly applied, and opium suppositories every six hours, with iced drinks. On the 30th I removed the clamp; a quantity of serous fluid, slightly tinged with blood, escaped from the lower end of the incision, which had not healed, and to which the pedicle had but slightly adhered. The edge of the wound, however, looked healthy. Not to enter into unnecessary detail, the patient remained much in the same condition till February 3. The pulse kept up regularly to 120; abdomen tympanitic, but without much tenderness; the sickness continuous, and yielding to no treatment; the lower edge of the wound looked unhealthy, and discharged offensively. She passed tolerably quiet nights by means of opiate injections, and was fed by nutritive enemata, which were generally retained, and she was hopeful and clear about her case. The bowels had been relieved by injection on the fifth day. After February 3, the pulse rose, the vomiting of an acrid, brownish fluid became continuous, and she sunk exhausted at nine o'clock in the morning of the 5th, the ninth day after operation.

Post-mortem Examination Thirty Hours after Death, assisted by Mr. Harding.—The abdominal wound had healed throughout its whole thickness, to within the lower inch of the incision. On laying open the abdomen, the whole of the viscera appeared matted together on their surface with lymph, which was thickly poured out at the lower part. The omentum was closely and strongly adherent to the intestines, requiring to be torn off with some force. The peritoneum on the abdominal wall was roughened with old lymph deposits; the edge of the wound had well united on its peritoneal surface, the stitches showing no especial marks of inflammatory action. Towards the left and lower part of the incision a small abscess, of the size of a nut, had formed into the parietes. The pedicle had retracted, showing a dark, sloughy, linear edge. The reflexion of the peritoneum over the fundus of the uterus was especially red and inflamed. The right ovary on section showed a small cyst of the size of a marble, white, and shining in its interior, with a distinct lining membrane. The peritoneum over the liver was reddened, and was adherent firmly to the under surface of the diaphragm in its whole extent, showing marks of old inflammatory action. The kidneys healthy; the head and chest not examined.

Probably more is to be learnt in order to facilitate diagnosis by the report and post-mortem of an unsuccessful case than the mere detail of a successful one, and the desire to add to our stock of statistics has been my object in publishing the above. I do not believe there is that reticence in the operators of the present day in withholding from the Profession the results of their cases, whether favourable or otherwise. That previous attacks of peritonitis had existed in this case was more manifested at the post-mortem examination than I could obtain from the history of the patient. The firm adhesions around the liver, about the omentum, and the slight attack which preceded the operation, I think

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prove this predisposition. The questions which arose, under the circumstances were whether I should tap again, with a view to future operation, or wait till the menstrual period should pass over, in the meantime subduing the existing symptoms by treatment. It must be remembered immediate action one way or the other was absolutely necessary. To tap again, after so rapid an accumulation of fluid and the abstraction of so large an amount of albuminous fluid from the system, would only have been to have left her a worse chance for future operation, and with her general health in all probability mere impaired. I preferred operating, therefore, although somewhat impressed with the idea that my chance of success would have been one shade better had I not been prevented operating at the time I wished by the circumstances above narrated.

Gower-street.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

THE LONDON HOSPITAL.

CASE OF EMBOLISM—GANGRENE OF THE FOOT—DEATH—AUTOPSY—CLINICAL REMARKS.

(Under the care of Dr. FRASER)

[Reported by Mr. CARTER and Mr. GWYNNE.]

ANN D., married, aged 29, admitted August 21, 1860. Has had two children at ten years' interval; has ailed ever since her last confinement, six months ago; flooded a great deal at the time, and for five weeks after; she then had pain in her stomach, shoulders, and chest; nausea, slight headache in the morning, and shortness of breath. On one occasion her bowels were not relieved for twelve days (probably from having had opium largely). Her appetite not good. The pains and nausea continued for some time, then left her, and returned once more; they left again, but the nausea returned with increased violence, vomiting all her meals; her breathing became more troublesome, and she suffered from severe paroxysms of dyspnœa, causing her to turn almost black in the face. She went into the country for some weeks, but was not benefited by the change. When admitted, she was suffering from intense dyspnœa, pain in her stomach, and frequent vomiting, pains across her loins and between her shoulders, the lumbar pain accompanied by a bearing down. The whole of the left side of the abdomen is painful when touched; right side not affected; a small amount of peritoneal effusion detected; lower extremities œdematous; there is a larger extent of precordial dulness than natural; and the heart-sounds are very feeble and indistinct, but no bruit, and no pneumonia or bronchitis. Pulse feeble, tongue white, bowels open, urine rather scanty. To have the ethereal tincture of lobelia and other anti-spasmodics.

August 23.—Pain very acute in loins and side; breathing very much distressed; lobelia found too depressing. To have brandy ℥ij. Pain was very severe. Ordered twenty drops of laudanum, and to be repeated every hour for three times, and fomentations to the abdomen in the evening.

24th.—Is easier this morning; vomiting ceased, and very slight dyspnœa.

25th.—She is much better, but still great lumbar pain. Heart-sounds very indistinct. To have gin, diuretic mixture, and blister to region of heart.

September 1.—During the preceding seven days the foregoing symptoms continued, and varied more or less. She had opiates, antispasmodics, neurotonics, embrocations, etc. On September 1, the nausea stopped, and she complained of intense pain in knee, instep, and big toe of left leg, which is cold as high as knee, and the toes purple and shrunken. Limb was enveloped in cotton wool and oil cloth; had opium internally, and a hot embrocation of laudanum.

2nd.—Much relieved by embrocation; no pulsation in tibials, pain in the course of the femoral artery.

3rd.—No sickness, and feels better. Seen by Mr. Luke, who recommends to wait for "line of demarcation."

4th.—Much relieved; foot and leg warmer.

5th.—Ordered the sesquicarbonate of ammonia.

6th.—Pain in ankle very severe; no feeling in foot when simply touched, but intense pain on its being moved; describes the pain as if running knives into the knee and ankle.

12th.—Vesications appeared on dorsum of foot and tibia.

19th.—The symptoms have continued as before. The ammonia has been continued, and to-day the iodide of potassium was added.

22nd.—Describes the pain as if the foot was being "broiled on a gridiron."

28th.—Cuticle beginning to be detached from instep; temperature of foot and leg still maintained. To have bark, chlorate of potash, iodide of potassium, and chloric æther, and intermit the ammonia.

October 6.—Line of demarcation well marked; pain and tenderness in left iliac region, and bearing down pain of rectum, and peritoneal effusion. Seen by Mr. Luke and Mr. Adams, who decided that amputation was inadvisable.

12th.—Symptoms have been much the same since last date. She is very weak and worn out by pain, which is little alleviated by large doses of opium.

16th.—An irregular suggillated spot, the size of half-a-crown, on inner side of left thigh, two inches below Poupart's ligament, and very painful to the touch.

17th.—Mortification extending, and she expired on the morning of October 18.

Post-mortem Eight Hours after Death.—Face livid; rigor mortis persistent. On opening pericardium about four ounces of limpid yellow serum was observed; the heart was large, its walls thicker and softer than usual. The cavities partially distended by semi-coagulated blood; no old fibrine found in them; valves quite healthy. Lungs were slightly emphysematous at apices, and the right pleura was partially adherent by old lymph; though congested, they were healthy in structure. Liver large; softer than usual; of nutmeg appearance. Kidneys paler than usual; no suppuration of calices, or calculus found; the bladder contained a minute calculus, the size of a millet-seed; it was white and friable. In spleen, which was small and firm, there were found three deposits of fibrine the size of half a walnut beneath the capsule. A small quantity of peritoneal effusion present. The uterus was small and firm; its internal surface was injected, and a very small quantity of blood was found in its cavity. Ovaries healthy; found one Graafian vesicle mature. On tracing the aorta, on its internal surface were found several scattered white patches beneath its serous coat (atheroma?) At the bifurcation of the iliac arteries a rope of recent fibrine was found reaching from left into right common iliac. At commencement of left common iliac artery was found a firm plug of yellowish brown fibrine; this could be felt externally, and traced by the finger down to the femoral, but it was much firmer for about the first inch and a-half, and not adherent to the arterial walls. All the branches given off by the artery, as far as to the middle of the thigh, were found obstructed by coagula, but in the lower parts they were looser and darker than that in the common iliac artery. The great veins were quite healthy, and contained only fluid blood. From the gangrenous condition of the limb the arteries were not traced lower, but they were in all probability plugged for their whole length. On slitting up the common iliac for a short distance, the inner coat was found to be of a deep red colour.

Clinical Remarks by Dr. Fraser.—The points to be noticed are—1st. Was the clot formed during life? Of this, from its situation, consistency, and non-adhesion to the walls of the vessel, apart from the symptoms during life, there cannot be a doubt. 2ndly. What were the special causes operating in this individual favouring a fibrinous deposit? namely, the loss of blood at the period of parturition, and the weakening effects of the subsequent protracted hæmorrhage, from the effects of which she never rallied. It is not easy, however, to determine where the coagulum was first, or where it was laid down? Most probably in the left heart, which will explain all the symptoms under which the patient laboured on her first admission. 3rdly. Can a coagulum be originally formed in any other part of the circulation, except in the cavities of the heart, in an aneurismal sac, or at the seat of a ligature? I think not. In this case it may be said that there was no valvular lesion to give a basis for the deposit. This, however, is not necessary, for in a languid circulation, with fibrine either in absolute or relative excess, it is easy to suppose a deposit to begin among or around the columnæ carneæ, for it is not necessary that actual stasis shall be present, as fibrine may be seen to attach itself to the stick or spoon while

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actively stirring fresh ox blood. All the symptoms are readily explained by the supposition of the deposit being in the left auricle, or ventricle, for by the aid of auscultation the absence of all pulmonic obstruction or inflammation was ascertained, thereby limiting the cause of the symptoms within the circulation. I conclude that the disentanglement took place on or about August 26, and on September 1, it was finally arrested at the bifurcation of the iliacs, on which day appeared the prominent sign of obstruction. In a therapeutic point, the volatile alkali did not manifest a dissolving power. In a practical point, the removal of the limb was contra-indicated from absence of a well-marked line of demarcation, as well as by the debilitated state of the patient, and the uncertainty as to the seat and extent of obstruction.

The wisdom of this decision was manifested at the post-mortem examination. Since the foregoing case occurred, a large experience has been obtained in this Hospital in the successful treatment of a great number of cases of rheumatism by the administration of very large doses of the fixed alkalis; the details of these cases will be given at another time. At present I would suggest that in embolism, as in rheumatism, there is a sub-alkaline state of the blood, and a consequent tendency to coagulation; and therefore this condition may be obviated by the employment of alkalis.

KING'S COLLEGE HOSPITAL.

CYSTIC TUMOUR OF THE BREAST—REMOVAL—RECOVERY—CLINICAL REMARKS.

(Under the care of Mr. FERGUSSON.)

For the notes of the following cases we are indebted to Mr. Smith, House Surgeon.

Susannah H., aged 44, single, was admitted December 18, for a large tumour in the left breast. She was a cook, a care-worn and cachectic-looking woman, and said that her grandmother and one of her aunts died of cancer.

History.—About two years ago, she observed a tumour in her left breast about the size of a walnut; at first she felt no inconvenience, but later suffered a great deal from sharp shooting pains in the swelling. For the first fifteen months that she noticed it, it grew very slowly, but during the last seven months it had increased very much in size, although it had caused her less pain. She could not give any cause for the tumour; did not remember to have had any blow upon the breast.

Upon admission, there was a large tumour in the left breast, about the size of a child's head. The skin was highly stretched over it, blue and congested, but not inclined to ulcerate. At the upper part there was distinct fluctuation, but below this there was a large hard, nodulated mass. The glands in the axilla were not enlarged; her health was not very good, and she had menstruated very irregularly.

December 20.—The patient having been put under the influence of chloroform, Mr. Fergusson made two elliptical incisions in the skin over the tumour, including between them the nipple. The skin was then carefully dissected back over the tumour on each side, then separating away the growth from its deep connections, the walls gave way, and a quantity of thick, grumous-looking fluid was poured out. Ten small arteries were tied, and the flaps of skin were brought together by sutures.

Mr. Fergusson, in his remarks to the class after the operation, stated that this kind of disease, though occasionally seen in other organs, was very rare indeed in the breast,—in fact, he himself had never seen one before. It was a cyst with very thin walls, loosely connected with the surrounding tissues, and containing in its interior a quantity of dark, thick fluid, somewhat like venous blood in colour. From the inner surface of this cyst there were attached several pedunculated cauliflower growths, the largest of which was about the size of a man's fist,—in fact, the tumour was one large cyst, although before removal it felt like a tumour made up together of hard tissue and several small cysts.

The woman went on uninterruptedly well after the operation. The edges of the wound gaped a great deal, and tore away from the sutures, but it healed up well by granulation, and the patient was discharged cured January 10.

FATTY TUMOUR UNDER THE DEEP MUSCLES OF THE BACK—REMOVAL.

Caroline L., aged 27, was admitted under the care of Mr. Fergusson, January 29, for a swelling in the back. She was a healthy-looking woman, married, and had had one child. About seven years ago she had a severe blow upon the back, but noticed nothing until nine months ago, when she found that there was a large swelling on the left side of the spine, and about midway between the lower ribs and the crest of the ilium. This had increased very slowly since, and without any pain.

Upon admission there was a soft, doughy tumour to be felt, the precise nature of which could not well be made out. She was taken into the theatre February 14, put under chloroform, and an exploratory incision made; it was then found to be a fatty tumour, deeply embedded under the trapezius and longissimus dorsi muscles, and about the size of an orange; it was easily squeezed out, and the flaps of the incision brought together by sutures.

The patient did very well, the wound healing partly by first intention, partly by granulation, and she was discharged cured February 27.

MIDDLESEX HOSPITAL.

CASE OF OBLIQUE INGUINAL HERNIA IN A LITTLE GIRL FIVE AND A HALF YEARS OLD.

(Under the care of Mr. HULKE.)

A little girl, 5½ years old, was brought to the out-patient's room, July 31, 1862, with a swelling in her right groin, about as large as a pullet's egg, which was evidently an oblique inguinal hernia, and was easily reduced. The mother had discovered it four days before, when the child complained of great pain in the part immediately after a fit of cough. Recognising the resemblance of this swelling to the congenital scrotal hernia of another of her children, which she had been taught to reduce, she tried pressure, and in a few minutes the swelling disappeared, with immediate relief of the pain.

From the silence of text-books on this subject, a common impression prevails that inguinal hernia occurs much more rarely in female children than is actually the case. The valuable tables drawn up by Mr. Kingdon, for the reports of the City of London Truss Society, show that in 1860, 29, and in 1861, 41 cases of this form of hernia in girls under five years of age were seen in that institution; the proportion of these to those in male children of the same age being in 1860 as 1·14 nearly, and in 1861 as 1·15.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.

CANCEROUS TUMOUR OF THE MEDIASTINUM—CANCER OF THE LUNG—EXTERNAL TUMOUR OVER THE STERNUM—CONTRACTION OF THE LEFT PUPIL—CLINICAL REMARKS.

(Under the care of Dr. POLLOCK.)

In this case (Dr. Pollock remarked) the existence of pressure on the root of the left lung was manifest enough from the various physical conditions existing during life, viz., enlargement of the external chest veins, inequality of the pupils and of the radial pulses, and alteration in the pitch of the voice; while a dulness more complete and extensive than could be attributed to tubercle or circumscribed empyema, with evidence of obstruction to the entrance of air into the left bronchus, pointed clearly to the existence of aneurism or other tumour in the mediastinum. The ordinary signs of aneurism, as murmur or pulsation over the dull part, murmur above the clavicles, or propagated to the vessels of the neck, were absent. There was no external tumour when the diagnosis of malignant disease was made; but the later appearance of a swelling over the sternum of a hard, inelastic character, rendered the evidence of malignant disease more decisive. Clubbing of the fingers, present in this instance to a remarkable extent, has always been associated with tubercle. Were the cicatrices and cretified masses observed in the right lung due to former tubercular deposits? The coincidence of cancer and tubercle in the same individual has been pointed out by many observers, and a case is recorded by Dr. Pollock in the Pathological *Transactions*, vol. iii., 1851-52, p. 264.

Another interesting feature in this case is the contraction of one of the pupils, due, no doubt, to pressure on the trunk of the sympathetic. Dr. Gairdner was the first to point out that alteration of the pupils is often a symptom of intra-thoracic tumours, and that it is due to interference with the

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sympathetic. In a case of thoracic aneurism, under the care of Dr. Fuller, related in this Journal for January 3, 1863, there was extreme contraction of one pupil; and in another case, under the care of Dr. Davies, in the London Hospital, this symptom was present and was clearly due to pressure of the aneurism in the trunk of the sympathetic. We shall speak more of this symptom in connexion with a series of cases of disease of the spinal cord, in which contraction of the pupil is sometimes present, and also in relating several cases of aneurism.

Chas. L., aged 54, teacher of German, was admitted on August 8, 1862, as an in-patient. He had no known predisposition to tubercular or cancerous disease. He had gout four years ago, and had been more or less out of health ever since. Hæmoptysis occurred sixteen weeks ago, and also repeatedly in small quantities since. He complained of much dyspnœa on exertion, and of severe lancinating pains through the left chest and shoulder. He had slightly lost flesh, and his fingers were clubbed to a remarkable degree. The right pupil was larger than the left; the right radial pulse was fuller than the left; pulse intermittent, occasionally as high as 132. On inspection, the movements of the left side seemed nearly lost. The external chest veins were enlarged, and more so lower down on the left side. The left side was absolutely dull over the front from the clavicle to the base, the dulness extending across the sternum. There was complete absence of respiration over the dull part. Posteriorly in the supra-spinous fossa there was bronchial respiration and bronchial voice, and very tubular respiration along the spine, where the vocal fremitus was much increased. The posterior part of the base presented slight, moist crepitation. On the right side the respiration was puerile, excepting along the spine, where it was slightly tubular. There was much tenderness over the left front, so that repeated examinations became impossible. There had been no hectic; dysphagia never existed; decubitus, generally slightly turned over on the left, with the head low. His natural voice was a deep bass; he now spoke in a high treble.

The diagnosis recorded on the first examination was, that a tumour occupied the mediastinum, pressing on the root of the lung—that its nature might be either malignant or aneurismal, but that the presumption was in favour of the former.

In about a week a slight prominence of the chest walls was manifest at the second rib and intercostal spaces above and below. This was hard, exquisitely tender, and the centre of the lancinating pains from which he suffered. This swelling daily increased till he died, the integuments over it remaining of a natural colour. He sank on October 15, 1862. Death appeared to occur from exhaustion; there was never any excessive dyspnœa. The physical signs at the last only differed from those already mentioned in the fact, that the crepitation at the left base had ceased, and no respiratory sounds of any kind were heard over this side. The left radial pulse became imperceptible some hours before the right.

Autopsy, Thirty Hours after Death.—Body well nourished; a hard, inelastic swelling over the second and third ribs of the left side and part of the sternum, about two inches long by three wide. The left pleura contains a large quantity of clear fluid; it is universally and firmly adherent, except at the base. A cancerous growth is seen in the posterior mediastinum, which is adherent to the vertebræ as low down as the sixth dorsal, and extends upwards a little way along the neck. It presses on the left lung, and surrounds the various structures at the root of the lung, and is continuous anteriorly with the tumour, which is seen externally. The left lung, rather larger than a man's fist, is infiltrated in its upper third with cancerous matter. It is firmly united, along with the pleura, to the inner surface of the sternum and ribs. There does not appear to be direct continuity of structure so much as infiltration of all the tissues with cancerous matter. The parts composing the root of the left lung are all involved in the morbid growth; the left bronchus is nearly obliterated in calibre; the left pulmonary artery much narrowed; the arch of the aorta is not pressed on. The right lung is of an average size; in the lower lobe were found two cancerous deposits, white, cerebreform, and possessing the usual microscopical characters of cancer. A puckering of the lung is seen on its surface in the lower lobe, and, on cutting into it, there is a small cretified mass. There are two cicatrices at the apex of this lung; no recent tubercle exists. One of the bronchial glands at the root of this lung is converted into a cretaceous mass.

HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA PARK.

MEDULLARY CARCINOMA OF THE LUNG AND BRONCHIAL GLANDS, AND OF THE STOMACH.

(Under the care of Dr. PEACOCK.)

[Reported by Mr. LANCHESTER, Resident Medical Officer.]

CHARLES T., aged 42, was admitted June 6, 1862. He had been ill about six months with a cough and some frothy expectoration; for the previous fortnight, mixed with blood. He was a large-made man, with a sallow complexion. He had been losing flesh; the pulse was 108, soft; tongue rather thickly furred; appetite bad; bowels confined; the urine, sp. gr. 1030; acid reaction; contained abundant lithates; no albumen. Sleeps well; decubitus almost entirely dorsal. The physical signs were not very marked. The chest, at the upper part, somewhat hyper-resonant; respiration harsh at both apices, more particularly the right.

His Previous History.—He had been a carpenter in the country. He had been a very strong man, though, for the last year or so, subject to rheumatic gout, and had probably lived a fast life. He was the youngest of a large family, all of whom were alive and healthy. He had one daughter, who was said to be phthisical. No other evidence of hereditary disease in the family was obtained.

The diagnosis at this time was incipient phthisis; but in a very few days it became evident there was more depression and general debility than would be occasioned by tubercular consolidation alone.

June 12.—He lies in bed nearly all day, feeling great disinclination to move, and complains of much pain at the epigastrium, and there is some tenderness to pressure. Tongue much furred; bowels confined. This pain continued for some days, and he was troubled with continual vomiting. Urine scanty, but contained no albumen.

24th.—The pain had become more general over the abdomen. No enlargement or irregularity could be felt of the liver or in the epigastric region. The vomiting continued troublesome.

29th.—To-day the expectoration has a very peculiar appearance, consisting of frothy mucus in large bubbles, intimately mixed with blood of deep red colour.

The physical signs have also become more marked, as the following note shows:—Impaired expansion and resonance on percussion; great deficiency of respiratory sounds, and absence of vocal fremitus on the right side. On the left still signs of general emphysema. The chest was not examined posteriorly, on account of the weak state of the patient. From the physical signs and peculiar "currant jelly" character of sputum, the surmise was hazarded that the case would prove to be one of carcinoma of the lung, involving also some of the abdominal organs.

There was some hæmoptysis the next day; probably, altogether, there was some four to six ounces of blood.

On July 7 he was attacked with erysipelas (no cause could be traced for this), and, though very weak, he lingered on some days, and died on the 13th. The vomiting had continued to two or three days previously.

Autopsy, Forty Hours after Death.—Rigidity marked; body smewhat emaciated; some discoloration of dependant parts. *Thorax.*—The superficial cardiac region was almost covered by the left lung, which also extended rather beyond the middle line above. On the right side, the pleural cavity contained a large quantity of serous flaky fluid; and the lung was compressed against the vertebral column, except where it was held by some adhesions at the apex; the layers of the pleura were much thickened.

Lungs.—Right.—Compressed to about half its natural size, but its weight much increased (39¼ ozs.). The lower lobe, the limits of which could be traced by the line of thickened pleura, contained encephaloid cancer diffused through its substance. The upper lobes were much condensed, and contained a few scattered masses of the same character. *Left.*—Large, generally emphysematous, with some congestion posteriorly (probably hypostatic). It was perfectly free from any deposit. (Weight, 22¾ ozs.) In the posterior mediastinum was a large mass of encephaloid, apparently formed round, or in the substance of, the bronchial glands.

The pericardium contained about two ounces of fluid, chiefly serous, with some flakes of lymph. Heart (weight 10½ ozs.) somewhat large; cavities dilated; substance flabby; valves

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normal, except some slight thickening of the mitral; aorta and pulmonary artery much blood-stained; some patches of commencing atheroma at origin of innominata, carotid, and subclavian. *Abdomen.*—Liver (weight, 4 lbs. 6¼ ozs.) large, soft, and fatty. On section, the hepatic veins appeared dilated; no carcinomatous deposit; gall-bladder and bile-ducts normal. *Stomach.*—In the lesser curvature, situated four inches from the cardiac orifice, at the posterior part, was a mass of encephaloid, about the size of a large walnut. It was contained in the walls of the organ, between the muscular and mucous coats; on section, was of moderate firmness; the mucous coat over it was entire, but a good deal congested; there were two smaller masses situated near it; the duodenum and intestines were healthy; the mesenteric glands were enlarged; no secondary deposit was found. In the head of the pancreas was a soft white mass of encephaloid, about the size of a marble. Spleen (weight 17¾ ozs.) very soft, quite diffluent; apparently no deposit. *Kidneys* (weight, 6¼ ozs.)—Renal capsules stripping easily; both somewhat congested; in the cortical portion of the left kidney, a small secondary deposit; none in the right.

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Medical Times and Gazette.

SATURDAY, MARCH 21.

CHILD MURDER.

Some energetic philanthropist, who assumes the name of "Eagle Eye," has circulated an analysis of coroners' inquests in England and Wales on children under two years of age, during the year 1861, and the first six months of 1862. From this it appears that 5113 such inquests were held, and that in 1860 of the number there was presumption of violent death. In 222 cases a verdict was returned of "Wilful Murder;" in 680 the verdict was "found dead;" and in 958 deaths was ascribed to suffocation, overlaying in bed, etc. It is assumed, therefore, that about 1200 infants are annually murdered in England and Wales, including about one-third of that number as the *quotum* for London and its suburbs.

A practical acquaintance with the subject induces us to demur to one of the chief items of this heavy bill, so far, at least, as London is concerned. It is assumed that the verdicts of "found dead," which are chiefly upon newly-born infants, whose remains are found "in ditches, fields, drains, cesspools, wells, canals, rivers," etc., point to that number of infants murdered. But there is another hypothesis, disgusting enough, it is true, but still capable of accounting for the finding of these children on more charitable grounds. A large majority of the infants "found dead," are really found with no marks of murder about them. They are still-born infants, which the parents have thrown away to avoid the expense of burial, or which the low undertakers' men have got rid of in this way for the like purpose. The *fee* at cemeteries for the interment of a still-born child is usually 5s., besides which there are the undertaker's charges. If the child have been baptised, and have ever been registered amongst the number of Christian human beings, the charges are nearly doubled. Hence a discouragement to baptism and to Christian burial. Further, the parents of a still-born child usually leave it to a nurse or undertaker to make all the arrangements for its sepulture. But if the undertaker's man gets rid of the body without burial, of course he can pocket the fees for his own perquisite. A case is reported lately, in which an undertaker tried to smuggle away a still-born child by putting it under the lining of a coffin for an adult. Moreover, bodies of these children are always forthcoming at dissecting-rooms for 5s. a-piece. Clearly, then, there is evidence to show that a great majority of the children found dead in London were not murdered.

But far too heavy a list remains undisputed. There stands the fact; and it is one against which all the Acts of Parliament or other positive enactments conceivable would fall harmless. We would lay down the aphorism that the number of deaths of young children in any community is proportionate to the want of education, of moral training, of social and material position, and that it can only be lessened by indirect measures.

What are the facts? A boy or girl finds him or herself suddenly—at a very tender age, long before body or mind has attained that power of resistance which maturity confers and experience strengthens—brought face to face with the most subtle, alluring, and overwhelming emotions. Let it be granted that the youth has been prepared for this internal conflict, that he or she has been instructed in those means of resistance which religion and morals confer,—like, as it were, to a shield in which fiery darts are quenched,—and that there are all worldly motives on the side of restraint, yet the temptation is always there, and it needs but "opportunity," that mother of vice, to give occasion for the victim to fall into the snare. Then what happens? Possibly, such a heart-rending spectacle as was exhibited at a police court last week, where a mere child of seventeen was committed for the wilful murder of an infant to which she had secretly given birth.

God forbid that we should palliate crime; but in any such case as this we should like to see the parents and guardians indicted conjointly as accomplices, to give them the opportunity of proving that the fall and subsequent crime were not to be attributed to their neglect. Was the girl properly trained in morals generally? Had she ever received from her mother cautions against this breach of morals specifically? How came the opportunity? Had the parents adequate grounds for trusting the girl? Would they have entrusted her whole fortune in money, be it much or little, to a girl of seventeen? If not, did they consider themselves justified in trusting her with her own honour?

When we consider the imperfect training of many girls, the low tone of their associates, the powerful nature of their internal emotions, and then the reckless mode in which they are cast loose, with nothing but their own slender discretion to trust to, we can only wonder that infanticide is not more common; and we see no chance of any diminution, until the whole facts of sexuality, as a part of natural science, are known to those who have the care of young women, and until the same amount of precaution is taken as there is against physical pestilence.

Vice is born of inclination and opportunity. Subtract both if you can. If not both, at least the latter. "Clap your padlock on the mind," if you can; but if you cannot, though it is said "love laughs at locksmiths," yet the locksmith is no mean ally to virtue.

THE PLEA OF INSANITY.

Is it possible that a clear line of demarcation can be established between criminal madness and madness the result of crime,—between the condition in which criminal impulses

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voluntarily nursed and cherished, become the irresistible rulers of a man's being and destiny, and the condition in which, without any wilful yielding to the dictates of vicious instincts, a course of crime is the first, and it may be for a time the only symptom of disease? We fear not. We at least know of no rules that can be applied in the diagnosis. In both conditions the individuals are equally of unsound mind, and are equally proper subjects for curative or palliative treatment; the sole difference from a Medical point of view being, that in the one the person has become diseased from causes over which he had no control, in the other that he has of his own accord pursued a course of thought and action which has given rise to a similar pathological state. In the same way certain diseases may arise from hereditary or constitutional causes, or they may be produced by drunkenness and vice. In either instance they are equally morbid states claiming the skill of the Physician. But in the case of insanity, the moment we quit the Medical point of view and regard the conditions we have specified in relation to society at large, their aspect entirely changes. The necessity of exactly estimating the nature of the chain of causes in the case of mental disease becomes forced on us by the question of responsibility. If the condition of drunkenness be no valid excuse for crime committed during intoxication, it cannot be allowed that a condition of insanity, induced by a voluntary course of vice, renders the agent irresponsible. Such at least will be the judgment of practical men who weigh equally the claims of society and the claims of the diseased.

But the etiological is not the only question of difficulty which encumbers the subject of criminal insanity. Leaving it out of consideration, an equally important inquiry is whether, in certain states of insanity, responsibility is lost? Can responsibility attach to an insane person, or, in other words, is any degree of insanity compatible with any degree of responsibility? For the settlement of this question it becomes at once necessary that a clear line of demarcation should be drawn between sanity and madness. If a man feels within him an impulse to commit a crime, knowing at the same time his moral obligation not to commit it, and resists the impulse, who will say that such a man is insane? But should he yield, is the fact of his yielding to be taken as a proof that the impulse was irresistible, and therefore that the man was mad? Such a conclusion could only be justly drawn in the case of a person who had previously displayed unequivocal signs of mental alienation.

There is no doubt that in all cases the previous condition and circumstances of the criminal are the only sure *indicia* for forming a valid opinion. But to draw from these a sound conclusion requires a thorough acquaintance with the causes, pathology, and symptoms of mental disease. To throw the *onus* of a decision on an uneducated, or even on an educated, jury is a wrong to them and a wrong to the criminal. It may be said that in such a case the judge directs the jury. But it is not so. Even were the judge competent to throw scientific light on the question, it is not part of his duty so to do. He usually states what is the law, gives a digest of the evidence, and leaves the matter of responsibility or non-responsibility where he found it—as *the* question to be decided by the jury.

The cases of Charles Fooks and Edwin Alfred Preedy, to which we referred last week, are striking instances of the unfair demands which the law thus makes on men who, however honest their intention, must be unfitted by previous pursuits, education, and habits of mind to act as judges. In both cases the plea of insanity was advanced, and in each it was supported by a certain amount of evidence. In the case of Charles Fooks, the farmer who shot a man named Stone, against whom he was known to have entertained a grudge, strong evidence of unsound mind was advanced by the prisoner's niece, Dr. Tuke, and Dr. Smith, of Weymouth—evidence which, we think, would have entirely justified another verdict. But, on the other hand, it was also proved that the prisoner was capable of managing his ordinary affairs; that during six months' residence in gaol he had exhibited no symptom of insanity, and that at the time of the murder the murderer was cherishing the strongest feelings of hatred against Stone—declaring that "if Stone came on his premises he would shoot him as he would a rook." Since the trial the incumbent of the parish in which Fooks lived has written to the *Times* a letter urging a commutation of the sentence. In this the writer states that—

"Whatever the scientific definition of the mental disability from which he (Fooks) suffers, I can bear my testimony that, after an acquaintance of fifteen years, I have never known a man more insane as a sane man, nor more sane as an insane man than Fooks."

Again, in the case of Edwin Alfred Preedy, a convict, who stabbed his warder at Portland, it was proved by the prisoner's aunt and mother that he had received injuries to his head in his childhood, that he had been eccentric in his behaviour, and that he had been always considered by his relatives not in "his right mind." On the other hand, the Surgeon and attendants in the gaol had never observed any real symptom of madness, and it was perfectly clear that the prisoner not only knew what would be the consequences of the crime to his victim, but also was aware of the punishment which awaited him. Shortly after the act he said "he hoped the man was dead, for he intended to murder him."

Another recent case is that of the man Burton, who was tried on the 13th, at Maidstone, for the murder of a poor little boy on Chatham lines. The prisoner not only confessed his crime, but said he did it in order to be hanged, as he was tired of life. The motive so stated was urged by the defence as a proof of the man's insanity—by the judge as evidence that he was fully aware of the nature of his act and its consequences. We confess that in this case, allowing the man to be insane, we should be inclined to refer his insanity to the sway and mastery which he had voluntarily permitted his lower instincts to acquire. He had been a brutal as well as an eccentric lad, and confessed that previously to his crime he had made up his mind to murder somebody, and that had one of the witnesses been at the time in Chatham he should have murdered him. However, in this case, the judge, Mr. Justice Wightman, cut the Gordian knot by virtually ignoring the existence of moral insanity except where the intellect is also diseased. In so doing it is needless to say that he placed himself in opposition to every competent authority on Medical psychology.

But in none of these cases is it our main intention to criticise the verdicts of the juries. We have already said that in the instance of Fooks we think that the evidence would have warranted a different decision. But we feel bound to assert that the machinery employed for arriving at a true settlement of such questions is not adequate. In these cases we hold it absolutely necessary that both judge and jury should have the benefit of the highest Medical opinion,—not proffered as evidence by prisoner or prosecution, but supplied by the Government for their assistance and guidance. The questions which surround moral insanity are the most difficult in the whole round of forensic practice, whilst on them depend the most momentous issues. Is it fair to themselves, to the public, or to the prisoner, that a jury of twelve ordinary men should have the whole responsibility of deciding—unassisted by competent and, at the same time unbiassed, scientific opinion?

THE WEEK.

THE WATER OF THE THAMES.

We fear it is too late to urge further the suicidal nature of the policy pursued in the main drainage scheme. That it will prove a gigantic failure is a conclusion which has already

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forced itself upon most unprejudiced persons. If the main end to be secured be the purification of the Thames, the means adopted will assuredly have the exactly opposite effect. The following report by Dr. Letheby on the water of the Thames during 1861 and 1862 re-asserts what has been stated over and over again, that the river during the summer and autumn will be polluted to such an extent as to be unbearable. Dr. Letheby proposes, as the only remedy, that the sewers be defæcated. How is a scheme to be characterised which necessitates a considerable annual expenditure in order that incalculable wealth may be throw away with safety?

"First,—The water in the middle of the river is invariably charged with a larger proportion of dissolved matter than that near to the shore, but the quantity of suspended matter is greatest in the shore water.

"Secondly,—That the proportion of saline matter in the water is greatly influenced by the rainfall and by the temperature of the river; for when the former is less than two inches in the month, and the latter is over 60° of Fahrenheit, the quantity of saline matter quickly rises from the normal proportion of about 32 grains in the gallon to upwards of 100 grains.

"Thirdly,—That when from evaporation and a diminished rainfall the supply of water to the river is from the ocean, instead of from the land, the mixture of the sea water with the sewage causes an offensive decomposition, which gives an unpleasant odour to the river.

"Fourthly,—That during strong winds, and at the time of the equinoxes, the quantity of suspended matter in the water is greatly increased.

"Lastly, it may be said that the normal composition of the river water is indicated by the proportions of the several constituents of the water during the first six months of the year—namely, from January to June. At that time the amount of saline matter ranges from 22 grains to 34 grains in the gallon, and of this quantity about 3·5 grains are organic. In the summer and autumn months, when evaporation from the river is considerable, the quantity of dissolved saline matter in the water sometimes exceeds 150 grains in the gallon. This shows that at those times of the year there is a strong upward current from the ocean, and it indicates the necessity at those periods for a very perfect defæcation of the sewage of the metropolis which is to be discharged into the river at Barking Creek. If this circumstance is disregarded, the condition of the river in after time, when the main drainage scheme is completed, will be unbearable and absolutely dangerous to health.

"Finally, I may say that the result of the constant examinations of the river water during the last five years shows that the quality of the water has been gradually improving, and that the special manufacturing impurities which were once so constantly present in the water are now no longer there. I attribute this to the careful supervision which is exercised by the officers of the Conservancy in preventing the discharge of such matter into the stream.

"Henry Letheby, M.B., M.A."

EXCISION OF THE ANKLE-JOINT, AND SYME'S AND PIROGOFF'S AMPUTATION OF THE FOOT—DISCUSSION AT THE PATHOLOGICAL SOCIETY.

At the last meeting of the Pathological Society there was a discussion as to the relative merits of excision of the ankle-joint and amputation of the foot. Excision of the ankle-joint has been performed several times lately by Mr. Paget and Mr. Hancock, and last night Mr. Canton exhibited parts removed in a recent operation. Mr. Holmes raised the question as to whether excision of the ankle was preferable to amputation, and asked especially for information as to how long it was before the patient could use his foot, and, if after recovery, the limb was really more useful than after amputation by Syme's or Pirogoff's method. The discussion, in which Mr. Partridge, Mr. Canton, Mr. Prescott Hewett, Mr. Henry Thompson, and Mr. Holmes took part, then diverged to the consideration of the relative merits of Syme's and Pirogoff's operation. Considerable interest seemed to be excited, and it was resolved that the matter should be practically investigated. Members are therefore requested to bring before the Society, at the meeting to be held on April 21, patients who have recovered from these operations (Syme's, Pirogoff's, and excision of the ankle), in order that the Society may judge as to the comparative usefulness of the limb after each.

DR. BROWN-SÉQUARD'S LECTURES.—LECTURE V.

Dr. Brown-Séquard's fifth lecture, delivered on the 5th inst., commenced by resuming the subject with which he closed his previous lecture, namely, Infantile Paralysis. According to the lecturer, this affection is not generally, as is usually supposed, of the "essential" kind—the word "essential," as now used, being understood to denote a form of paralysis unaccompanied with structural lesion. In the beginning of his practice, he shared the general opinion of the Profession concerning the pathology of this disease, and looked carefully for cases illustrative of it; but an extensive experience has now convinced him that the alleged essential paralysis of children is, at all events, exceedingly rare, and that a great majority of the so-called cases are really instances of paralysis having lesions of some part or parts of the cerebro-spinal axis as its cause. This malady is generally accompanied by some symptoms of structural change: squinting; a difference in the size of the two pupils; different degrees of sensibility; screaming, indicative of acute headache; pain in the calves of the legs; spasms; twitchings; jerking of the limbs; and muscular atrophy, not the simple effect of rest, are indications of organic disease, one or more of which may usually be noted by an observant Physician in cases of the kind in question. The reason why this disease, when it appears in children, is regarded as essential or reflex, and not organic, is, that in them inflammation or congestion of the brain or spinal cord quickly passes away, although it leaves its results, viz., partial or complete hemiplegia or paraplegia. Post-mortem examinations of children who have suffered from this malady, but who have died from some other cause, have frequently afforded evidence of effusions of serum within the dura mater and ventricles of the brain, and, though more rarely, of inflammation of the substance either of the brain or cord. The difficulty of diagnosis of diseases of the nervous system affecting children is of course greatly increased by their incapacity to explain their symptoms; otherwise there is no doubt it would be possible to discover all the phenomena, including the various degrees of anæsthesia and hyperæsthesia demonstrated by the compasses, which adults suffering from like diseases exhibit. The lecturer showed a patient who was affected with paralysis when three years old; she is now probably twelve or fourteen, and is subject to a peculiar spasmodic movement of the arm and hand. She has been treated with iodide of potassium, and a blister has been applied round the arm, with the view of inducing a modification of nutrition in those parts of the brain related to the limb. The result has been great and rapid improvement. The next case shown was illustrative of the extreme violet hue caused by the use of nitrate of silver, and was the more interesting (though not in a medical point of view) because the subject of it, a Mons. Racine, is a descendant of the poet. The lecturer next adverted to a case of facial paralysis, showing the extensive reflex effects of cold water. The patient, 44 years old, was out in the rain, and got very wet in October, 1862. The following night he was affected with facial paralysis. He was unable to shut the right eye; and, the tongue and lips being affected, he could not pronounce certain letters; for the same reason drinking was difficult; there was slight motor paralysis of the right side of the tongue; the sense of taste on the same side was lost; the eye, was very sensitive to light; the sense of hearing on the right side was lessened; there was hyperæsthesia on both sides of the face; but the sense of feeling in the tongue was normal; and there was no tinnitus aurium and no headache. The power of the

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nerves on the left side, corresponding to those affected on the right, was also slightly impaired. As will be seen from these symptoms, this case is not one of simple paralysis of the portio dura; the patient frowns on the left but not on the right side, and, as already stated, the right eye remains open; but in addition to these evidences that the facial nerve is involved, the slight loss of motor power in the tongue, the loss of taste, and the diminution in the sense of hearing, show that three other nerves are affected, and yet it is clear that the affection is not centric but entirely peripheral; if any central cause existed, the sense of feeling in the tongue would be lessened; and if the portio dura were affected within the cranium, the function of the auditory nerve would be intensified. There is a further reason for concluding that the brain is in no degree affected; there is no loss of power of, and there are no abnormal sensations in, any of the limbs. It is undoubtedly an instance, though a rare one, of purely peripheral paralysis caused by cold. The next case referred to by the lecturer was one of a man who had hæmorrhage of the brain five years ago, and who, a year and a half ago, became affected with apoplexy of the retina, which was observed by Dr. Jackson, Assistant-Physician to the Hospital. This patient is now suffering from albuminuria, but was not so when first attacked with cerebral apoplexy. This case serves as a good illustration, that when the arteries have given way in one part, the degeneration affecting them will be found to be general, and will sooner or later show itself by serious lesions elsewhere. The remainder of the lecture was occupied in treating of syphilitic diseases of the nervous system. One great feature of these diseases is, that the syphilitic matter, which may easily be detected by the microscope, has a tendency to become deposited in many parts of the cerebro-spinal axis and nerves at the same time; the levatores palpebrarum are peculiarly liable to attack—ptosis of course ensuing; the branch of the third nerve distributed to the iris is also often affected, thus causing constriction of the pupil; frequently deposits in the dura mater, shown by rapid jerks of one side, often the same side as that of the deposit, occur, and are followed by epilepsy. Indeed, any nerve of the body may be affected, of course causing paralysis of the muscles or anæsthesia of that part of the skin to which it may happen to be distributed. Squinting is a frequent result of these deposits. If the patient has had primary syphilis, there is no need to assure ourselves that he has had secondary symptoms before becoming convinced that this poison is the cause of the nervous disease in question, if we find that the nervous system is affected in several distinct parts at the same time. Virchow has satisfied himself by his investigations, that a man who has had a primary sore thirty years before, and no secondary symptoms, may yet have syphilitic deposits in the nervous system, which themselves may be regarded in his case as the secondary symptoms of the disease. If ten, fifteen, or twenty grains of iodide of potassium, and a small addition of the bichloride or proto-iodide of mercury (half a grain of the latter) be given, the effects of the medicine will soon prove the nature of the case. A remarkable instance of syphilitic disease of the nervous system was shown: the man thirteen years ago had a primary sore, two years ago he had itching of the limbs, followed by a node on one hip-bone, and afterwards by a slight eruption of the skin. The swelling of the cervical glands, which Ricord alleges to be characteristic in these cases, but which Dr. Brown-Séquard says he has rarely observed, did not occur in this instance. Succeeding the eruption of the skin the patient experienced dimness of sight in the right eye; both pupils are small, but especially the left one, thus proving an irritation of the branch of the third nerve to the iris. It is clear that this constriction is not due to paralysis of the dilator branch of the sympathetic nerve, for the constriction in such cases is never so great as in the one in question. The sixth nerve on the right side is also paralysed, causing the patient, of course, to see double. Eight or nine months ago he began to have pains in the head and legs, especially at night; he has great weakness of the right side, less on the left; he has also considerable difficulty in directing his movements (locomotive ataxy), tingling of the limbs, and marked anæsthesia of both legs, pointing to an affection of the roots of the spinal nerves; the sense of hearing and that of taste are both lessened; and there is great difficulty of swallowing, which implies some lesion of the pons Varolii or of the pneumogastric nerve. The protean form of this disease is especially characterised by its tendency to affect particular branches of one nerve: some of the nerves distributed to the eye are almost invariably affected. This patient is much wasted and generally cachectic. The treatment consists in giving large doses of iodide of potassium. Fifteen or twenty grains three times a-day is an amount commonly given by French and German Physicians, and in such large doses there is little fear of injurious consequences. If given with neutral or alkaline salts when the stomach is empty—*i.e.*, there being no acid in it—it is then rapidly absorbed instead of being decomposed. It is best to accompany it with some bitter tonic. But if it should do harm, iodide of ammonium in doses double those of the iodide of potassium, and united with sesquicarbonate of ammonia, may be used instead with success. The secretion from the nose caused by taking iodide of potassium, may be checked by the use of finely powdered sugar taken as snuff. When syphilitic patients, having their minds impaired, are unwilling to take iodide of potassium, it may nevertheless be given to them mixed with fresh butter instead of the usual salt, or it may be employed as an ointment.

PARLIAMENTARY.

There appears to be a remote possibility that the condition of suspense and discontent in which the Medical Departments of the Royal and Indian Armies have so long found themselves will at some future time be terminated. On Thursday, the 12th, Mr. R. Mills asked the Secretary for India when the details for the Amalgamation of the Medical Service of the late East India Company with that of the Royal Army were likely to be promulgated. Sir Charles Wood's answer was in the true official tone, "that the amalgamation in question was a very complicated and difficult matter, and must be attended with considerable expense." He went on to say, "that a plan had been sent out to India some time ago, but a totally different one was suggested by the Indian government in return. The latter plan had been submitted to the judgment of military and Medical men connected with India, who happened to be in this country, and upon the whole they approved it. It had been since sent to the highest military authorities here, and was now under consideration, but he was not in a position to say when the details would be promulgated. He hoped they would be soon."

We are glad to see that General Peel, one of the framers of the original warrant for the Medical Department of the Royal Army, came forward as its champion on Monday, the 16th, on the occasion of the vote of 255,993*l.* for Medical establishments, services, and supplies.

"General Peel expressed regret at the diminution of the staff. The warrant founded on the report of the Sanitary Commission of 1858, was calculated greatly to improve the Medical establishment, by inducing talented men to join. Its provisions had not, however, been carried out, and he thought the Medical officers had just ground for complaint. The result was that the number of candidates was falling off, so that on a recent occasion when there were forty-five vacancies, only fifteen candidates appeared, and some of these broke down under the qualifying examination.

"Sir G. C. Lewis said there had been some difficulty in the navy in regard to the warrant. Negotiations had been opened with the admiralty, and he hoped that before long the

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warrant would be issued in a form likely to be satisfactory to al the Medical officers. (Hear, hear.) The numbers of the staff Medical officers were given in accordance with the return of the Medical Director-General. The reductions had been chiefly effected in foreign stations."

We cannot at all admit the validity of Sir G. C. Lewis's explanation. The Army warrant was promulgated long before that of the Navy, and was completely independent of it. However, the facts stated by General Peel, as to the number and quality of the candidates presenting themselves for commissions, will not be lost on Parliament. The Medical students of the United Kingdom are masters of the position, and, if they be true to their Profession and to themselves, they will compel the Government to redeem the promises they have given.

On Wednesday, Mr. Brady moved the second reading of his Bill for the prevention of the spread of disease, by the conveyance of patients suffering from infectious and contagious disease in cabs. The provisions of the Bill were few and simple. The principal clauses enacted:—1. That suitable carriages for conveying infected persons should be provided by every local authority executing the Diseases Prevention Act within the City of London, or the Metropolitan Police district. 2. That the rate of charge for such carriages should not exceed ordinary cab-hire. 3. That persons conveying patients whom they believed to be suffering from contagious or infectious disease in ordinary hackney carriages should be subject to a fine, not exceeding ten pounds. 4. That it should not be necessary that the nature of the disease be proved; it would be sufficient if the disease were believed to be infectious. Lastly, that for the purposes of the Act the word "infectious" should include "contagious," and every contagious disease should be deemed infectious.

"Mr. Brady hoped the Government would see the necessity of passing the measure, because the public mind was greatly alarmed on the subject. The report of the Fever Hospital abundantly demonstrated the necessity of some such measure as the present. There were in one year 663 patients taken to the Fever Hospital, and out of that number 110 died, showing that the diseases under which they laboured were most serious; and it was evident that patients of that class labouring under typhus or typhoid fever must necessarily infect any public conveyance, and lead to the spread of disease. In families where servants were taken ill, the first thing that was done was to have the person removed either to a public institution or sent home, not through unkindness, but for the sake of protection of the family; and such persons were invariably conveyed in public conveyances. In the case of scarlet fever, there was no knowing how long the contagion lurked in clothes or in drawers; and there could be no doubt that any person sent home or to the Hospital with scarlet fever would infect the public conveyance in which they were carried. Out of the large number of cases he had alluded to, it was a remarkable fact that 530 were sent to the Hospital by the parish authorities. That satisfied him that the parish authorities, being the natural guardians of the poor and the representatives of the ratepayers, were the proper persons to carry into operation the provisions of the bill he now moved. There were undoubtedly cases in which ladies and others had taken fevers in consequence of travelling in cabs which had previously been employed in conveying patients to the Fever Hospital. If his bill were not perfect, it might be amended in the committee, but there could be no doubt that some measure of the kind was absolutely necessary.

"Mr. Ayrton opposed the bill, as an example of minute and trifling legislation, which would do more harm than good. Cabmen might refuse to take any one, under the plea of suspecting the person hiring the cab of being infected with a contagious disease, and thus open the door to the extortion of cabmen. What real evidence was there that disease had been extensively propagated in public vehicles? In his opinion the bill itself was not equal to carrying out what it professed to accomplish.

"Mr. D. Griffiths was of opinion that the hon. gentleman who introduced this measure deserved the thanks of the community at large. He mentioned a case within his own knowledge, in which a servant with the small-pox had been sent to the Hospital in a public cab, to the great danger of the public. It was plain that that cab might be, and probably was, engaged within five minutes after the departure from the Hospital, and it would be a most extraordinary thing if some measure could not be passed to mitigate the evil. He should be sorry to believe that this matter was beyond the power of legislation.

"Mr. Henley regretted that there was no Minister whose special duty it was to be informed upon all matters relating to the conservation of the public health. The House was quite in the dark with reference to the working of the Act passed two years ago, or whether it had been evaded, and by whom. With reference to the more difficult part of the Bill, the enacting parts, and the penalties attached, it was impossible to see how it should be carried out. There ought to be an interpretation clause at the beginning. The Bill said that every infectious disease was to be considered contagious, and every contagious disease infectious, but that did not inform them what diseases were contagious or infectious. They all knew that the itch was considered somewhat catching, and there were other diseases in reference to which it was hard to say whether they were infectious or not; people therefore ought to be made aware, when a £10 penalty was to be imposed, in what cases they would be subject to the penalty. If the Secretary of State for the Home Department could see that a Bill of this nature could be put into a proper form, and be supported by the Government, he would support it; but if the Government did not see their way to make it a useful measure, he should not support it.

"Sir G. Grey referred to the withdrawal of the clause affecting this question in the Diseases Prevention Act, and observed that although he quite admitted the importance of the subject, yet he did not think that the present measure could be altered in committee so as to make it an effective measure. The hon. gentleman wished to make the permissive clause in the bill of 1860 compulsory, but there was no machinery whatever in the bill to accomplish the object sought, nor could it be amended in committee in his opinion. The subject was fraught with difficulty, and the real effect might be, that it would deter people from using public conveyances at all. Besides this, there really ought to be some evidence as to the necessity of the proposed special conveyances, and he could vouch for the fact that in one extensive district in which such a conveyance had been provided, there had not been one application for it. If the object was to be accomplished at all, it could only be accomplished by means which the honourable gentleman objected to, namely, by the police, who had conveyances and stretchers; and he thought that stretchers in particular might be very usefully employed, while it was evident that it would be far easier to apply to the nearest policeman, who would get a stretcher in a few minutes and remove the diseased person. He suggested that the motion should be withdrawn until further inquiries into the subject were made.

"Mr. Brady consented to that course, and the motion for the second reading was postponed until May 27.

"The House then adjourned at twenty minutes past one o'clock."

We are sorry that the bill which, whatever its deficiencies in detail, was excellent in principle, was thus withdrawn, and we hope that Mr. Brady will not hesitate to take the earliest opportunity of again bringing the subject into notice. Sir George Grey's instance of disuse of the carriage provided by the district authorities, merely shows how necessary it is to make the employment of such a carriage compulsory. The proposal to take patients suffering from typhus, small-pox, and scarlatina through the open streets on stretchers, is worthy of the genius which presided at the Home Office on March 7 and 10, 1863.

MEDICAL PROFESSION IN VIENNA.—According to the most recent statements, there are at present in Vienna 560 physicians, 179 surgeons, and 912 midwives. Of this number 93 physicians, 13 surgeons, and 9 midwives are paid from government funds; 92 physicians, 32 surgeons, and 14 midwives are employed in institutions; and 375 physicians, 134 surgeons, and 890 midwives are engaged in private practice. There is 1 physician to 947 inhabitants, 1 surgeon to 2,961 inhabitants, and 1 midwife to 291 women.

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REVIEWS.

The Tropical World; a Popular Scientific Account of the Natural History of the Animal and Vegetable Kingdoms in the Equatorial Regions. By Dr. G. Hartwig, Author of the "Sea and its Living Wonders." With eight Chromoxylographic Plates and numerous Woodcuts. London: Longmans. 1863. 8vo, pp. 566.

The Weather Book: a Manual of Practical Meteorology. By Rear-Admiral Fitzroy. London: Longmans. 1863. 8vo, pp. 464.

The Earth and its Mechanism; being an Account of the Various Proofs of the Rotation of the Earth, with a description of the Instruments used in Experimental Demonstrations, to which is added the Theory of Foucault's Pendulum and Gyroscope. By Henry Worms, F.R.A.S., etc. With numerous Woodcuts and Diagrams. London: Longmans. 1862. 8vo, pp. 296.

We include these books under one notice, because they form parts of the extensive series of works on Physical Geography which are published by the Messrs. Longman, and because we are thus able to give, with more economy of our limited space, an account of the characters of each.

Dr. Hartwig's "Tropical World" is, as its title-page declares, a "popular" book. If we may be pardoned the play on the word, it well deserves popularity, and is just the book to interest young persons who have the sense to perceive that the truths of nature are not only stranger, but far more profitable than some fictions. All that intelligent women and children desire to know about the tropics will be found here;—the aspects of nature, the rivers and coasts, the great sandy deserts, the gigantic vegetation, and the animal denizens from insects to apes; but excluding the tropical varieties of man. Livingstone, Emerson Tennant, and other great travellers, are resorted to for the facts which Dr. Hartwig has woven into the handsome and instructive book before us.

Rear-Admiral Fitzroy's "Weather Book" is not intended solely for scientific persons, nor yet for sailors, but for all persons of education who may wish to understand the phenomena of the weather, and to make practical use of the various instruments which are commonly employed to test and indicate its varying conditions. The writer begins with a familiar account of the atmospheric ocean with which our terraqueous globe is environed; and of the great influence—heat—by which its equilibrium is disturbed. He then describes the properties, construction, uses, and cost of the various instruments used in meteorological research, with a notice of various popular and unscientific marks from which the weatherwise peasantry are in the habit of gathering indications. Then he speaks of the registration and comparison of observations, and of the history of their appreciation and use. On this last head he shows how great an interest the public at large have in the matter, because a knowledge of wind and weather tends greatly to shorten sea voyages; and considering that the expenses, the wear, and tear, and wages of a large ship vary from £50 to £200 *per diem*, the price of freight and passage, and the cost of all commodities brought from distant countries is lowered in proportion as voyages are shortened. Then we have a practical account of climates all over the world; an account of the system of simultaneous meteorological observation and telegraphy carried on at the Board of Trade, and the principles on which weather may be *forecast*. An abundance of tables and diagrams conclude the book, with an appendix, in which we notice a great variety of interesting matters:—Amongst them, an account of that "Weather Glass"—a closed tube, containing camphor and sal ammoniac, which is seen at most philosophical instrument makers, and which is a puzzle to most people.

Mr. Worms's book on the "Mechanism of the Earth and its Rotation," although the introductory chapters are written in a popular style, is a work of more exclusively scientific character than those which precede it in our list, and is, in its greater part, intended for the mathematician exclusively. It contains accounts of the application of Wheatstone's revolving mirror to the determination of the velocity of electricity and light; of experiments with falling bodies, made by Professor Reich in the mines at Freiburg; and of the experiments of Foucault with the pendulum and the gyroscope. Our readers will recollect the pendulum experiments made four or five years ago at King's College and the College of Surgeons; they are described in Mr. Worms's book.

A Manual of Elementary Chemistry, Theoretical and Practical. By George Fownes, F.R.S., late Professor of Practical Chemistry in University College, London. Ninth Edition, Revised and Corrected. London: Churchill and Sons, 1863. 12mo, pp. 520.

This work has attained so large a popularity at all Medical schools, and other institutions in which chemistry forms a part of the curriculum, that it is unnecessary for us to do more than briefly announce this, the ninth edition. Its main characteristics are brevity, yet fulness and clearness. It begins with an account, in rather more than 100 pages, of such portions of physics as the Medical student is generally expected to be master of; including specific gravity, the constitution of gases, heat, light, electricity, and magnetism. In this part is introduced a very clear and good account of the principles of spectrum analysis and of photography. In 300 pages it then treats of inorganic chemistry. And under the head of hydrogen compounds gives the details of Mr. Graham's process for separating *colloid* from crystallisable substances by *dialysis*. In 400 pages more it recounts the principles of organic chemistry, and throughout is illustrated by woodcuts, not enough to make it a "picture-book," nor yet, with some exceptions, to exhibit common apparatus, but to explain special devices, such as Graham's Dialyser. About forty pages are devoted to an exposition of Gerhardt's system of notation, which we gave an account of in the *Medical Times and Gazette* for Sept. 27, 1862. Although the editors conceive that it would be inexpedient to adopt this system in the body of the work, they yet judge, quite rightly, that some knowledge of it is essential to the student. When we add that this ninth edition has been revised by Dr. Hofmann and Dr. Bence Jones, we need not say that it will commend itself to the notice of the student of chemistry pure and simple, as well as to him who desires to study chemistry because of its relation to Physiology and Medicine.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

Paris, March 3.

Periodical literature has had a striking influence upon the progress of Medical science in France. It is carried on with unceasing energy, and employs the time and powers of some of the most intellectual men in Europe. No less than forty journals appear at stated intervals; there are some that are published as often as three times in each week, and they are all fully supported by the reading Medical world. "The appetite seems to increase by what it feeds upon." Scarcely is there a person interested in the cultivation of the healing art that does not see at least two periodicals weekly. They are found equally necessary for the student and for the experienced Practitioner; and no one can feel that he keeps pace with the march of science if he does not know what is contained in their prolific pages. The journals in Paris are, for the most part, either three times a week or weekly; and whilst some of them have their *spécialité*, and are devoted to a single branch of the Profession, others embrace all its parts, give outlines of lectures, hospital cases, clinical observations, transactions of the Medical societies, and reviews of the works that are likely to excite much interest.

La Gazette des Hôpitaux makes its appearance three times in each week, under the careful superintendence of Doctor Brochen; it is deservedly a favourite with the Medical world, and furnishes a faithful picture of all that is passing. *L'Union Médicale* likewise gives three times in each week a mass of scientific and practical observations; its chief editor, M. Amadée Latour, pupils his task with great care and zeal.

The *Gazette Médicale* is superintended by Dr. Jules Guerin, who offers the result of his experience and his acquaintance with the different branches of knowledge. This is brought out only once a week, as well as the *Gazette Hebdomadaire*, which is much esteemed, and its editor, Dr. Dechambre, is considered as admirably adapted for the task he has under-

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taken. Dr. Brown-Séquard superintends the *Journal de Physiologie*, which appears twice in each month. The *Journal des Connaissances Médicales* is circulated every ten days.

Each branch has its journal. Psychology and mental alienation have their exponents; Dr. Baillarger and Dr. Delasseauve superintend their respective periodicals. Dental Surgery, Ophthalmology, and even Homœopathy find the means of giving publicity, either weekly or monthly, to the subjects to which they are devoted.

The Medical Societies are occupied in debating upon a question rather relating to the moral duties of the Physician than to science. It has undergone not only warm discussion within the walls of the Schools, but is filling long columns in the journals. This question is,—Ought a Physician to disclose to any individual the malady which calls for his attendance upon a patient. The law in France, as laid down in the *Code Napoleon*, formally forbids a Medical man to communicate to any one the professional secrets confided to him. But, may not there be sufficient reason for him, according to his judgment, to commit a breach of this law? A case has been put which has brought into the field some warm advocates for a frank disclosure under certain circumstances on the part of the Physician.

A young gentleman had paid his addresses to a lady of delicate health, and had been accepted by the family; it, however, came to the ears of the young lady's father that her betrothed had been for some time under the care of a Practitioner of considerable eminence, and he had heard such hints thrown out that he judged it proper to call upon the Physician with the hope of learning from him whether his intended son-in-law had any complaint that might prove injurious to his daughter, who was herself somewhat of an invalid. He was courteously received by the Doctor, who, however, positively refused to give the slightest information as to the state of the youth, his patient. He declared that it would be a breach of confidence which no circumstance could warrant. The father dwelt upon the necessity of arriving at truth, and stated that the approaching marriage of his daughter filled him with anxiety from what he had accidentally heard. He pleaded in vain; not a syllable was to be obtained from which he could glean any shadow of information. The marriage took place, and fearful were the results. The young wife was affected with secondary syphilitic symptoms, which, from her ignorance and her delicacy, assumed a most formidable character, she not disclosing her state to anybody. An infected infant is brought into the world; the mother, always delicate, dies, and a tragedy of a most afflicting character supervened, in consequence, as it has been alleged, of the improper silence of the Medical man. Arguments on both sides have been heard. At two of the Medical societies, the opinion has been given by large majorities that one of the first duties imposed upon the Doctor is silence. The oath of Hippocrates to that effect is quoted, and there seems to be a disposition generally to consider that the Physician is never warranted to give information as to the state of those consigned to his care. The words of the law which appear in the penal code are,—"Physicians and other persons who by profession are depositories of secrets confided to them, and who, unless called on by law, shall reveal such secrets shall be punished by imprisonment from one to six months, and by fine from 100 to 500 francs."

Dr. Civiale has delivered his annual retrospect of his practice in calculous disease within the last year. He has had 69 cases of stone in the bladder for treatment,—66 men, 2 women, and 1 child; 45 of these were private patients, 24 were at the Hospital; 61 had stone for the first time, 8 had already been subject to the disease; 58 of these cases were operated upon, 45 by lithotrity; 1 fatal occurred only. There were 8 cases relieved only, 10 were submitted to the ordinary operation, of which 3 were cured, 2 relieved, and 5 died; 3 have been operated on by joining together the two methods of lithotrity and cutting; of these 2 were cured, the third has irritable bladder; 11 did not undergo any operation. An analysis of this *compte rendu* would occupy more space in the *Medical Times and Gazette* than could be given to it, but it would prove highly interesting; it is to be found in the *Gazette des Hôpitaux*, in the number published 27th of the last month.

Syphilographie has had an addition in a memoir by Docteur Amedée, Paris, in which he points out the advantage of filiform setons in suppurating buboes.

SCOTLAND.

March, 1863.

As your faithful correspondent, I sit down to write my usual letter.

Mr. Syme has had another important aneurism case in the Royal Infirmary. The tumour situated in the left groin above and below Poupart's ligament. The operator laid the sac open, and applied ligatures to the external iliac and superficial femoral arteries. Professor Lister came from Glasgow to compress the aorta, and all seemed to go on well; but unfortunately the patient died. No doubt a full report of this case will be published. Mr. Lister's abdominal tourniquet, described in "Holmes' System of Surgery," seems to the bystanders here very efficient. I have heard, however, that it has elsewhere induced faintness and vomiting. When M. Nélaton, some years ago, injected gluteal aneurisms with perchloride of iron, he had the abdominal aorta compressed by the hand of an assistant.

The President and Council of the Royal Society gave a *conversazione* the other evening. Professors Bennett and Balfour exhibited a large number of microscopic preparations. The Astronomer Royal for Scotland had a huge magic lantern, and exhibited views illustrative of his ascent of Teneriffe. A photograph of the moon was also shown on a large scale, which, from its weather-beaten and decayed appearance, seemed, as the Yankee said of the Coliseum, to be "a fine thing in its way, but requiring a deal of repair."

A gentleman, whose name I forget, showed an ingenious electric lamp for mines. The light is contained in a gas-tight, glass-sided box, set on wheels. As it would not do to completely exhaust the box and expose it to a dangerous degree of atmospheric pressure, there is an elastic bag suspended underneath, which receives the surplus air after the glass sides of the box have cooled, and *vice versâ*. The electricity is generated by a steam-engine, which does the other work of the mine.

Messrs. T. and H. Smith, the well-known chemists, exhibited pharmaceutical preparations, among others, a vase of "Muriate of Thebais," the beauty of which was a general theme. To produce this Circean goblet required the manipulation of "five tons of opium, costing about £11,000, and requiring for their production about 1100 acres of poppies."

The College of Surgeons held a somewhat similar meeting lately. Dr. Newbigging (the President) had about 300 guests, including many from Glasgow. Professor Syme narrated a case of removal of the scapula, and one in which he excised the head of the humerus for a tumour. The latter case had been in a neighbouring metropolis, and temporising was recommended. Our Clinical Professor thinking, with Lady Macbeth,—"If 'tis to be done, 'twere better 'twere done quickly," operated at once and successfully. The scapula case was then shown, and the singular fact demonstrated, that one with a hand and arm can move the same, nay, swing about a chair, in spite of being minus a shoulder-blade, the bone generally used in these movements. He could also tuck his elbow under his chin; and in short, so far as his right upper extremity goes, deserves admission to "the Society of India-rubber Brothers."

Mr. Turner then gave a lecture on "Cellular Pathology," characterised by clearness, condensation, and facility of demonstration. Dr. Wilson, his colleague in the dissecting-rooms, had furnished him with many diagrams which admirably illustrated the lecture, while they did great credit to the clever artist and accomplished anatomist who could tear himself from the charms of a putrid dog-fish to draw them for his friend.

Virchow's theories seem to be in favour here; many of our most active students and young Practitioners have been his pupils, and industriously propagate his doctrines in opposition to those of Professor Bennett. The most practical remark in Dr. Turner's paper was that cancer cells may be found in the muscular fibres near a malignant tumour, but sufficiently far off to escape the knife. I believe Professor Bennett made this fact public some years ago, but I fear Surgeons would scarcely wait while their microscopic brethren adjusted their slides and lenses. It is one thing having to examine a piece of morbid tissue on your study table, and another having to cut it from the quivering flesh of an enfeebled patient.

After Mr. Turner's lecture, Dr. Craigie, President of

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College of Physicians, thanked both gentlemen in the name of the audience, especially congratulating Professor Syme on having so successfully followed out a practice (removal of the scapula) suggested many years ago by Mr. Liston, and subsequently accomplished successfully by several Surgeons in London and elsewhere. Dr. Craigie did not mention the name of Mr. Jones, of Jersey—no doubt an unintentional omission.

At the Medico-Chirurgical Society, Mr. Spence read a paper on Amputation. He gave a sketch of the various methods,—how Messrs. Syme and Liston advocated flaps, how the former had subsequently modified his views, and now performs a mixture of the flap and circular. The author prefers a long anterior flap, the skin being first dissected up, then the muscles divided, and the flap doubled over the end of the bone,—apparently Teale's operation, but with little or no posterior flap.

From the subsequent discussion it would seem that we have no means of ascertaining accurately what is the average mortality after amputations performed in this Infirmary. Mr. Spence had a table of his own experiences there, but had not drawn any important results from it. When we consider the number of amputations performed here we cannot but regret, not only that the poor patients are not eructaceau, but that the results of operations are not made public in a tabular form.

Dr. Handyside made some allusions to scupressure, which is now frequently used here. Many cases were cited, but it still possesses what Balzac called "l'amertume de la nouveauté," and is therefore not to the taste of the Infirmary Doctors.

Professor Lister, in his article already referred to, says clipping off one end of the ligature is not worth the *time* or *trouble*. Mr. Spence alluded to cases where eighteen or even twenty-four vessels have been tied on the same stump. Now, if even the smaller of these had been compressed between the wire and needle they could have been removed in a few hours, and surely would have been well away.

Mr. Annandale read an interesting paper "On Grangrene, following Obstruction of the Femoral Artery."

Among the other demonstrations on the 10th there was to have been a procession by torch-light of nearly a thousand students. They were to march through the town and up the zig-zag paths of the Princes-street-gardens. No doubt this would have added greatly to the picturesque. The worthy authorities did not exactly stop the procession, but excluded it from the main streets and the gardens. Now, as walking about carrying a torch, with nowhere to go to, and nobody to look at you, is not an exhilarating way of spending a winter night, the students preferred studying human nature without the adventitious aid of oakum.

The Edinburgh College Hall Company (Limited) seems likely to obtain a complete and rapid success. There are at present in Edinburgh 1050 students who have come here, and chiefly lead a solitary life in lodgings. The site proposed for the building is somewhere near the schools, and the accommodation contemplated in the first instance comprises a dining-hall for students generally, bedrooms for fifty residents, reading-rooms common to several residents, and separate parlours for those who may require them. The charges are estimated at £48 on an average for the winter session of six months, and £24 for the summer session of three months, leaving a return of 5 per cent. yearly to the shareholders for their advances. The cost of building and furnishing a suitable hall for fifty students is estimated at £15,000.

Every one who knows the natural history of students will see at once how desirable it is that such a building should exist. Its success cannot in any way affect the interests of private families taking in boarders, or of the regular lodging-house keepers. The only appreciable effect it can have on the latter will be to create a healthy opposition. Indeed, I do not despair of seeing the windows of lodging-house parlours occasionally open (I allude to the old town); to see bed-closets put to their original purpose of coal depôts; nay, when maids-of-all-work will be no longer afraid of spoiling their complexions by soap-and-water, and a weary student may regale on well-cooked chops and steaks. The new College Hall is much wanted, and I have no doubt will do a great deal for the moral and physical benefit of the students, and, through them, advance the reputation of our already-celebrated University.

GENERAL CORRESPONDENCE.

RUSSELL v. ADAMS.

LETTER FROM MR. ADAMS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg to forward to you a letter from Mr. Maitland, the secretary of "the Royal Benevolent Society," which you may perhaps deem of sufficient importance to publish in the *Medical Times and Gazette*, since from an official source it exposes the system of trading upon one of the charitable institutions of London—and others have equally suffered by a similar practice—adopted by a Mrs. and Miss Russell, who have also for many years systematically traded upon the benevolence of members of the different professions, more especially the clergy and Medical men.

As one of their last victims, I have lately been dragged before the public, in the Court of Exchequer, as the defendant in the most absurdly ridiculous action for breach of promise of marriage which ever disgraced an English court of justice.

I am, &c.,

WM. ADAMS.

5, Henrietta-street, Cavendish-square, March 18.

"Royal Benevolent Society, Sussex Chambers, S.W.
"10, Duke-street, St. James's-square,
"March 12, 1863.

"*Re Russell.*

"MY DEAR SIR,—In reply to your letter of yesterday's date, I beg to subjoin an account of the above case:—Mrs. Russell was first referred to the Society by Lady Mary Ross for investigation in 1859. On inquiry it was found she was of respectable extraction, and in great want. A situation had been obtained for her daughter at Little Hampton, and a sum of money was requisite for the purpose of conveying them both to that place. Under these circumstances the case was brought before the Committee, and a loan of £12 (without interest) was granted. Of such loan £6 10s. only was repaid, the securities, Lord Raynham and Dr. Major, having liquidated the balance.

"In January, 1860, they left Little Hampton, in consequence of some disagreement, and went to reside with a Mr. Crump, at Andover-road, Hornsey. In the summer following they procured a list of subscribers to this Institution, and commenced a system of *begging-letter writing*. I cautioned them if they did not desist I should be obliged to warn all the members, which, in consequence of their persevering, I did.

"In March or April, 1861, she left Mr. Crumps in consequence of a quarrel. She refused to go at first, and it was only on Mr. Crump bringing in the brokers that they vacated their quarters. They have since led a roving life, going from lodging to lodging, in Osnaburgh, Coleshill, Warwick, Portland, streets, etc., and invariably leaving in debt and disgrace.

"In November, 1861, they wrote several letters of a similar description, and Miss Russell came to me requesting me to recommend donations, as she required them for an action of breach of promise against Dr. Adams. Of such fact I at once apprised the various subscribers.

"With respect to your friend, Dr. Adams, I am not aware I can be of much service. However, it is a fact not to be denied, that they were from first to last well aware he was a married man, for long before the alleged proposal in September or October, 1860, I had been asked by Miss Russell to advance money for the purpose of procuring certain materials to make up goods for a stall Mrs. Adams was to hold at some bazaar.

"Miss Russell asked me to commence the action for her, but I informed her the Royal Benevolent Society was not instituted for such purposes. I recalled the above facts to her mind, asked her how she could reconcile them, and recommended her, if true, at once to accept Dr. Adams, to marry him, and, on leaving the church, give him into custody for bigamy. I told her that course would be the shortest and most efficacious, but she stated she preferred an action, as the money would be so acceptable, and that he never would dare go into court.

"On her again pressing me to commence the action, I told her an attorney was the proper person, upon which she went to the solicitor belonging to this Society, and who afterwards threw up the case. Subsequently Miss Russell informed me Mr. Propert had taken up her cause, and was to carry it on at

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his own risk; in fact, she showed me a letter stated to be from Mr. Propert, in which he informed Mrs. Russell of the above. The letter was dated from New Cavendish-street, it being stamped on the head with blue ink.

"If you require any further information on the subject, of course I shall be happy to give it to you as a subscriber to this Society. Faithfully yours,

"WM. H. MAITLAND.

"The case was carried on by Mr. Pike, Mr. Propert's solicitor.

"To ——, a Subscriber to the Royal Benevolent Society."

REPORTS OF SOCIETIES.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, FEBRUARY 2, 1863.

DR. BABINGTON, F.R.S., in the Chair.

A PAPER, by THOMAS HUNT, F.R.C.S., was read, on DISEASES OF THE SKIN DEVELOPED IN SCHOOLS, WORKHOUSES, AND FACTORIES, FROM DEFECTIVE HYGIENE.

The author wished prominently to bring forward the effect of congregating and incarcerating many children or young persons under one roof, of feeding them on one and the same diet, and thus promoting locally the more or less permanent inroads of certain cutaneous diseases, which diseases often subside spontaneously upon the removal of the sufferer from the locality. These diseases are chiefly the common ringworm (*porrigo sentulata*) and scabies, the former being usually aggravated by the presence of a vegetable, the latter by an animal *parasite*. He had never visited a workhouse, or a detachment of pauper children, or a large boarding-school occupied by the poor, without observing many cases of ringworm and scabies; one of these two diseases prevailing at one time, the other at another period, and both showing a tendency to pustulation. These cutaneous plagues will often persist month after month, in spite of the most careful treatment and the most scrupulous attention to cleanliness and ventilation. He had already published an account of an endemic scabies which infected, for many months together, a large girls' school in the neighbourhood of London, where cleanliness, ventilation, good drainage, good nursing, and good Medical care were conspicuously apparent. But nothing was of any permanent service until an entire change of diet was introduced, together with the daily exercise of the inmates away from the premises. Accounts of similar endemic difficulties reached the author from Medical Practitioners who had the charge of institutions of the same character in different parts of the country, and the same kind of treatment proved equally effectual in all of them. In those factories where children are employed, and *boarded* and *lodged* on the premises, like occurrences are observed, involving the clean and the dirty, the well-fed and the ill-fed. The doctrine of contagion fails to explain the cause; nor, indeed, is any one imaginable cause to be named that is capable, *per se*, of accounting for all the peculiarities of the case. But it appeared to him, that by duly reflecting upon *all* the sanitary circumstances in which these children are placed, we may be able to discover an aggregate of influences, so to speak, which not separately but concurrently may combine to produce these morbid conditions. Atmospheric impurity, unnatural diet, deficient exercise, and contagion, are the four conditions which appear to unite their several forces to perpetuate these loathsome affections of the skin. And yet not one of these causes alone ever presents a formidable difficulty in the treatment; neither do any of them exist in any prominent degree in these establishments. There is no sensible vitiation of the atmosphere, no bad smell, no defective drainage, no neglect of ventilation. The diet is excellent in quality, plentiful in quantity, wholesome in character, and correct in its chemical elements. Exercise is allowed and encouraged within the walls of the institution, and contagion is for the most part antagonised by care and cleanliness, and often by individual segregation. So that, considered apart, these causes of disease exist, if at all, in scarcely an appreciable degree. And yet, together, they are capable of establishing a most formidable cachexia They poison the blood, producing not only their immediate effects in the form of parasitic skin disease, but laying the foundation probably of more serious disorders, manifested in after life by the presence of lumbrici, ascarides, tapeworm, pediculi, fungi, hydatids, tubercles, and perhaps cancerous germs, in the various organisms which, under morbid changes, become capable respectively of nourishing these distinctive parasites. The author then considered the causes referred to singly, and of sameness of diet he said:—There is a daily dole of potatoes with boiled mutton, or potatoes without boiled mutton; there is the eternal pea-soup or oatmeal gruel, with so many ounces of bread, and so many grains of salt. Oh, what a luxury would a red herring be to those poor creatures, or a lettuce, or an apple, or a dish of greens, or carrots, or turnips. Man was made capable of living upon a *variety* of food, animal and vegetable, fish, flesh, fowl, root, leaf, stem, fruit, and seed. But no man can live on bread alone; no, nor on mutton chops alone, nor on any two or three articles alone. The life supported by half-a-dozen changes only is in a feeble, imperfect, half-poisoned condition. It appeared, then, to the author, that these four causes, atmospheric impurity, sameness of diet, insufficient exercise, and contagion, all of them trifling in degree, are yet capable of working together for evil, and may thus become powerful agents in the promotion and perpetuation of disease. The blood becomes vitiated from the unvarying character of the diet, from impure and stagnant air, from deficient perspiration, and restricted activity of limb, and the agents of contagion triumph over the low degree of vitality which results. If this be sound pathology, these combined evils will probably be found to play a busy part in the production or aggravation of other diseases, endemic or epidemic in their character. Fortified by an ample, generous, and varied diet, free ventilation, active exercise, and cleanly habits, our junior population might set at defiance cholera, diphtheria, dysentery, and typhus, and probably half the physical "ills which flesh is heir to."

Mr. FRENCH said that his experience of the itch in a London Workhouse, viz., that of St. James's, Westminster, did not accord with that of the author of the paper, "that the disease was produced by a uniform diet," or the other circumstance to which he alluded. In that establishment there were about 200, who were fed unvaringly upon boiled mutton every day, and had been so dieted for many years—who took little or no exercise, and were in every respect so circumstanced as to favour the occurrence and spreadance of the disease, according to the view expressed by the author; yet these were the very people among whom the disease did not occur. It was a disease frequently admitted into the workhouse for the purpose of being cured, and only spread when sufficient care was not bestowed on the separation of the infected, and this very rarely happened. On the other hand, at the Parochial School, at Wandsworth Common, where the diet was varied, where fresh vegetables of every description were freely used, and exercise in the open air was abundantly taken, where no fresh comers were admitted with the slightest papulæ upon them—here the disease would continually break forth unless the most rigid inspection were constantly observed, the patients with papulæ immediately separated, and active treatment adopted. It is true that neither vesicles nor pustules ever appeared except in cases where the treatment was purposely deferred in order to afford conviction of its necessity; indeed, nothing but ample experience can convince the mind of a medical observer of the necessity of dealing peremptorily with symptoms of so slight a character as those which furnish the first evidence of itch. He thought that the author attached too much importance to some of the circumstances which accidentally surrounded the patients as the cause of the disease; and the same remark applied to the conjectures which he hazarded as to cholera being influenced by the same causes.

Mr. HARRIS agreed fully with the author of the paper as to the primary importance of improved diet in all cases of scabies when occurring in a large number of children, wherever collected. He also cordially subscribed to the opinion that next to an improved diet (especially avoiding all boiled meats) fresh air, and exercise in it, were of primary importance. Cleanliness was essential, but to prevent overcrowding was not less so. Mr. Harris resorted, as the correct treatment of what he believed to be true scabies (but only acknowledging a vesicular and a pustular form), to the wash recommended by the Poor-law Board and their Medical officers, but which he had used long prior to his reception of their printed formula in preference to sulphur ointment, either simple or compound. The form of wash was this—2 lb. of sublimed sulphur, 1 lb.

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of quicklime recently burned, and 3 lb. of water (to which Mr. Harris added a small quantity of sulphuric acid and common salt when boiled); but the above three ingredients, in these specified proportions, were boiled together for one hour, or until a green colour was produced; then poured off without straining, and kept in stone jars well stopped; and this wash applied after a warm bath in which soap had been used, would cure scabies in the vesicular form in two days, with only one dressing per diem, and the pustular form in four days; and no sheets, or blankets, or clothes would be messed or spoiled; for if rubbed in with a bit of sponge or tow before the fire it would dry in ten minutes, causing some shrinking of the skin and a smarting warmth, but the cure was most satisfactory. Yet scabies becoming endemic in wards and schools compelled the non-return of the cured patient to their old ground, or it would quickly recur. Mr. Harris alleged that numbers alone would not render scabies endemic; but the persistence of a succession of cases in the same ward; and he instanced the Workhouse of St. Luke's, to which he was Medical officer. He was also Medical officer to the Orphan School, Haverstock-hill, wherein, with nearly always 400 children, he had never seen a case of scabies, and very little ringworm. The other disease specially mentioned by the author of the paper, ringworm, like itch, was another term so loosely applied, that, to Mr. Harris, it appeared all children's eruptions were called either ringworm or itch. Fifty per cent. of ringworm, so called, was eczema of scalp; thirty per cent. was impetigo; and twenty per cent. only was tubercular, strumous, or true favus, frequently commencing as the disease called porrigo decalvans, and passing on into true tubercular ulcers, minute, clustering, confluent. Of the treatment here he would not speak, under such uncertainty that each meant the same thing; but to corroborate Mr. Hunt's views, he would say that an improved diet of roasted and broiled meats was imperative, much free exercise out of doors, and but few children in any one department, however large. These, conjoined with free ablutions with hot water and soap, would go a long way to effect cures; and the specific treatment might be safely left to each individual Medical attendant, never forgetting that in strong solutions of nitrate of silver and iodine we possessed the main elements of local success, and that in steel we had a most energetic and valuable constitutional auxiliary.

Dr. Murchison, Dr. Buchanan, Dr. Hillier, and Dr. Seaton, also took part in the discussion.

A paper, by Dr. Buchanan, was read on

RECENT TYPHUS IN LANCASHIRE.

Since the great typhus-epidemic in Lancashire at the time of the Irish famine in 1847-48, there has been scarcely any of this disease in the cotton towns. In 1862, however, positive maculated typhus has made its appearance. The disease has been most prevalent at Preston, and next at Manchester. Several cases have been met with in Chorley, a town not far from Preston, and more recently at Accrington; and scattered attacks, still of true typhus, appear to have been observed at Salford and Blackburn. As the chief interest centres on Manchester and Preston, Dr. Buchanan confined his remarks to the outbreaks in these towns. He had visited Preston late in October under the directions of the Privy Council. The earliest case of distinct typhus he could trace had occurred on July 7, in a four-roomed cottage, 17, Cross-street, at some distance from the centre of the town. It was not known that the first patient had been exposed to contagion. In this cottage eight persons had crowded by night into a room whose utmost cubic capacity was 800 feet. They were dirty, underfed, and the boy who first felt ill had also been much exposed to the weather. The boy was removed to Hospital, and returned home on his convalescence. In the last week of August six other persons were attacked in this house. They were removed and the house closed. Meanwhile new cases of typhus had occurred in another part of the town, apparently without communication with the former. These were in a district that was afterwards subjected to the chief violence of the epidemic. The locality consisted of very confined and dirty courts, lying low, near the canal, and densely inhabited. At the end of August a third neighbourhood, distant from either of the other two, became affected with typhus. A fourth outbreak, apparently unconnected with the rest, was seen in another central part of the town in the middle of September. By the end of this month cases had occurred in five out of the six wards into which the town is divided. The general progress of the outbreak in the town may be estimated from the following return of reported cases of typhus:—Cases occurring in July, 2; August, 8; September, 23; October, (5 weeks), 109; November 89; December, 35; week ending January 3, 13,—a third more than in the previous week, and double the number occurring in the week ending December 20. Week ending January 10, 15; and since then a still further increase, though not to any great extent. At the time of Dr. Buchanan's visit at the end of October, the House of Recovery (Fever Hospital), which was constructed for 40 patients, contained 52 cases of typhus. Afterwards there were upwards of 60 inmates at one time. In some wards the space for each bed fell short of 600 cubic feet, and the air was here very foul. At the beginning of November a wooden building was erected in contiguity to the House, capable of containing 60 patients, with a space of 1600 cubic feet to each. This building was put up in ten days; but there was a lamentable delay before the patients were removed into it at the end of December. In the meanwhile upwards of twenty persons in attendance on the sick had caught the fever, the Medical officer and the Master of the House of Recovery being among the number. It deserves mention, for the sake of those who refuse to acknowledge an epidemic influence that does not show itself on the general death-rate, that in the September quarter of 1862 the mortality from all causes in Preston was very markedly below the average, 464 deaths only being registered, against 607 in the corresponding quarter of 1861. This subsidence was entirely among children under six years of age, and resulted, there is reason to believe, from the greater care bestowed by mothers on their infants during the time of industrial depression. The following returns from the Parish Fever Hospital will indicate the progress of the outbreak of typhus in Manchester. In July, 7 cases of the disease were admitted; in August, 8; September, 12; October, 20; November, 23; December, 17. From December 29 to January 13, not one case, but on the last named day, two cases, and since then a few who had contracted the fever in adjoining wards of the Workhouse. Scattered cases of typhus have probably occurred in Manchester from time to time, but very rarely, since 1847-48. The earliest instance of true typhus in the Infirmary occurred at the end of May, and two cases were admitted in June. At present there is very little typhus in Manchester, but it would be premature to reckon on the complete subsidence of the disease. Dr. Buchanan referred to his recent report to the Privy Council, "On the Health of the Operatives in the Cotton Towns of Lancashire, affected by the Prevailing Distress," for a detailed account of the circumstances contributing to the outbreaks of typhus in Preston, and Manchester, and other towns. He was at a loss to explain why the typhus influence should have fallen chiefly on Preston. Manchester was exposed to the danger of imported typhus. The limitation of the fever to these towns chiefly was to be ascribed to the strict removal of cases to Hospital; the maintenance of a high standard of relief, increasing almost every month; the liberal distribution of bedding and clothing as the winter has advanced, and the almost unprecedented mildness of the weather since November, which was the coldest month since the distress began, witnessed the maximum of typhus cases both in Preston and Manchester.

Dr. Murchison observed that the Society was under great obligations to Dr. Buchanan for the important facts which he had brought before it. The points of especial interest in the communication were two, viz.:—1. The circumstances under which the epidemic of typhus commenced. 2. The circumstances under which it began to subside. As to the first, he could corroborate Dr. Buchanan's statement, that true typhus had not been met with at Preston, and most of the other large towns of Lancashire, for many years before the autumn of 1862. The fever which had prevailed in these towns was typhoid, or enteric fever, which was very frequently confounded with, and, when fatal, returned to the Registrar of deaths as, typhus. In proof of this, Dr. Murchison read an extract from a letter, which he had received in May, 1862, from a very intelligent Surgeon at Preston, who was well versed in the distinctions between typhus and fever. During four years that the writer had been in extensive practice among the poor of Preston, he had only seen a single case of typhus; but, though typhoid fever was far from uncommon, the deaths from typhus, as returned to the Registrar, far exceeded the deaths from typhoid fever. Characteristic cases of typhoid fever, which had come under the writer's own notice, had been reported to the Registrar as examples of typhus.

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Dr. Murchison observed that the epidemic of typhus did not commence until after the population had been for many months in a state of great destitution, and that it was unquestionably the indirect result of this destitution. He did not pretend to say that any amount of starvation would in itself produce true typhus, but destitution led to overcrowding, and it was this which generated typhus. In the *Times* of October 13 it had been stated that numbers of cottages at Preston were untenanted, from the inability of the inhabitants to pay the rents, and that it was the practice for several families to congregate into one house. As many as six different families had been said to be collected in one house scarcely above the ordinary size, and now the Society had been informed by Dr. Buchanan that the first cases of true typhus observed at Preston had been in a family of four persons, who had been living in a small room with only 600 cubic feet of space, and who were in a state of extreme want. It was important to observe that there was no evidence that any of these persons had been exposed to the poison of typhus, nor that typhus had been imported into Preston. In the next place, Dr. Murchison observed that the epidemic at Preston began to subside at the beginning of December, at the very time that the condition of the people began to improve, as shown by the diminished numbers in receipt of relief. Whether the disease, once generated, might not spread by contagion, remained to be seen; but every effort had been taken on the part of Government and of the local authorities to prevent it spreading. The immense amount of pecuniary relief which had been sent to the distressed operatives in Lancashire, the ability with which this relief had been distributed, and the energetic measures adopted by Dr. Buchanan and others for arresting the spread of the fever after it had commenced, had alone prevented an epidemic of typhus like that which resulted from the Irish famine in 1847. The epidemic of typhus which had been raging for the last fourteen months in London, would no doubt also have been prevented, if the condition of the poor in the Metropolis had attracted the same amount of public attention as that of the suffering operatives in Lancashire.

Mr. Harris also took part in the discussion.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, March 12, 1863:—

John Davies, Coleshill, Warwickshire; William Arthur Bracey, General Hospital, Birmingham.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

ATWELL, GEORGE H., L.R.C.P. Lond., has been appointed Senior House Surgeon and Secretary to the York Dispensary.

BEVERIDGE, ROBERT, M.B. Aberd., has been appointed Lecturer on Pathology and Morbid Anatomy at the Royal Infirmary, Aberdeen, and Curator of the Museum.

BRIERLEY, JOSEPH C., M.D., St. And., has been elected Medical Officer and Public Vaccinator for the Burnley District and Workhouse, also Medical Officer and Public Vaccinator for the Coine District of the Burnley Union.

CAIRD, GEORGE, M.B. Aberd., has been appointed Physician to the Royal Infirmary, Aberdeen.

CRAIG, J. WRIGHT, M.D. Glasg., has been elected Assistant Medical Officer of St. Giles's and St. George's Infirmary, Bloomsbury.

FISHER, LUKE, M.D., has been appointed Senior House Surgeon to the Dispensary, Preston, Lancashire.

HASTINGS, JOHN CHARLES, M.R.C.S. Eng., has been appointed one of the Assistant-Surgeons to the East Sussex, Hastings, and St. Leonards Infirmary.

JONES, J. LLOYD, M.R.C.S. Eng., has been appointed Junior House Surgeon to the Dispensary, Preston, Lancashire.

PENNALL, JOHN T., M.R.C.S. Eng., has been appointed one of the Assistant-Surgeons to the East Sussex, Hastings, and St. Leonards Infirmary.

TURNER, G. BROWN, M.D. St. And., has been elected Surgeon to the East Sussex, Hastings, and St. Leonards Infirmary.

WOLFF, JOHN R., M.D. Glasg., has been appointed Ophthalmic Surgeon to the Royal Infirmary, Aberdeen.

DEATHS.

COOPER, J., M.R.C.S. Eng., at Great George-square, Liverpool, on March 3, aged 73.

JONES, JOHN, Surgeon, at Gnosall, Staffordshire, aged 84.

LITTLE, D., M.D., at Clarence River, New South Wales, on November 23.

MARSHALL, BUCHANAN, M.D. Glasg., at Islington, Liverpool, on March 3.

MARSHALL, RICHARD, M.R.C.S. Eng., at Marlborough-place, Walworth-road, S., on March 11, aged 48.

PROWSE, JOHN, M.R.C.S. Eng., at Nuneaton, Warwickshire, on February 26, aged 43.

RUTTER, JOHN SIMPSON, M.R.C.S. Eng., at Hunter's-lane, Handsworth, Birmingham, on March 4, aged 52.

WILSON, ROBERT, M.R.C.S. Eng., 28, Cannon-street-road east, E., on March 12, aged 47.

THE ILLUMINATIONS.—Eight deaths have occurred by accidents at the illuminations. The last victim was Mr. John Walker, who died from fractured ribs and other injuries at Guy's Hospital.

ROYAL MEDICAL COLLEGE, EPSOM.—The collegians and aged pensioners of this institution celebrated the marriage of H.R.H. the Heir-Apparent and the Princess Alexandra, on Wednesday, the 11th inst., by a dinner given by the Council of the College.

THE ARSENICAL POISONINGS AT MAREHAM-LE-FEN.—John and Elizabeth Garner were tried at Lincoln, on March 17, for the murder of Jemima Garner, the mother of the male prisoner. It will be recollected that arsenic was unequivocally detected in the body by Prof. Taylor. No new evidence was adduced. The jury took the view that the poison was administered negligently, and not wilfully, and therefore returned a verdict of "Manslaughter." The Judge, in sentencing the prisoners, said that the jury had taken a very merciful view of their case, but that he felt bound to pass upon them the severest sentence of the law. He then sentenced them to penal servitude for life.

THE SANATORIUM ASSOCIATION.—A company has been started under this name for the establishment of a Lunatic Asylum, on what their prospectus calls "a commanding scale," for patients of the better classes. It appears that they have already purchased a property at Hendon, Middlesex, on which they propose to erect a building furnished with all the means and appliances that science can suggest for the treatment of insanity. A resident physician is to be appointed, at a salary of 1000*l.* per annum, and under him is to be another Medical officer, at a salary of 300*l.* Dr. R. Quain and Dr. H. Stevens are chosen visiting physicians, and Messrs. Partridge and Pollock consulting surgeons. If the management and resources of the Institution fulfil the promise of the prospectus, the Sanatorium Association need not fear receiving the support of the Medical profession. As a pecuniary speculation the undertaking is based on the fact that nearly one-fourth of the 24,800 lunatics in England and Wales belong to the wealthier classes, whose friends are willing to pay liberally for their Medical and social treatment.

TRIAL FOR POISONING.—At the Spring Assizes, Northern Circuit, a man named Fox and a woman named Walker were tried for the murder of George Walker, the husband of the female prisoner, a miner, at Balley, near Dewsbury, by the administration of arsenic. The fact of death having been caused by arsenic appears to have been clearly proved. Arsenic was found in all the internal organs except the brain. The analysis was made by Drs. Scattergood and Baildon. Five grains of arsenic were found by Dr. Scattergood in the stomach of the deceased, half a grain of this being in a solid state, leading to the inference not only that poison had been administered from the beginning of the deceased's illness, but up to within a few hours of his death. It was, however, proved that the deceased had himself bought the arsenic for the purpose of killing rats, and had kept it in an open drawer. There was no evidence to connect the male prisoner with the administration; and the jury, seeming to adopt the theory of the defence that the poison had been given by accident, acquitted the woman.

SPIRITS.—A return under this head, issued on Wednesday, the 18th, states that the number of gallons of proof spirits on which duty was paid during the year ending December last was—For England, 8,857,121, and the duty £4,428,561 10s.; for Scotland, 6,189,356, and the duty £3,094,678 19s. 10½d.; and for Ireland, 4,653,773, and the duty £2,326,885 18s. 6½d.; making for the United Kingdom 19,700,250 gallons, and the

gross duty £9,850,126 8s. 5d. The total number of gallons of methylic alcohol sold by the Excise for the period mentioned was 51,897, and the methylated spirits sent out by persons licensed to sell the same under 18 and 19 Vict., c. 38, amounted to 538,088 gallons.

STATISTICAL SOCIETY.—On Saturday, March 14, 1863, at the twenty-ninth annual meeting, Sir John Pakington, Bart., M.P., in the chair, the following gentlemen were elected council and officers for 1863-64:—*President.*—Colonel W. H. Sykes, M.P., F.R.S. *Council.*—Charles Babbage, M.A., F.R.S., James Bird, M.D., Sir John Boileau, Bart., F.R.S., Swinton Boult, Samuel Brown, William Camps, M.D., William Farr, M.D., D.C.L., F.R.S., *Right Hon. Earl Fortescue, Humphrey William Freeland, M.P., Sir Francis Henry Goldsmid, Bart., M.P., Q.C., William Augustus Guy, M.B., James Thomas Hammick, Frederick Hendriks, James Heywood, F.R.S., Sir Rowland Hill, K.C.B., William Barwick Hodge, Charles Jellicoe, Leone Levi, F.S.A., William Golden Lumley, LL.M., Right Hon. Holt Mackenzie, F.R.G.S., Matthew Henry Marsh, M.P., *Right Hon. Lord Monteagle, F.R.S., William Newmarch, F.R.S., Right Hon. Sir John S. Pakington, Bart., M.P., G.C.B., Frederick Purdy, Right Hon. Lord Stanley, M.P., Col. W. H. Sykes, M.P., F.R.S., *Major-General Sir A. M. Tulloch, K.C.B., *Richard Valpy, *Cornelius Walford, *Rev. William Whewell, D.D., F.R.S. (Those marked * are new members.) *Treasurer.*—William Farr, M.D., D.C.L., F.R.S. *Honorary Secretaries.*—William Augustus Guy, M.B., William Golden Lumley, LL.M., Frederick Purdy.

TESTIMONIAL TO E. A. PARKES, M.D., F.R.S.—On Tuesday, March 17, Dr. Parkes, late Professor of Clinical Medicine at University College, was invited by a large number of his old pupils to a meeting for the purpose of being presented with a bust of himself, subscribed for on the occasion of his resigning his office in that College. The bust, a striking likeness, is the work of Edward Davis, Esq., of Charlotte-street, Fitzroy-square. The presentation took place in the botanical theatre of University College, before a large assemblage of old and present students, and many of the professors, former colleagues of Dr. Parkes. Dr. Jenner, the Professor of Medicine, presided. The following address was read:—"To Dr. Parkes,—Sir,—We have invited you here to-day that we might have an opportunity of presenting you with this testimonial of the affectionate esteem entertained for you by your old pupils. When, three years ago, you resigned your post of Professor in this College, there was a general feeling amongst us, not originated by one man, but one that seemed to take possession of all at the same time, that you should not be allowed to depart without taking with you some token of the affection you had inspired during your connexion with us. We could not but feel that, not contented with being merely a teacher, you had striven to be a friend as well; that you had not only fulfilled most perfectly the duties which the office required, but had added thereto kindnesses such as no office could require and no student expect. There are amongst us some who, of course, feel this more strongly than others, there are amongst us those who have experienced at your hands kindnesses so great that no memento can fitly express their gratitude, but we beg you to believe that there is no one who has taken part in the preparation of this testimonial who does not feel that in his remembrance of you there is something warmer than mere admiration of your skill as a teacher, something better than mere respect for your eminence as a man of science. That said, there is little more to add. You will at once perceive that we who are present here are but a few out of the number of those who have united to present you with this bust; we should have preferred, if it had been possible, having all the subscribers present, but their very absence furnishes the, we think, not unpleasant reflection that all over the kingdom are scattered men who were once your pupils, and who still think, and will ever think, of you with affection and respect."

GREEN OYSTERS.—We described a few days ago two methods employed by M. Cuzent for discovering copper in the oysters which come from Marennes, and which are remarkable for their green hue. The *Moniteur* now publishes a letter from the mayor of that town, which is intended to counteract the unfavourable impression caused by M. Cuzent's revelations regarding the unwholesomeness of these oysters. He states in his letter that the trade in green Marennes oysters has increased to such a degree during the last fifteen years, that the white oyster beds of the neighbourhood had become insufficient to stock those peculiar beds where the creature acquires a green colour, together with that delicious taste which causes the Marennes oyster to be so eagerly sought after. In order, therefore, to meet the demand, white oysters have had to be imported from Spain, Bretagne, Ireland, and England. The Marennes oyster is in fact, in its ordinary state, as white as any other, and only receives its green colour and peculiar taste when transported to certain beds covered with a small submarine kind of moss, and formed of the slime deposited by the sea from the small gulf called the Rivière de Seudre. Now, a considerable quantity of oysters are imported from Falmouth by the inhabitants of Marennes, and these oysters really contain a certain quantity of copper, which gives them an acrid taste. On their arrival they are deposited in certain beds apart from the others, and kept there for six months, after which period experience has shown that they lose their copper salt, and consequently their bad taste. Now, as to M. Cuzent's experiments, and the results obtained by him, the mayor explains that a Marennes fisherman, whose trade is not very extensive, got over from Falmouth a few thousand oysters, which, out of thirst for gain, he sent off to Rochefort before they had sojourned more than three weeks in the beds set aside for their purification. These oysters having caused alarming symptoms, copper was found in them by M. Cuzent, but they were not real Marennes, but Falmouth oysters, the former still retaining the excellent qualities for which they are known.—*Galignani's Messenger.*

MEETING OF THE MEDICAL PROFESSION AT GLASGOW.—On Thursday, March 12, a numerously attended meeting of the members of the Medical Profession who have formed themselves into an association to procure a repeal of that section of the Scotch Registration Act, under which forced unrequited Professional labour is exacted from the Medical men of Scotland, was held in the Lower Room of the Trades' Hall, Glassford-street—Dr. H. Thomson, the President of the Association, was in the chair. The Chairman stated that this meeting had been called specially to consider an overture which the Lord Advocate had made to Mr. Dalglish, and which had been communicated to the Association by Mr. Dalglish, in a letter to the secretary. Before calling on the secretary to read Mr. Dalglish's letter, he begged to remind the Association of the progress made. After their body had been fairly constituted, the secretary, as instructed, addressed a letter to the member for Glasgow, to ascertain exactly how he stood and felt affected towards our movement; whether, in fact, he was prepared to introduce a repealing bill, should the Profession throughout Scotland back him up with a large number of petitions. As some of the gentlemen present had not heard Mr. Dalglish's letter in reply read, he would go over it again.

"House of Commons, February 18, 1863.

"DEAR SIR,—I was anxious to have had a conversation with the Lord Advocate before writing to you on the subject of the clause in the Registration of Deaths Act which enforces a penalty on medical men if they do not return a certificate of the cause of death.

"I would advise that the medical profession send a deputation to the Lord Advocate (who is still in Edinburgh), and endeavour to persuade his lordship to introduce a short bill to amend the present Act so far as the objectionable clause is concerned, so as to place the Medical profession in Scotland in the same position as their friends in England and Ireland. If the Lord Advocate refuse to bring in such a bill, perhaps the deputation may get a pledge from his lordship that the Government will not oppose a bill for that purpose, if brought in by a private member.

"In either case I shall place my services at the command of the profession. I am, dear sir, yours very truly,

"Dr. Walker." "ROBERT DALGLISH.

On receipt of this letter, the secretary convened a meeting, when the proposition of our hon. member was discussed, and unanimously agreed to. Drs. Walker, M'Carron, and myself (the chairman), being the parties appointed to wait on the Lord Advocate. As time was exceedingly pressing, the secretary at once addressed a letter to his lordship, requesting an interview, at which it was proposed to submit to his lordship a scheme for the transmission of the certificates from the Practitioners to the registrars, which would greatly facilitate the collection of the desired information, and prevent the documents passing through the hands of relations of the deceased, as well as prevent any use

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being made of them, but for the purposes of the Act. Unfortunately, rapid as our movements had been made, we were too late; the Lord Advocate left for London immediately thereafter, so that any interview he may favour us with must be after his return.

The Secretary then read the following letter which he had received from Mr. Dalglish:—

"House of Commons, March 4.

"Dear Sir,—I have had a conversation with the Lord Advocate on the subject of the penal clause in the Scotch Registration of Deaths Act. His lordship says that if an alteration of the Act to the extent of only enforcing the penalty after three consecutive cases of neglect or refusal to make the return on the part of the Medical man would satisfy you, he would be inclined to make such an alteration as would accomplish that object. It appears to me that this is a compromise which is worthy of your consideration. It relieves the Profession from the penalty, so far as any breach of the Act from mere inadvertence is concerned; and I do not suppose that any Professional man would willingly obstruct the compilation of statistics so valuable to the Profession.

"I shall be glad to have your opinion upon the proposal.

"I am, dear sir, yours truly,

"Dr. Walker." "Robert Dalglish.

Now he (the Secretary) had taken the earliest opportunity of calling the Association together to consider this proposal. To every member of the Association the eminently absurd nature of the thing was at once apparent—it was begging the whole question. He was astonished that such an idea could have entered the Lord Advocate's head, or that the city member could in the least degree have countenanced so ridiculous a notion. Although the proposal were carried out to-morrow, the unjust and unconstitutional system of exacting compulsory labour would still remain in its full force, and the odious admission that the Medical Practitioners of Scotland are of a lower type or caste, and not entitled to occupy "the same position as their friends in England and Ireland," would still remain unwiped out. However, a proposal by a Lord Advocate is not a matter to be slightly passed over. He would suggest that a meeting of the whole Profession in Glasgow and neighbourhood be called, to consider not only this proposal, but the whole question. A requisition to call such a meeting might be presented to the President of the Faculty of Physicians and Surgeons, or this Association might take the initiatory steps, and request Dr. W. I. Gairdner to preside. After the meeting had been addressed by Drs M'Carron, Reid, Glass, Cowan, Coats, and Lapraik, Dr. Thomson, the President, in a few remarks, brought the proceedings to a close. He thought it impossible that the Royal Colleges of Edinburgh could longer refrain from expressing some opinions on this question. Sir R. Peel, in his place in the House of Commons, deliberately said that the Scotch penal system was altogether unfitted for the Medical men in Ireland. The free English system was the only one that would be tolerated there. He had come to this conclusion from conversations with the President of the Royal College of Surgeons of Ireland, and from information supplied from other sources. Now he (Dr. Thomson) could not see how our Scotch Presidents of Colleges could keep silent any longer. As to the Faculty of Physicians and Surgeons of Glasgow, he was afraid to mention their name. Probably it was too much to expect them to put in an appearance. Situated far from the centre of power, their small voice was seldom or never heard when the honour and dignity of the profession was at stake.

Child Stealing.—A remarkable case of child stealing engaged the attention of the Salisbury magistrates for three or four hours on Saturday. A woman, named Annie Shipsey, was charged with stealing an infant from the wife of John Yarlett, and her husband, John Shipsey, stood charged as an accessory after the fact. A summons had likewise been issued against Mr. Samuel Pyle, a Surgeon of more than twenty years' standing at Amesbury, to show cause why he also should not be similarly charged as an accessory. The facts, as they were deposed to in evidence, were these:—On Tuesday, the 3rd inst., Mrs. Yarlett, the prosecutrix, who had been confined only about five weeks, was on her way to see her mother, having her baby in her arms, when she was accosted by the female prisoner, who inveigled her into a public-house. She had not been more than a few minutes in the house when she was asked by the female prisoner to go to a shop in the town for a parcel which had been left there for a Mrs. Brown, and which she herself was too ill to be able to fetch. Mrs. Yarlett went, leaving her baby in the hands of the prisoner, but when she returned to say that there was no parcel for any Mrs. Brown, the prisoner and the infant were nowhere to be seen. The woman Shipsey was traced by Superintendent Caldow, of the Salisbury police, who went to her house, on a farm at Milston, where her husband was shepherd, and there found an infant being nursed by her sister. The female prisoner, who was in bed upstairs, stated that she was confined immediately after her return from Salisbury on Tuesday evening, and that two women, neighbours, were present. These women, however, did not appear to have been called in until after the "little stranger" was in the house, and having his suspicions that the said "little stranger" was considerably more than two or three days old, Mr. Caldow called in Mr. Pyle, and paid him the usual fee to examine the woman. He went upstairs, and in a few minutes gave it as his opinion that she had been recently confined, that she had milk, and that the child might be about four or five days old. Further suspicion was, however, excited, and on the following day Mrs. Shipsey was examined by Mr. Winzar, a Surgeon of Salisbury, who gave it as his opinion that she had not been recently confined, even if she had ever been confined at all, and that the child was at least four or five weeks old. A warrant was obtained for the apprehension of Mrs. Shipsey and her husband, but on Saturday Mr. Pyle refused to allow the police to enter the house, on the ground that the woman was suffering from inflammation of the bowels. Later in the day, Mr. Martin Coates, another Surgeon of Salisbury, was taken over to examine her, and, while his opinion fully corroborated that of Mr. Winzar, he could discover no traces of inflammation, although the woman complained of pain on pressure. The child, and a calico bandage in which it was wrapped, were ultimately identified by the mother. On Sunday evening Mr. Pyle consented to the prisoner's removal, and expressed his regret at not having originally made a more minute examination. Mr. Lewis, who defended Mr. Pyle, contended that the latter had committed no offence. Mere negligence did not render him liable to an indictment as an accessory. The Bench, taking this view of the case, dismissed the summons. The woman Shipsey was committed for trial at the Salisbury Borough Sessions.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

A Surgeon.—1. No. 2. We think not.

M.D.—We do not know the individual's name, and we think it very unlikely that he has any fixed address.

Dr. R. Lyle.—We shall be happy to receive our correspondent's communications.

Derby.—We know nothing of the circumstances of the case which has led to the misunderstanding between Messrs. Gisborne and Fearn; but we regret to see professional differences of opinion discussed in a personal tone in the columns of a provincial newspaper.

Hood's "Song of the Shirt."—The "Song of the Shirt" was sent down by Hood to Mr. Lemon for insertion in *Punch*; and with it this apologetic note, "I sent it to a first-class magazine, and they wrote back, 'It is hardly the thing for genteel people.' What say you?"

Ethnological.—The royal family of Denmark is descended from Hedwig, own sister to Adolphus, Duke of Sleswick, who was the lineal descendant of Sophia, wife of Gerhard, Count of Holstein, whose mother, Richissa, was the second daughter of Eric the Fifth, who was the lineal descendant of Gorme, the first Christian King of Denmark, A.D. 765, who was the son of Harold the Fourth, who was descended from Rorick Slyngbland, and through him from Humble, of Zealand, B.C. 1038.

Hydrochloric Acid in Typhoid Fever.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you allow me to recommend a full trial of hydrochloric acid in cases of typhoid fever to be made in some of the London Hospitals, as I have found it an excellent remedy for this disease during a slight epidemic which occurred here last autumn. Thirty-seven cases came under my treatment in the Chinese Hospital, and with the usual treatment about 25 per cent. died; but after adopting the hydrochloric acid treatment, mortality fell to about 7 per cent. I gave half a drachm of the dilute acid in half an ounce of infusion of quassia every three hours. When stimulants were required, I added half an ounce of brandy to the mixture.

I am, &c.

Shanghai, January 23. J. Henderson, M.D.

The Meeting at the Freemasons' Tavern.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I should have allowed the report of the meeting at the Freemasons' Tavern, contained in your Journal, to have remained undisturbed by any

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communication from me, if Dr. O'Connor had not thought fit to refer to the subject in a letter contained in your this week's number.

I have now to inform you that as Dr. O'Connor himself admits, I was not call-d to order by the chairman, who gave as his reason for not doing so, that I had made only a general observation, and no personal attack whatever.

I will leave your readers to determine who indulged in offensive personality, when I state that when in the course of the attack made upon me by Dr. O'Connor, he attempted to depreciate my standing in the Profession by stigmatising me as a pettifogging parochial Apothecary, not only three-fourths, but apparently the whole meeting rose up, amid loud cries of "Order," and sat down.

The sense of the meeting as regards Dr. O'Connor's attack upon me was sufficiently expressed in my favour for me to state that I shall consider it beneath my dignity further to notice anything he may write or say on the subject. Apologising for the necessity of thus addressing you,

I am, &c.

33, Dean-street, Soho-square, March 13. JOSH. ROGERS.

Health Assurance Society.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Being desirous, with many others, of calling the attention of the Medical Profession to the necessity of forming a Medical Health Assurance Society somewhat on the principles of the Clergy Mutual Association, whereby an incapacitated invalid member may receive a certain sum weekly, I should feel obliged if you would, with other periodicals, kindly co-operate in the promotion of the same for the benefit of your readers and of the Profession generally, and to the end that some idea may be formed, if a feasible plan would be sufficiently supported, I shall be glad to receive communications from gentlemen, stating their views, and if they would join a society when proper rules are satisfactorily arranged and submitted for inspection. I am disposed to think that an annual subscription, varying from £5 to £15 annually (provided that 200 or more subscribed as members), would be sufficient to allow of from £2 weekly during sickness, an annuity after a certain age, and a sum varying from £100 upwards at death—the society being formed on mutual principles. If gentlemen write to me personally, wishing an answer, perhaps they will favour me with an envelope, stamped and addressed. Having been in active business for nearly thirty years, and within these four years had a fearful illness, incapacitating me for nearly twelvemonths (from which I am now thoroughly recovered), no one can better than myself judge of the absolute necessity for an association of the kind proposed.

I am, &c. JOHN M. BRYAN, M.D., F.R.C.S.,
Hon. Sec. and Treasurer to the South Midland
Branch of the British Medical Association

Poisoning by Morphia.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your impression of last week a case of poisoning by opium is related by Dr. Morell Mackenzie, of London, where recovery took place without having recourse to the ordinary method of treatment, and which induces that gentleman to raise the question, "whether the nervous system, already overpowered by the poison, is not still further exhausted by the ordinary treatment." That considerable latitude should be exercised in the treatment of cases already debilitated by disease is unquestionable, but that the "do nothing" system is the proper course to adopt in cases of opium poisoning generally, I am inclined to doubt, and my conviction is further supported by the following case, which to every impartial observer will appear as a typical example of the good effects of the ordinary method of treatment, or at all events, that "keeping the brain in a state of activity" in such cases is erring upon the side of safety.

On January 4, 1862, at 4 p.m., John D., aged 60, a gouty old butcher, swallowed six pennyworth of laudanum with intent to commit suicide. Symptoms of poisoning soon came on, which rapidly merged into complete insensibility. On my visiting him three hours after, his condition was as follows:—He lay upon his back with his neck arched forward; the breathing was loud and stertorous; countenance bloated and livid; pupils contracted; eyes fixed, and insensible to all external impressions; even free manipulation could be tolerated without creating the slightest resistance. In short, he resembled a person straining laboriously, and at the same time holding the breath. The rousing system was immediately adopted, but without evincing a shadow of sensibility. The stomach-pump was used with great difficulty, owing to the fixation of the muscles of the neck and chest, and that viscus thoroughly washed out, and afterwards had hot milk and tea injected into it.

At 12 p.m. of the same evening, the breathing became less comatose, though even now several seconds elapsed between each inspiration, but, in other respects, the same insensibility continued. As a *dernier ressort*, hot jars and bricks were ordered to be kept to the feet and legs during the night, and half-a-dozen mustard-poultices to be applied along the spine to vesication. By some mistake the hot applications were so assiduously applied as to blister the feet and legs severely, but with the happy effect of "keeping life in the old sinner," as the nurse quaintly remarked in reply to my inquiries the following morning, and to which, no doubt, in this case, the recovery must be mainly attributable.

I am, &c.

Cleveland-place, Bath, March. K. N. MACDONALD, L.R.C.S. Edin.

The Percentage System.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I received this morning the circular which I enclose. Any inclination which I might feel to assist a brother in distress is stifled in the present instance by that most unfortunate and degrading offer of a "percentage," which, if accepted, would place me on as low a level as that of the meanest tradesman or swindling contractor. Let us suppose that a "handsome percentage" means 10 per cent.: then "Medicus" proposes that I should inveigle an unfortunate wretch into living with him, and receive myself £15 per annum. But in order to do so, I must be a thief somehow; either I pick the pocket of the person whom I recommended, by the surreptitious abstraction of £15, so that he pays £150 for what costs only £135, or I am mean enough to accept this gratuity for helping a man who pleads poverty and appeals to the commiseration of his brethren on account of his "urgent position." Was there ever a more ludicrous attempt to combine lovingkindness and larceny? If you travel in the East you may hear *La Allah ill Allah—Backsheesh!* "The rage of the vulture and love of the turtle, mixed like the bump of benevolence and Thurtell," is nothing to it.

I wish this were a solitary case, but I fear it is not. There are grievous suspicions afloat about the connexion of Medical men with Orthopædic and other Surgical instrument makers, chemists, mineral water vendors, corncutters, elastic stocking and truss makers, keepers of hotels and sea-side boarding-houses, and even with undertakers. This kind of thing might have done a century ago, but ought to be tabooed now that the trading element is being eliminated. We look to the *Medical Times and Gazette* to keep us straight. I am, &c.

London, March 16. AN OLD SUBSCRIBER.

(Circular.)

"A doubly-qualified married Medical man, residing in Clifton, whom a chain of unfortunate circumstances have brought into great embarrassments, will feel very grateful to any of his more fortunate brethren who could and would recommend him a resident patient, invalid, requiring change, or other inmate. His house is well suited for the purpose. His terms are at the rate of £150 per annum and upwards, according to requirements. The writer would be glad to pay a handsome percentage to anybody who could forward his views, the urgency of his position being great. Name, address, and references to some of the most eminent London Practitioners, forwarded on application to 'Medicus,' care of Henry Roupe, Esq., Kensington Dispensary, London."

Etymology of "Pythogenic."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—One of your correspondents, signing himself "Quærens," but whom another correspondent has unwittingly, though appropriately, styled "Querens," has expressed his ignorance as to the derivation of the word "pythogenic." If I mistake not, Dr. Murchison first used the word some four or five years ago, and it has been since in frequent and unquestioned use. He derived it from the root of the Greek verb πύθομαι, *putresco*, and γείνομαι, *nascor*, from which would come the compound word πυθογενής (pythogenic), literally signifying "born of putridity."

Your correspondent, on the other hand, thinks that "genetic" must be derived from γεννητικος, possessing generative power, or "genic" from γενικος, equivalent to the Latin word *gentilis*, and seems to be ignorant of the fact that the best Greek writers, as Æschylus, Euripides, Hesiod, and Sophocles use the terminal "γενής" to imply "born of," or "produced by." For instance, amongst many others we find such words as γηγενής, born of the earth; νεφεληγενής, born of the clouds; πυριγενής, born of the fire, etc. It may be worth mentioning that a similar word to pythogenic has long been in use. "Pyogenic" is not only applied to a membrane supposed to produce pus, but "pyogenic fever" is used as a synonym of pyæmia or a fever which is supposed to be produced by pus.

"Quærens" further states that if the word pythogenic be derived from πυθος (*sic.*), and γενικος, it would signify "belonging to the race of Pytho," and this latter word, in combination, might either imply a native of Pytho, or one of the great serpents named after the Pythian one slain by Apollo. It is a pity that your correspondent did not refer to any good dictionary, and then he would have found that the serpent in question was called πύθων, *Python*, because it was believed to have been born of putridity. "Πύθων, draco vel serpens, quem Apollo intermit, sic dictus quod ex putridine terræ ortus esset."—*Scapulæ Lexicon.* I do not know in what dictionary he would find "πυθος." It appears, then, that the word Python was derived from the same root as πύθομαι, *putresco*, which is also the root of "pythogenic," their parent being the Sanskrit word "puj," *corruption.*

Whether Dr. Murchison's view, now so generally accepted by the Profession, that the fever in question is generated from putrifying matter, be correct or not, I cannot offer an opinion, not being a Physician, but it seems unaccountable that in these days of barbarous nomenclature a word having so respectable a parentage as pythogenic should be singled out for cavil. The word "enteric," which Dr. Tweedie and Quærens so strangely agree in upholding, was first proposed many years ago by Dr. Wood, of America. It is sufficiently explicit, but it also pledges one to an opinion that the fever is the result, and not the cause, of the intestinal lesion.

I am, &c.

F.R.S.

Man's Place in Nature.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I find two or three things in Professor Huxley's "Man's Place in Nature" which puzzle me, a poor third year's student, not a little. May I hope that some one of your readers will clear up my difficulties, which occur for the most part in a long note at pp. 102-103 of the above work. The gist of this long note, if I understand it aright, is that there is really very little difference between an ape's brains and a man's; and that if a great gulf does separate the two animals, it is not so much that man originally surpassed the ape in the quantity and quality of his brain, as that he was superior to him in the quality of certain of his motor apparatuses, "especially those which are concerned in prehension and in the production of articulate speech," and so was enabled to develope himself into what he now is. In other words: construct an animal which shall have the brain of the highest ape, and the hands and vocal apparatus of a man, and this animal will in the course of time develope itself into a being but little inferior to man.

Now, I of course allow, as every one must, that the human brain has probably increased both in quantity and quality in consequence of man's possessing hands and a vocal apparatus, still I had always thought that it was not so much because he possessed these that he was superior to the ape, as because he had originally bestowed upon him a brain far superior both in quantity and quality to the ape's, and was enabled by it to make use of his hands and vocal apparatus. Else why does not an idiot speak? He has commonly a far larger quantity of brains than the highest ape, and there is no reason for believing that what there is is defective in quality, and there need be no defect in his vocal apparatus; but it seems that he has not *brains enough* to speak. A parrot has a vocal apparatus sufficiently good to enable him to speak very distinctly, yet *from want of brains* parrots cannot frame a language, and so remain what they originally were. Again, in the latter part of the same note, Professor Huxley seems to compare the human and the ape's brain to a watch that will and a watch that will not go. Is he justified in doing this? Does he mean to say that the ape's brain does not perform all that it *can perform* as well as the human brain does; in other words, that its capabilities are not all called into play? Or are we to believe that an ape's brain, if it had only hands and a vocal apparatus to work upon, would be able to direct them?

And, again, at the end of this note he tells us that he finds it very easy

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to comprehend that some structural difference, as inconspicuous as that between the vocal apparatus of man and the ape, "may have been the primary cause of the immeasurable and practically infinite divergence of the human from the simian stirps" Should a man who sneers at Owen for basing "man's dignity upon his great toe," or hippocampus minor, *i.e.*, for basing the distinction between man and the ape upon two facts (though, it may be, *false facts*)—should such a man, I say, base his distinction upon a *gratuitous assumption*.

Lastly, after telling us in plain terms that man has been evolved, both body and mind (p. 109) from something far below an ape, Professor Huxley bids us (p. 111) discern in man's long progress through the past a reasonable ground of faith in his attainment of a nobler future. That is, we are to rejoice because our *posterity* may at some distant day be evolved into something like an angel! What consolation is this to us? And what consolation, indeed, is there to be derived from the whole book, unless it be a consolation to convince oneself that one cannot believe in the progressive development of man and at the same time believe in the doctrines of the New Testament, according to which *individual human beings*, if they ever reach heaven, will never reach it by progressive development! No, according to the theory of progressive development, progression for the *individual* must end with the grave; progression for the *race* will never end. But this is no comfort to the *individual*.

I am, &c.

STUDENS PERPLEXUS.

A CASE OF DIVISION OF THE ULNAR AND MEDIAN NERVES BY ACCIDENT, AND THE REMOTE EFFECTS ARISING THEREFROM.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your impression of February 14, 1863, Mr. Hutchinson reports an interesting case showing the remote effects of division of the ulnar nerve. The following case has many points in resemblance:—

Isabella J., aged 35, married, states that in the course of her avocations she had occasion to get on to a bench, but being in danger of falling, she thrust out her right hand, which passed through a pane of glass, thereby inflicting a deep wound on the anterior aspect of the fore-arm. She states that the bleeding was very copious, but was completely controlled by compression, which was applied by a Surgeon, under whose care she remained until the wound healed up, which it did quickly. Ultimately she came under my observation.

State of the parts, December 2, 1862, six weeks after the Accident.—On examination there was a well-marked cicatrix, about two inches long, extending transversely across the wrist, half an inch distant from the joint. There was slight pain and a feeling of tenderness over the cicatrix, which at one part seemed to be adherent to the superficial tendons beneath. The hand presented a peculiar pinkish or bluish appearance, as if it had been exposed to cold. The temperature was much below that of the left hand, varying from 4½ to 6 degrees at different parts. The circulation was exceedingly languid, as evinced by the capillaries filling very slowly on exerting pressure. There was an appreciable difference in the size of the two hands. She had lost all motion and sensation in those parts supplied by the ulnar and median nerves in the hand. She could move the thumb, however, to a very limited extent, and experienced slight sensation in it, also in both sides of the index and radial side of the middle finger. This sensation was only experienced on the dorsal aspect of the hand, showing that it was to the branches of the radial nerve this was due. I should here state that in consequence of the loss of power in the hand she was obliged to leave her situation. I recommended her to employ gentle friction to the parts, which should be performed at regular intervals, and also to keep the hand enveloped in cotton.

At the end of two weeks she came back, when I found that other symptoms were manifesting themselves, namely chilblains had formed on the tips of the middle, ring, and little fingers. These were treated by the method usually recommended, namely, stimulating liniments, and keeping up the temperature of the parts by means of cotton; also friction was still persevered with. Having persevered this plan of treatment during one week, it was found of no effect in checking the spread of the chilblains, nor yet did they manifest any tendency to heal up. I now passed a galvanic current through the fingers and hand for the space of fifteen minutes each day. On the fourth application it was seen that the spread of the chilblains was checked, and that a reparative action had commenced, which continued until all the parts were quickly healed up. Under the continued use of the galvanic current for ten days she regained power in the thumb and index finger, but there was no appreciable increase of motion or sensation in any of the other fingers.

At this date, January 3, 1863, she went to stay with some friends for a short time. On January 14 she returned, in consequence of the fingers becoming flexed upon the palm of the hand. On resorting to extension of the fingers she said that it caused pain; but when the extending force was removed, the fingers immediately became flexed again. A small splint padded with cotton was then applied, and the hand carefully bandaged. The splint was taken off at the end of three days, and she was told to return should flexion recur again. She returned in two days afterwards stating that "the fingers were closing again." The splint was reapplied, and kept on for ten days, without causing any inconvenience. Since that time she has not returned again.

I visited her on February 28, when I found the temperature of the injured hand had increased since I last saw her, so much so, that there was scarcely any difference in the temperature of the two hands. The muscles of the hand were considerably atrophied, so that the difference in size of the two hands was very distinct. There was slight flexion, but no return of motion or sensation in the middle, ring, or little fingers.

I am, &c.

ROBERT STYLE, M.D., L.R.C.S. Edin.

15, West-street, Gateshead, March 9.

COMMUNICATIONS have been received from—

Dr. HUGHLINGS JACKSON; Mr. SPENCER WATSON; Dr. W. WILSON; Dr. ARTHUR MITCHELL; Dr. ROBERT LYLE; Mr. J. ROGERS; M.D.; Dr. R. PAYNE COTTON; Mr. H. R. HATHERLY; Dr. J. HENDERSON; STUDENS PERPLEXUS; Dr. DAVIS; Mr. HAYNES WALTON; Mr. CHARLES HUNTER, Glasgow; Dr. CAMPS; LIVERPOOL; UNIVERSITY COLLEGE; Dr. DEVENSHIRE; Dr. J. C. BRUNWELL; THE SECRETARY OF THE ROYAL INSTITUTION; Mr. CURGENVEN; A SURGEON; THE SECRETARY OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Dr. TWEEDIE; Dr. RAMSBOTHAM; THE SECRETARY OF THE ROYAL MEDICAL COLLEGE; Dr. BRYAN; Mr. C. VASEY; A WELL-WISHER TO THE HUNTERIAN SOCIETY.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 14, 1863.

BIRTHS.

Births of Boys, 1006; Girls, 946; Total, 1952.
Average of 10 corresponding weeks, 1853-62, 1852·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	802	759	1,561
Average of the ten years 1853-62 ..	666·5	635·3	1301·8
Average corrected to increased population..	..	..	1432
Deaths of people above 90	..	..	5

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	12	14	7	1	8	3	3
North	618,210	9	8	17	4	28	15	2
Central	278,036	5	5	7	2	7	1	1
East	571,158	14	..	22	3	10	7	1
South	773,175	8	9	13	6	14	9	4
Total.. ..	2,703,969	47	36	66	16	67	35	11

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·295 in.
Mean temperature	38·1
Highest point of thermometer	54
Lowest point of thermometer	28·5
Mean dew-point temperature	33·1
General direction of wind	Variable.
Whole amount of rain in the week	0·21 in.

APPOINTMENTS FOR THE WEEK.

March 21. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

METEOROLOGICAL ASSOCIATION OF MEDICAL OFFICERS OF HEALTH, 7½ p.m. William Acton, Esq., "On the Increasing Mortality from Infantile Syphilis in London, with Suggestions for its Prevention."

ROYAL INSTITUTION, 3 p.m. Professor Max Müller, "On the Science of Language" (Second Series).

23. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Mr. W. J. Coulson, "On a Case of Obturator Hernia—Operation."

24. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 7½ p.m. Captain Burton, V.P., "On a Day amongst the Fans." Prof. Halmondi, "On Indian Tribes of Lorica, North Peru."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. Greenhow, "On Diphtherial Nerve Affections." Mr. Henry Thompson, "On Treatment of Severe Stricture of the Urethra by Gradual Distension at a Single Sitting."

ROYAL INSTITUTION, 3 p.m. Professor Marshall, "On Animal Mechanics."

25. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

HUNTERIAN SOCIETY, 8 p.m. Dr. McDonnell, "On a Case of Disease of the Knee joint, with Abscess, and Necrosis of the Tibia." Mr. Hutchinson, "On a Case of Injury to the Brachial Plexus, supposed to be torn through near the Spine."

26. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical House, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Frankland, "On Chemical Affinity."

27. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. W. Crookes, Esq., "On Thallium."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday (to-day) at 2 p.m.:—

By Mr. Ferguson—Staphylorraphy; for Necrosis of Femur; Ligature of Nævus.

By Mr. Henry Smith—For Varicocele; For Necrosis of Tibia.

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CHLORODYNE.

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(*Extract from* Affidavit made before S. C. Ward, Esq., Chancery Record Office, Chancery-lane, London, June 16th, 1862.)

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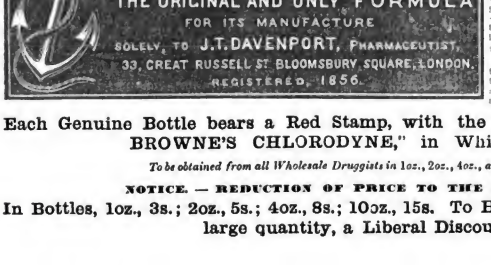

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ORIGINAL LECTURES.

PROFESSOR HUXLEY'S LECTURES

AT THE

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Lecture III.

(Being the Second of Six Lectures on Classification.)

Mr. President and Gentlemen,—At our last meeting we carried our study of the structure of the principal groups of the animal kingdom so far as the *Hydrozoa*; and I propose to-day, commencing with a similar examination of the *Actinozoa*, to carry that study, if possible, through the *Mollusca*. The class of the *Actinozoa* contains those animals which are familiar to us as sea anemones and coral polypes, the creatures which fabricate the remarkable skeletons on the table, and by the activity of which, in many tropical parts of the world, those huge reefs which are so well known to navigators are constructed. It embraces the Sea pens and the Red coral, and those creatures which are known to us under the names of *Beröe*, *Cydippe*, *Pleurobrachia*, etc., transparent, beautifully symmetrical, free-swimming animals, provided with eight rows of longitudinally-disposed large cilia. In all these animals we find a great uniformity of structure, and their plan of construction is quite as readily definable as that of the preceding class, with which they exhibit a close affinity. Like the majority of the *Hydrozoa*, most *Actinozoa* have their mouths surrounded by tentacles; there is the same primary distinction of the body into two cellular layers—the ectoderm and the endoderm—though in the adult forms of the more highly organised *Actinozoa* these primitive layers become further differentiated into bundles of definitely disposed muscular fibres, and even into nerves and ganglia.

As in the *Hydrozoa*, again, the alimentary canal communicates freely and by a wide aperture with the general cavity of the body, but the whole of the *Actinozoa*, polype-like as they are in external appearance, differ from the *Hydrozoa* by a very important further progress towards complexity. We found that in the *Hydrozoa* the digestive cavity was completely outside the general cavity of the body, the digestive portion of the organism being continued into, and not in any way contained within the part which contains the general cavity. But if you make a vertical section of a sea anemone (Fig. 1), you will find that the digestive cavity—as freely open at the bottom as in the *Hydrozoa*—is enclosed within a part of the body which contains a prolongation of the general cavity. If you could suppose the stomach of a *Hydrozoon* thrust into that part of the body with which it is continuous, so that the walls of the body should rise round it and form a sort of outside case containing a prolongation of the general cavity, the *Hydrozoon* would be converted into an *Actinozoon*.

Fig. 1.

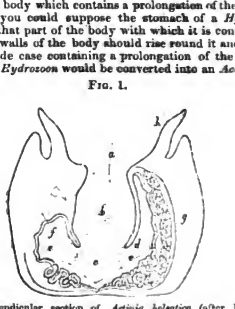

Fig. 1.—Perpendicular section of *Actinia holostica* (after Frey and Leuckart): *a*, mouth; *b*, stomach; *c*, common cavity: *d*, interne enteric chambers; *e*, cord containing thread cells at the edge; *f*, the mesentery; *g*, reproductive organ; *h*, tentacle.

The prolongation of the general cavity thus produced, which, as it surrounds the chief viscus, may be termed the "perivisceral cavity" (*d*), receives the products of digestion mixed with much sea-water; and the nutritive fluid which thus fills the perivisceral cavity and its ramifications plays the same part as the blood of the more highly organised animals. The gastric chamber of the *Actinozoa* does not lie free in the interior of the body, but is connected to the sides of it by means of membranous partitions, the so-called "mesenteries" (*f*), which pass radially from the stomach to the side walls of the body, and so divide the "perivisceral cavity" into a number of chambers which communicate with the bases of the tentacles. In the whole of the *Hydrozoa* the reproductive organs were attached to the exterior of the body, and projected from it. In the whole of the *Actinozoa*, on the other hand, the reproductive organs, which are, very frequently, both combined in the same individual, are internal, inasmuch as they are situated in the substance of the mesenteries (*g*).

These are the universal and distinctive characters of the *Actinozoa*. That some are simple and some are compound organisms; that some are fixed and some free swimmers; that many are soft, while a great number are provided with very dense skeletons; that some possess a rudimentary nervous system, while the majority have as yet afforded no trace of any such structure, are secondary circumstances in no way affecting the problem before us, which is, to find a diagnostic definition of the group.

Fig. 2.

Fig. 2.—*Plumatella repens*, a freshwater Polyzoon, magnified (after Allman).

In the next class on the list—the *Polyzoa*—we meet (notwithstanding the invariably minute size of these organisms) with a very great advance in complexity of structure. In such a compound *Polyzoon* as this specimen of sea-mat, or *Flustra*, the entire surface of the foliaceous expansion, on being examined by the microscope, will be found to be beset with an infinitude of minute apertures leading into little chambers, out of which, when the animal was living and active, you would have seen multitudes of little creatures, one from each chamber, protruding the oral extremities of their bodies. The ends of the branches of the freshwater form *Plumatella*, represented in this diagram, present a similar spectacle. Each mouth is surrounded by a circlet of tentacles, and, as every tentacle is fringed with long and active vibratile cilia, lashing the water towards the mouth, hundreds and thousands of little Maelströms are created, each tending to suck down such nutritious bodies, living or dead, as come within its range. Each mouth (Fig. 3) leads into a long and wide pharyngeal and œsophageal tube, which opens below into a definite stomach. From this is continued a distinct intestine, which bends upon itself towards the oral end of the body so as to form a sharp angle, and then terminates upon the outer surface near the mouth; so that we have here, for the first time in our ascending survey of the animal kingdom, an animal possessing a complete intestine, not only structurally separated from the general substance of the body, and provided with permanent apertures, as in the *Hydrozoa* and *Actinozoa*, but completely shut off from the perivisceral cavity, and in *direct* communication only with the external medium. All the *Polyzoa* possess a nervous system, the characters and the position of which are very well defined. It always consists of a single ganglion (Fig. 3, *e*), placed between the oral and the anal apertures, and sending off nerves in various directions. It has been affirmed that in some *Polyzoa* there is a more extended system of nerves by which the various zooids of the compound organism are placed in communication; but of that we want further evidence. In these animals no heart has been discovered as yet, the matters which result

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from digestion percolating through the walls of the intestine, and becoming mixed with the perivisceral fluid. One of the structural characters which I have mentioned is exceedingly

FIG. 3.

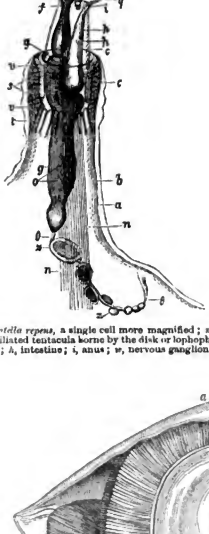

FIG. 3.—*Pyrosoma repens*, a single cell more magnified; *m*, calyx at the base of the ciliated tentacula borne by the disk or lophophore; *k*, gullet; *g g*, stomach; *h*, intestine; *i*, anus; *w*, nervous ganglion.

important. As I have said, the intestine is not straight, but is bent upon itself (Fig. 3), and the direction of flexure is such that the nervous ganglion, which corresponds with those called "pedal" in *Lamellibranchiata*, is placed in the re-entering angle between the gullet and the rectum. In order to express this relation of the nervous system to the alimentary canal, the flexure of the latter has been called "neural"—the side of the body on which the principal ganglion is placed, and towards which the intestine is bent being the "neural" side. Whatever our terminology, however, the great point is to remember that the structural relation which it expresses is constant throughout the *Polyzoa*. In the next division, the *Brachiopoda*, which are animals differing very much in external appearance from the *Polyzoa* we shall find, nevertheless, a singular fundamental resemblance of internal structure to the latter. All known *Polyzoa* are compound animals, that is to say, the product of every ovum gives rise by gemmation to great assemblages of partially independent organisms or zooids. The *Brachiopoda*, on the contrary, are all simple, the product of each ovum not giving rise to others by gemmation. All the *Brachiopoda* possess a bivalve shell—a shell composed of two horny or calcified pieces, which are capable of a certain range of motion on one another, and are very commonly articulated together by teeth and sockets. The proper body, which is small when compared with the size of the shell, has its dorsal integument produced into broad membranous expansions, which line the interior of the valves, of the shell, and are called the lobes of the mantle or "pallium." The aperture of the mouth is situated in the middle line between the pallial lobes, and on each side of it is a longer or shorter prolongation of the body, provided with ciliated tentacula. It is from the presence of these "arms" that the class has received its name. Suppose the tentaculate oval disk of a *Polyzoon* to be pulled out on each side to a much greater extent than is the case in the "Hippocrepian," division of that group, and you would give rise to "arms" closely resembling those of the *Brachiopoda*.

FIG. 4.

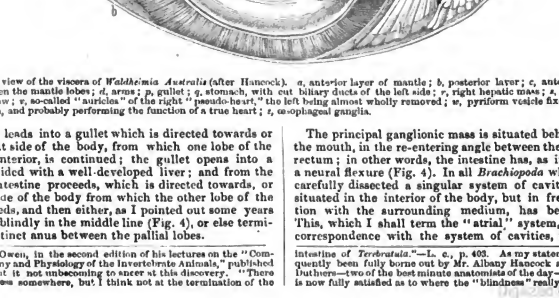

FIG. 4.—Lateral view of the viscera of *Waldheimia Australis* (after Hancock). *a*, anterior layer of mantle; *b*, posterior layer; *c*, anterior walls of the body between the mantle lobes; *d*, arms; *p*, gullet; *q*, stomach, with cut biliary ducts of the left side; *r*, right hepatic mass; *s*, intestine ending cæcally below; *v*, so-called "auricles" of the right "pseudo-heart," the left being almost wholly removed; *w*, pyriform vesicle fixed at the back of the stomach, and probably performing the function of a true heart; *x*, œsophageal ganglia.

The mouth leads into a gullet which is directed towards or lies along that side of the body, from which one lobe of the mantle, the anterior, is continued; the gullet opens into a stomach provided with a well-developed liver; and from the stomach an intestine proceeds, which is directed towards, or along, that side of the body from which the other lobe of the mantle proceeds, and then either, as I pointed out some years ago (a), ends blindly in the middle line (Fig. 4), or else terminates in a distinct anus between the pallial lobes.

The principal ganglionic mass is situated behind and below the mouth, in the re-entering angle between the gullet and the rectum; in other words, the intestine has, as in the *Polyzoa*, a neural flexure (Fig. 4). In all *Brachiopoda* which have been carefully dissected a singular system of cavities and canals situated in the interior of the body, but in free communication with the surrounding medium, has been discovered. This, which I shall term the "atrial" system, from its close correspondence with the system of cavities, which has re-

(a) Professor Owen, in the second edition of his lectures on the "Comparative Anatomy and Physiology of the Invertebrate Animals," published in 1855, thought it not unbecoming to sneer at this discovery. "There may be blindness somewhere, but I think not at the termination of the intestine of *Terebratula*."—L. c., p. 403. As my statements have subsequently been fully borne out by Mr. Albany Hancock and by M. Lacaze Duthiers—two of the best minute anatomists of the day—I trust Mr. Owen is now fully satisfied as to where the "blindness" really was in 1855.

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ceived the same name in the Ascidians, has been wrongfully regarded as a part of the true vascular system, and the organs by which it is placed in communication with the exterior have been described as "hearts." There are sometimes two and sometimes four of these "pseudo-hearts" situated in that part of the body wall which helps to bound the pallial chamber. Each pseudo-heart is divided into a narrow, elongated, external portion (the so-called "ventricle"), which communicates, as Mr. Hancock has proved, by a small apical aperture with the pallial cavity, and a broad, funnel-shaped inner division (the so-called "auricle"), communicating on the one hand by a constricted neck with the so-called "ventricle," and on the other by a wide, patent mouth, with a chamber which occupies most of the cavity of the body proper, and sends more or less branched diverticula into the pallial lobes. These have been described as parts of the blood vascular system; and arterial trunks, which have no existence, have been imagined to connect the apices of the ventricles with vascular networks opening into the branched diverticula, which are of a similarly mythical character.

In fact, as Mr. Hancock has so well shown in his splendid and exhaustive memoir, published in the *Philosophical Transactions* for 1857, the true vascular system is completely distinct from this remarkable series of atrial chambers and canals, the function of which would appear to be to convey away excretory matters, and the products of the reproductive organs which are developed in various parts of the walls of the atrial system.

The precise characters of the true vascular system of the *Brachiopods* probably require still further elaboration than they have yet received, and the same may be said, notwithstanding the valuable contributions of F. Müller and of Lacaze Duthiers, of their development; but the shell, the pallial lobes, the intestines, and the nervous and the atrial systems, afford characters amply sufficient to define the class.

Fig. 5.

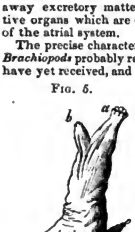

Fig. 5.—*Phallusia mentula*: *a*, oral; *b*, atrial aperture; *c*, base of attachment.

The next great division is that of the *Ascidoida*, which, like the *Brachiopoda* are marine animals, and are very common all over the world; the more ordinary forms of them being always easily recognisable by the circumstance that their external integument is provided with two prominent, adjacent apertures, so that they look very much like double-necked jars (Fig. 4). At first sight you might hardly suspect the animal nature of one of these singular organisms when freshly taken from the sea; but if you touch it, the stream of water which it squirts out of each aperture reveals the existence of a great contractile power within; and dissection proves that this power is exerted by an organism of a very considerable degree of complexity. Of the two apertures, the one which serves as a mouth is often—but not always—surrounded by a circlet of tentacles (Fig. 6). It invariably leads into an exceedingly dilated pharynx, the sides of which are, more or less extensively perforated. The gullet comes off from the end of the pharynx, and then dilates into the stomach, from which an intestine, usually of considerable length, is continued to the anal aperture. The latter is almost always situated within a chamber, the external aperture of which is that second aperture seen upon the exterior of the tube to which I referred just now. Furthermore, in all Ascidians which I have examined the first bend of the intestine takes place in such a manner that, if the intestine continued to preserve the same direction, it would end on the opposite side of the mouth to the nervous ganglion (Fig. 5); in other words, the nervous ganglion would not be situated in the re-entering angle between the gullet and the rectum. Therefore the flexure of the intestine is not neural, as in the *Polyzoa*; but as, on the contrary, the intestine is primarily bent towards the heart side of the body, its flexure may be termed "hæmal." And this hæmal flexure of the intestine in the Ascidians thus constitutes an important element in the definition of the class.

In these animals there is an atrial system, the development of which is even more extraordinary than in the *Polyzoa*. The second aperture to which I have referred (*b*, Figs. 5 and 6) is continued into a large cavity lined by a membrane, which is reflected, like a serous sac, on the viscera, and constitutes what has been termed the "third tunic," or "peritoneum." From the chamber which lies immediately within the second aperture (*k*, Fig. 6) it is reflected over both sides of the pharynx, extending towards its dorsal part very nearly as far as that structure which has been termed the "endostyle" (*m*, Fig. 6). It then passes from the sides of the pharynx to the body-walls, on which the right and left lamellæ become continuous, so as to form the lining of the chamber (*k*), into which the second aperture opens—the "atrial chamber." Posteriorly, or at the opposite end of the atrial chamber to its aperture, its lining membrane (the "atrial tunic") is reflected to a greater or less extent over the alimentary canal and circulating organs, sometimes inclosing each of their parts in distinct plications (as in the genus *Phallusia*), sometimes merely passing over them, and limiting the blood sinus in which they are contained (as in *Clavelina*, etc.). Where the atrial tunic is reflected over the sides of the pharynx, the two enter into more or less close union, and the surfaces of contact become perforated by larger or smaller, more or less numerous, apertures. Thus the cavity of the pharynx acquires a free communication with that of the atrium, and, as the margins of the pharyngo-atrial apertures are fringed with cilia, working towards the interior of the body, a current is produced, which acts in at the oral aperture, and thence out by the atrial opening. Hence the current, which, in a living Ascidian, is constantly setting in this direction.

Fig. 6.

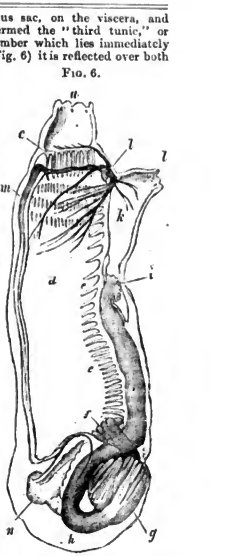

Fig. 6.—*Phallusia mentula*: the tes removed, and only so much of the animal drawn as would be seen in a longitudinal section. *a*, oral aperture; *b*, atrial aperture; *c*, circlet of tentacles; *d*, pharyngeal or branchial sac: the three rows of apertures in its upper part indicate, but do not represent, the pharyngo-atrial apertures; *e*, the languets: a series of tongue-shaped processes which project into the branchial sac; *f*, œsophageal opening; *g*, stomach; *h*, intestine performing its hæmal flexure; *i*, anus; *k*, atrium; *l*, ganglion; *m*, endostyle; *n*, heart.

The Ascidians possess a distinct heart, but of a very simple construction, seeing that it is merely an incomplete muscular tube, open at each end, and devoid of valves. Functionally, it is not less remarkable than structurally, for, in the great majority of Ascidians, if not in all, it exhibits an alternation in the order of the peristaltic contractions of its muscular substance, which has no parallel in the animal kingdom. The result of this reversal in the direction of the contractions of the heart is a corresponding periodical reversal of the course of the circulation of the blood, so that the two ends of the heart are alternately arterial and venous.

The perforated pharynx serves as a branchial apparatus, the blood contained in its perforated walls being subjected to the action of constant currents of aërated water. All Ascidians possess a single nervous ganglion placed upon one side of the oral aperture (*l*, Fig. 6), and, in all known genera but *Appendicularia*, it is situated between the oral and atrial apertures, and, indeed, between the oral and anal apertures; for the intestine, after it has made its hæmal bend, in all genera but that mentioned, curves down towards the neural side of the body, and opens into the atrium on that side of the body, and behind the nervous ganglion.

The outer integument of the Ascidians secretes upon its surface, not a calcareous shell, but a case or "test," which may vary in consistence from jelly to hard leather. And it is not one of the least remarkable characteristics of the group that this test is rendered solid, by impregnation with a su-

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stance identical in all respects with that "cellulose" which is the proximate principle of woody fibre, and forms the chief part of the skeleton of plants. Before the discoveries of late years had made us familiar with the production of vegetable proximate principles by the metamorphosis of animal tissues, this circumstance was justly regarded as one of the most remarkable facts of comparative physiology.

The last common and distinctive peculiarity of the Ascidians which I have to mention is one which acquires importance only from its constancy. The middle of the hæmal wall of the pharynx from near the oral to the œsophageal end, in all these animals, is pushed out into a sort of fold, the bottom of which projects into a blood sinus, and has a much thickened epithelial lining. Viewed from one side, the bottom of the fold consequently appears like a hollow rod, and has been termed the "endostyle" (*m*, Fig. 6). The functions of this structure are unknown, but it has been noticed in all genera of Ascidians hitherto examined.

ORIGINAL COMMUNICATIONS.

CASE OF

INTRA-CAPSULAR FRACTURE OF CERVIX FEMORIS WHERE OSSIFIC UNION IS SUPPOSED TO HAVE TAKEN PLACE.

By FRED. J. MASON, M.R.C.S. Eng.

On Thursday, February 13, 1862, I was sent for to see Mrs. L., aged 69, a healthy-looking woman, residing in an adjoining village, who had sustained an injury by falling on her left hip. The cause of the fall was attributed to her having received a blow on the chest. On my arrival, I found her reclining in a chair, and suffering much from pain in the hip. I ordered her to be carried to bed, when I made a careful examination of the injured part. The limb was perfectly powerless, the trochanter less prominent than one on opposite side, the foot was everted, and the limb shortened nearly an inch. By making extension and rotating the limb, crepitus could be distinctly felt. She suffered much pain at the upper and inner part of thigh. The small amount of shortening in the limb was owing, I imagine, to the capsular ligament having been but slightly lacerated. There was no swelling or bruise about the part.

The plan of treatment adopted in this case was the application of a Liston's long splint and a band round the hips for five weeks. The splint was then discontinued, and the limb supported merely by pillows up to the end of the tenth week, when, her health beginning to suffer, she was allowed to leave her bed. At this time she had not the slightest power to use the limb. Her diet all the time had been on a liberal scale, and she was allowed a certain amount of stimulants. At the end of the fourth month she could begin to use the limb a little, and, with the aid of crutches, got about tolerably well. She left her home for change of air, and I did not see her again until eight months after the accident, when she could walk with the assistance of a stick only, which she continued to use until the beginning of the eleventh month. I have seen her lately; she can walk (limping slightly) without the aid of either crutch or stick. There is very little shortening of the limb. She states that it gains strength, and she improves in her walking daily.

Foston.

SEVEN CASES OF OVARIOTOMY IN PRIVATE PRACTICE.

By T. SPENCER WELLS, F.R.C.S.

Surgeon to the Samaritan Hospital, etc.

In a Clinical Lecture published in the *Medical Times and Gazette*, July 26, 1862, a short account is given of a case in which I divided with an *ecraseur* the connections between the uterus and an ovarian tumour. The patient has continued in excellent health. Since that case I have performed ovariotomy seven times in private practice, and I now propose to lay a short account of these cases before the Profession. Reports of cases occurring in the Samaritan Hospital during the same period may be found in the *Medical Times and Gazette* for December 20, 1862, and March 14, 1863.

Case 1.—On June 30, 1862, I saw a single lady, 49 years of age, in consultation with Dr. Cahill, of Brompton. She was in a state of great distress, and we tapped her that afternoon to obtain relief. Fourteen pints of fluid were removed from an ovarian cyst, and great relief was afforded. The history of the disease showed that growth had commenced about four years before, but that the tumour had only risen from the pelvis into the abdomen about eighteen months before, since which time she had suffered a great deal, and latterly the increase had been rapid. On August 16, the cyst having refilled rapidly, I again removed fourteen pints of fluid by tapping, and agreed with Dr. Cahill to perform ovariotomy without much further delay. On September 3, Mr. Parson gave chloroform, and assisted by Dr. Savage, Dr. Cahill, and Dr Buchanan, of Glasgow, Professor Schuh, of Vienna, being present, I removed the tumour through an incision six inches long, after separating some parietal adhesions. The pedicle was very short, but was kept outside by a clamp. The left ovary was atrophied. A description of the tumour may be found in the *Medical Times and Gazette*, October 25, 1862, in the report of the Pathological Society. I described it as an example of *Adenoma*, being identical in structure with the chronic mammary tumour. The patient recovered rapidly, went to Worthing five weeks after operation, and has since enjoyed excellent health.

Case 2.—On August 22, 1862, I saw a single lady, 32 years of age, in consultation with Dr. Walshe, and Mr. Denne, of Winslow. Her health had been failing for two or three years before, but she had not noticed any abdominal enlargement until the beginning of 1862. The whole abdomen was occupied by an ovarian cyst, and it was agreed that she should be tapped. On September 4, I removed ten pints of thick fluid, and found a large group of secondary cysts on the left side. It was therefore arranged that another tapping would be useless, and that ovariotomy should be performed as soon as the tumour had refilled, which it did very soon. I operated on November 6. Mr. Clover gave chloroform, and I was assisted by Dr. Savage and Messrs. Lawson and Peirce. There were no parietal adhesions, and I removed a very large cysto-sarcoma through an incision four inches long. The peduncle was on the left side, and very short, so that there was considerable traction on the clamp, depressing the lower angle of the wound close to the sacrum; but this was not followed by any unpleasant symptom; recovery was uninterrupted, and she has since remained in excellent health.

Case 3.—Several times in September, 1862, I saw a single lady, 23 years of age, in consultation with Dr. Hawksley, who had made the diagnosis of a multilocular ovarian cyst on the left side. There being no large cyst, tapping was evidently useless, and it was agreed that I should perform ovariotomy as soon as the operation was warranted by the state of the general health, or the urgency of any symptom. Dr. Savage met us on November 8, and it was decided that I should operate a clear week after the cessation of the catamenial period. On November 15, Mr. Clover gave chloroform, and, assisted by Drs. Hawksley and Savage and Mr. Parson, I removed a non-adherent cyst through an incision four inches long. The peduncle was very short, and the traction on the clamp considerable, but the stump was kept outside. There was a good deal of pain on recovery, but it was relieved by an opiate. During the next four days the pulse only varied from 76 to 84, and there was no bad symptom; but she was very hysterical, and complained of a severe sciatic pain at times. This ceased when the clamp was removed on the 20th, and the bowels acted. After this she gradually improved, went to St. Leonard's on December 18, afterwards to Brighton, and has since been gradually recovering perfect health.

Case 4.—On October 23, 1862, I was consulted by a single lady, 26 years of age, with a very large multilocular cyst of the left ovary, of two years' standing, for which she had consulted Dr. Grimsdale, of Liverpool, who had said that tapping could be of no service, and that ovariotomy was her only resource. I entirely agreed with him, and performed the operation on November 26. Mr. Clover gave chloroform, and I was assisted by Professor Pirrie, of Aberdeen, Dr. Druitt, and Dr. Kumar, of Vienna, removing a cyst (after emptying it of thirty-two pints of viscid fluid), and groups of secondary cysts, through an incision four inches long.

There were some unimportant adhesions, easily separated, above and to the right of the umbilicus. Professor Pirrie kept the abdominal wall so closely pressed against the cyst as I withdrew it through the opening that we did not even see the intestines. The right ovary was felt to be healthy. The peduncle was unusually long. She recovered well, but for several days after operation complained of severe pain in the course of the left sciatic nerve, but never of any pain in the abdomen. The pain seemed to be due to a hernia or prolapse of the pedicle behind the clamp, forming a swelling which increased daily after the clamp was removed from the size of a walnut until it was about three inches in height and four in circumference. On the summit were the remains of the slough, and the peritoneal surface around was covered by flakes of lymph and bedewed by serum which exuded in considerable quantity. The rapid increase in the stamp was evidently the result of œdema caused by pressure of the contracting wound. The sciatic pain it caused was becoming so severe and continuous that, on December 1, I placed a loop of wire around the neck of the prolapsed pedicle, and proceeded to tighten the wire with an écraseur, but the pain thus caused in the thigh was so great that I took away the wire, and, with the kind assistance of Mr. Hulke, who gave her a little chloroform, I transfixed the stump, tied it in two portions, and cut it away. There was some bleeding, which we stopped by a ligature tied below the spot of transfixion. Dr. Kumar carefully examined the portion of stump, and found in it some very large vessels, and a nerve as large as the ulnar at the wrist, but it was chiefly made up of cellular tissue. After this she steadily improved, the sciatica disappeared, she went to Liverpool on December 26, and has since been in excellent health.

Case 5.—In July, 1862, I was requested by Dr. Martin, of Rochester, to see a single lady, 53 years of age, and found the abdomen, from an inch above the umbilicus downwards, occupied by a multilocular ovarian tumour. She had been well until about a year before, and the tumour had only been detected about three months before I saw her. As there was no urgent symptom, we advised her to wait. She went on pretty well until October, when she began to increase in size, and early in December the legs became œdematous. I saw her on the 16th of December, and found that a considerable quantity of ascitic fluid had formed around the ovarian tumour. A nodulated tumour could be felt in the pelvis behind the uterus. This tumour moved freely in every direction with the abdominal tumour. The cervix uteri was normal, and movable independently of the tumour. There was no albumen in the urine, and I advised ovariotomy without delay as the only hope of saving life. Dr. Gream saw her on December 16, and Dr. West on December 17. Both these gentlemen agreed that she could not live a year if left alone, or if the ascitic fluid were removed by tapping; and it was agreed that ovariotomy should be performed. I operated on December 23. Mr. Clover gave chloroform, and I was assisted by Dr. Savage, Dr. Martin, of Rochester, and Dr. Kumar, of Vienna. After making an incision five inches long from an inch below the umbilicus, and allowing about twelve pints of ascitic fluid to escape, a non-adherent, semi-solid tumour, of very irregular shape, was exposed. I tapped this in two places with a very large trocar, but the contents were too viscid to escape. Rather than enlarge the incision, I passed my hand into the tumour and broke it up, gradually squeezing it outwards. A short pedicle was secured by a clamp, and the peritoneal cavity very carefully cleansed by sponges from all serum and ovarian fluid. The wound was closed as usual. Healthy reaction soon came on. She had a comfortable night after one opiate, and went on remarkably well afterwards. The pulse remained rapid—100 to 110—for three weeks, but there was no re-formation of ascitic fluid. She returned to the country a month after operation, and I had a letter on March 14, stating that "she complains of nothing, and takes her drives and walks, and enters into society as she always used to do."

Case 6.—On January 31, I saw a single lady, 25 years of age, who was suffering greatly from an ovarian tumour which occupied the whole abdomen, and extended beneath the false ribs, pushing them outwards, and the ensiform cartilage forwards. The girth was forty-two inches, the measurement from sternum to pubes nineteen inches. I wrote to Dr. Watson (by whom the parents of the young lady had been advised to consult me) stating that I found a large cyst of the right ovary and groups of smaller cysts on the same side; that there was no proof of disease of the left ovary, and that the tension of the abdomen was so great that it was impossible to determine the extent of adhesion. There was no albumen in the urine, nor any proof of any other than the ovarian disease. As tapping could only be of temporary service, I proposed to make a small incision, and be guided by the extent of adhesion, as to whether I should do more than empty the large cyst; and it was arranged that I should do so. On February 3, Mr. Clover having given chloroform, and assisted by Dr. Savage, Mr. Burton, of Doverstreet, Mr. Cowell, of Piccadilly, and Dr. Kumar, of Vienna, I made a small incision midway between the umbilicus and pubes. The large cyst being firmly adherent here, I opened it and allowed its contents to escape before proceeding. A large group of secondary cysts was then felt to be freely movable above and to the right of the umbilicus, and as the adhesions seemed to be chiefly near the incision, I enlarged it to between four and five inches, separated some adhesions, and passed my hand into the cyst, breaking up the smaller cysts as I gradually withdrew the whole of the tumour, separating a small piece of adherent omentum, and lastly a very firm patch of adhesion in the right iliac fossa. The pedicle was very broad and short, and there was considerable traction on the clamp, which was fixed outside. The left ovary was healthy. The abdominal cavity was carefully cleansed by sponging. She was restless, and complained of much pain for about two hours after operation, but it subsided after a second opiate, and I was told that she had been in a very similar state some months before after taking chloroform for tooth-drawing. The skin and kidneys acted freely during the evening; she became easy; the pulse rose to 110, and she passed a good night. The next morning she appeared to be doing very well, had not required more opium, and was cheerful; but the pulse had risen to 130. Still as it was soft and not feeble I was very hopeful. In the afternoon the urine, which had been clear and abundant, became scanty and concentrated, and there was a return of pain. An opiate was given, and the pain was relieved, but a tendency to vomit came on. At night she became weaker. The pulse rose to 140, and was more feeble. Champagne was given, and a mixture of eggs and brandy thrown into the rectum. Early in the morning she became faint, and a profuse discharge of serum—upwards of a pint—escaped beside the peduncle. Brandy was given freely both by the mouth and rectum, and she rallied for a time, but afterwards continued to sink, and died forty-four hours after operation. Dr. Kumar, Mr. Cowell, and Mr. Burton were present at the post-mortem examination. There was not a drop of blood, nor any clot in the peritoneal cavity, but there were evidences of a low form of diffuse peritonitis, shown rather by the effusion of serum than of lymph. Two or three coils of small intestine were united together by recent lymph. The process of repair had commenced by a coating of lymph on the surfaces where the adhesions had been separated, and the peritoneal edges of the wound were well united. There was a little bloody serum in the subperitoneal tissue of the uterus and left ovary. On the right side the broad ligament and Fallopian tube which had formed the peduncle were firmly secured.

On reflecting upon this case, I can see no reason to regret that the operation was performed, while, if the patient had been allowed to die a few weeks or months later of the natural progress of the disease, there would have been great reason to regret that the effort to save her life had not been made. The true lesson it appears to teach is,—not to delay the operation too long, nor waste time in useless or merely palliative treatment.

Case 7.—On the 23rd and 27th of last February I saw an unmarried mulatto lady from Jamaica, in consultation with Dr. Hare, who had made the diagnosis of a multilocular cyst of the left ovary. The early symptoms of the disease had commenced when she was about eighteen years of age, but it was not until the autumn of 1861 that any increase in the size of the abdomen was observed. In February, 1862, she was tapped, and seven pints of fluid removed. She was relieved for a time, but was tapped again in September, 1862, when fourteen quarts of fluid were removed, and a hard, movable tumour left. She filled again rapidly, and when I saw her with Dr. Hare, she was larger than she had ever been before. The girth was forty-six inches; from sternum to pubis, twenty-six inches; and thirty-one inches from one anterior superior spine of the ileum to the other. She was very u willing to be tapped again; and as I considered

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case to be a fairly favourable one for ovriotomy, it was decided that the operation should be performed. It was done on March 9. Mr. Parson gave chloroform, and I was assisted by Dr. Savage, Dr. Druitt, and Mr. T. H. Smith. The incision extended five inches midway between the umbilicus and symphysis pubis. The cyst was firmly adherent there, and I opened it and allowed the contents to escape before exposing the peritoneal cavity by separating any adhesions. When the cyst was empty, careful examination was necessary to make out the exact line of demarcation between the cyst and parietes, and it was necessary to separate some very firm and extensive adhesions. When this was done, I passed my hand inside the large cyst, and broke up a number of smaller cysts, pressing out quantities of hair and fat, and then withdrew the whole of the tumour, Dr. Savage assisting by steady pressure on the varietes, which he kept closely applied against the cyst as it escaped. The pedicle was secured by a clamp, the left ovary sound to be healthy, the pelvic cavity thoroughly cleansed by sponging, and the wound united as usual. A loose shred of vascular tissue, which hung loosely from the abdominal wall on the left of the incision, was brought out beside the pedicle, tied, and cut away. It consisted of a portion of the cyst wall, and of some organised fibrine, which had been the medium of connexion between the cyst and the parietes. There were forty-six pints of fluid collected, and the cysts weighed four pounds. Some of the smaller ones contained hair, and several teeth grew from the lining membrane of two of them. She soon rallied after the operation, did not vomit once, and had a good night after one opiate. A return of pain on the fourth day led to a second opiate, and this was the only medicine given, except a teaspoonful of castor-oil on the sixth day, which was followed by easy action of the bowels. Dr. Hare called upon her on March 23, and found her sitting up in an arm-chair, convalescent.

3, Upper Grosvenor-street.

HYDROCYANIC ACID IN THE TREATMENT OF INSANITY.

By KENNETH McLEOD, M.D.

(Continued from page 291.)

Case 6.—Melancholia—Parozysms of Acute Excitement Successfully Treated by the Administration of Hydrocyanic Acid.

M. E., married, admitted January 29, 1861. Labours under a second attack of insanity; the first occurred at the age of 20; is now upwards of 50; present attack of two months' duration; cause, "hereditary predisposition"; mother died in an asylum; despondency has been the principal feature; has attempted self-destruction by strangling.

Symptoms on Admission.—Is a tall, strong, stout woman, of arthritic diathesis; large face and features; has a very florid complexion from dilated facial capillaries; general health fair; complains of severe frontal cephalagia, giddiness, rheumatic pains, etc.; mentally, is very melancholic, recriminating, entertaining dark views of present circumstances and forebodings of future.

September 23.—Until recently has exhibited no acute symptom; has been habitually gloomy, silent, and sad; expression distracted and desponding; declares that she is miserable, beyond hope in this world, and that she will be lost in the world to come; has not attempted suicide in any way; has employed herself with needlework, knitting, etc; has complained constantly of headache, want of sleep; occasional vomiting; been treated, without much benefit, by tonics, sedatives, and liberal diet. Lately, she has given way to emotion, violent and suicidal manifestations; has rushed along the corridor of her ward, wringing her hands in despair, crying, attempting to rush through the window, and refusing any consolation or comfort. These paroxysms have been treated with perfect success by the administration of ♏v. of Scheele's dilute hydrocyanic acid. She describes the effect as overpowering; says that it effectually prevents her fretting or shouting. Generally asks to lie down a few minutes after taking a dose; gets up in an hour or two quite calm and void of excitement. When the excitement recurs, the same treatment is pursued, with the same result.

November, 1862.—Has not had any paroxysm of excitement for upwards of a month; is low and desponding, but settled, calm, and industrious.

Case 7.—Melancholia—Improvement under Tonics, Sedatives, and Stimulants—Acute Parozysms—Successfully Treated by Hydrocyanic Acid.

E. M., aged 49, a widow, was admitted on April 12, 1862. Labours under a second attack of insanity of seven days' duration. The first occurred at 34 years of age. The causation of this attack appears to be partly physical, nervous diathesis, and low state of health, predisposing; and moral, her husband's death exciting. She has manifested the symptoms of suicidal melancholia, declares that her soul and body are lost, and has attempted suicide by cutting her throat.

Symptoms on Admission.—1. *Physical.*—Is of neuro-arthritic diathesis; is emaciated, cachectic, anæmic, and melasmic. No structural change or acute disease of any part of the body discoverable. 2. *Mental.*—Labours under deep melancholia, which is general, as to past, present, and future, and envelops all her feelings and memories of their circumstances and relations with gloom. Refuses her food. Repeats that she is lost, and wishes she were dead.

The treatment resolved on, and pursued, consisted of—1. The ingestion of as much nutritive food as possible, at first artificially, and, when she began to feed spontaneously, by concentrating as much as possible; 2. Stimulants—wine, porter, etc.; 3. Tonics—the citrate of iron and quinine, in doses of gr. v. thrice daily; 4. Sedatives—a combination of hyoscyamus, morphia, and ether, at bed-time; 5. Open-air exercise and light employment.

July 29.—Has gradually improved in physical health and mental condition; has become more stout and ruddy; expression more cheerful; is industrious; has lost most of her delusions.

September 7.—Was visited yesterday by her son. The occasion has caused a recurrence of melancholia. Is more excited than she has been since admission; in constant motion; gesturing despairingly; wringing her hands; clenching her teeth. Is completely pre-occupied, crying, and incessantly repeating distracted exclamations and expressions. To have acid. hydrocyanic dil. ♏v. every hour.

8th.—Settled down almost immediately after the first dose of the medicine ordered; became calm, quiet, cheerful, and gave over her gesticulations and expressions. Slept well last night. Excitement appeared in slight degree this morning; was promptly stayed by the administration of the acid. Describes its effect thus:—"Goes all over me"—"makes me 'most drunk"—"makes my head light"—"can speak, but feel as if I could not stand"—"feel calmer; more able to control myself"—"takes effect in a minute or two after taking it."

November.—No excitement has occurred since the report of September 8. Former treatment resumed. Has continued to improve satisfactorily, and will probably, at no distant date, be discharged.

Case 8.—Mania—Third Attack—Extreme Excitement—Immediate and Sustained Improvement from the Use of Hydrocyanic Acid—Gradual Convalescence and Ultimate Recovery.

E. R., aged 39, single, poor, a dressmaker, of respectable family, well educated, amiable, industrious, chaste, religious. At some former period, suffered from disease of the right knee-joint, which occasioned for a long time great suffering, to which she attributes her mental affection; caused considerable lameness from anchylosis. Was admitted into the asylum on two former occasions, in August, 1858, labouring under an attack of mania similar in phenomena to the present, and in June, 1861, labouring under melancholia. From both attacks she made most excellent recoveries, becoming very useful, industrious, sensible, and cheerful. She was discharged in December last, and continued very well during the month or two following. She has recently, however, exhibited in conduct and conversation generally a great amount of eccentricity, and during the last six days has been in a state of very great unruliness and excitement. Admitted on June 11, 1862.

Symptoms on Admission.—Has defective palatal development; lateral incisors of upper jaw wanting; the front incisors very large and bucked; development otherwise excellent; is stout, well-nourished, and in good physical health; is menstruating.

Mentally.—Is in a state of extreme mania; incessantly moving and talking; grimaces; winks; gesticulates; shouts; swears; scolds; repeats the same expression over and over again; gets out of bed; exposes herself; is excited when any of the Medical officers enter the ward.

June 12.—Continued very excited during the afternoon, evening, and night. Was specially watched. 9.30 a.m.—Is in a state of intense excitement, struggling, gesticulating, grimacing, screeching, yelling, kicking, screaming, nudifying, swearing, etc. Ordered acid. hydrocyanic dil. ♏iv. every hour. Became quiet after the first dose in a few minutes. The calmative effect was uninterruptedly maintained during the afternoon. Seen at 10 p.m.—She was sitting quietly on her bed talking rationally. She stated that the medicine soothed her. Explained the occurrence of delirium by a "rush of blood to her head." Has been conversing quietly and rationally with patients and attendants during the whole afternoon.

13th.—Slept during most of the night; when awake talked somewhat whimsically, but not obscenely or loudly. The contrast with the night before is alleged, by an intelligent patient who slept next her, to have been as "marked as between night and day"—"she has been quite a different person." In the morning seemed inclined to be restless and talkative, but after having got one or two doses of prussic acid she became quiet and capable of self-control; was up all day; sat quietly, and conversed with a considerable degree of rationality.

14th.—Slept well; up all day; did a little work; is rapidly regaining the rational use of her faculties.

30th.—Since last report there has been no re-accession of exment. During the day she sits quietly, talks to the patients or attendants, and employs herself in sewing. Sleeps well at night; is still incoherent, and occasionally winks and laughs, but there has not been the slightest approach to the same degree of aberration and intensity of manifestation which she exhibited formerly.

July 16.—Has been rational, quiet, and industrious since last report; complains of pain in both ears; there is occasional otorrhœa, and sometimes discharge of small quantities of blood, with relief of pain and head symptoms.

November.—Has continued uniformly to improve; may now be considered perfectly restored to reason; will be discharged soon.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

METROPOLITAN FREE HOSPITAL.

OVARIOTOMY IN A WOMAN AGED SIXTY-FIVE —RECOVERY.

(Under the care of Mr. HUTCHINSON.)

[From Notes by Dr. WARNER, House-Surgeon.]

THE patient in the following case is probably the oldest on whom the operation of ovariotomy has yet been performed, we may also add that she makes the fourth recovery after ovariotomy, in succession, at this Hospital. Mr. Hutchinson pointed out to those present at the time of the operation that although the woman's age, counting her years, was 65, yet in constitution she was at least ten years younger. There seemed every probability that, if relieved of her disease, she might enjoy active life for many years to come. Her own strong wish for the operation must also, he remarked, be allowed its weight. She was a monthly nurse, and until the tumour had formed, had been in constant employment. For the last six months the size and weight of the tumour had wholly incapacitated her for any engagements. She was losing flesh and strength, and if not relieved of her disease, there was nothing before her but an illness, more or less slowly tending towards death, and involving throughout its course deprivation of almost all her accustomed sources of enjoyment. He had therefore felt that the mere fact of the patient's age was not one which ought to induce him to decline the operation. He directed attention to an œdematous state of the integuments of the abdomen, and in some degree of the lower extremities, stating that the urine had been examined and found to be free from albumen. The œdema had much diminished during the fortnight that the woman had been in the Hospital. He expressed his opinion that the tumour was polycystic, and had unusually thick walls. He did not expect to encounter any firm adhesions, as there was no history of peritonitic tenderness until quite recently. The following are the facts of the case:—

S. B., aged 65, looking much younger than she really was. She had been sent to Mr. Hutchinson in order to the performance of ovariotomy, by Dr. Sutton, under whose observation she had been at times for three years. Dr. Sutton first discovered the tumour three years before. It was then very small, and at first it increased slowly, and caused no inconvenience; latterly, it had grown much more rapidly; the woman's health had also much failed. She was a widow, and had borne five children. The abdomen measured forty-five inches in circumference, and was everywhere dull excepting in the right loin. The integuments, especially of the hypogastrium, were œdematous, and the prominence of the tumour was greatest in the hypogastric region. Fluctuation could be elicited, but it was indistinct, and as if transmitted through very thick structures. The uterus was ascertained by vaginal examination to be high up, and quite normal.

On December 9, ovariotomy was performed. An incision, just large enough to admit the hand, was made through the integuments down to the cyst. The hand being introduced, some slender adhesions over the whole front of the tumour were broken down very easily. The chief cyst was then punctured by a large trocar. When the cyst was nearly empty, it was drawn out at the wound, its withdrawal being very greatly facilitated by turning the woman over on her right side. It was necessary during the withdrawal to puncture two or three of the smaller cysts. The pedicle was long and thick. It was secured in a clamp, and the tumour was then cut away about three inches above it. The intestines had not been seen, Mr. Chance, who was assisting, having carefully kept the edges of the wound closed during the concluding steps of the operation. The wound was closed by hare-lip pins, a flannel bandage applied, two grains of opium introduced as a suppository, and the patient returned to bed. The operation had occupied but a very short time, and the woman had borne it remarkably well.

With the exception of a few teaspoonfuls of brandy with ice during the afternoon and evening, nothing was done or required in the way of treatment. During the following night she slept well, and on the next morning her countenance was cheerful, tongue clean, pulse 80, soft and full. A little tea and dry toast was now allowed.

On the 12th the clamp was removed, and on the 13th the pins were taken out. The wound had now entirely healed, but the stump of the pedicle was of considerable size, and occupied its lower end. Excepting a little trouble from vesical irritation, at the end of ten days, and for which quinine and opium were prescribed, the woman had not the slightest ailment during her convalescence. She left the Hospital in excellent health on January 8, thirty days after the operation.

NOTE ON THE IMPORTANCE OF A SIDE POSITION IN PERFORMING OVARIOTOMY.—In commenting on the above case, Mr. Hutchinson adverted to the great assistance derived in ovariotomy from turning the patient on to one side. It was convenient to perform the first steps of the operation with the woman on her back, but as soon as the tumour was partially emptied, the side posture had great advantages. The patient should be turned to the side opposite to that from which the tumour grew, as the intestines would thus be less likely to protrude. The advantages obtained are two—first, in the greatly increased facility of dragging out the cyst, and, secondly, the much diminished risk of any cyst-fluid finding its way into the peritoneal sac. With the patient on her back, and the cyst nearly empty, there is often still considerable difficulty in getting the tumour out, owing to the circumstance that the remaining fluid by its gravitation drags the cyst back again at one part as fast as the operator extracts it at another. All this is remedied by the side position, and the operation may be completed much more quickly and with a smaller incision. The importance of preventing cyst-fluid or blood from gaining access to the peritoneal sac is obvious, and can scarcely be overrated. It is clear that there would be much less likelihood of any doing so with the patient on her side. Mr. Hutchinson added that he had several times tried the side position, and found it more than realise the advantages expected. It had also been tried, at his suggestion, in a case in which he was not the operator, and with a result which was all that could be wished for. In cases of polycystic tumours, in which it was needful to cut into many cysts in succession, the side position was especially desirable, and

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some such it might even save time to turn the patient well over, and then cut freely into the tumour, without any attempt at emptying it by means of the trocar. It was of course important to arrange for a good light from below in adopting this position.

GUY'S HOSPITAL.

ACUTE RHEUMATISM—ENDOCARDITIS—PERICARDITIS AND PLEURITIS—CLINICAL REMARKS.

(Under the care of Dr. HABERSHON.)
[Reported by Mr. EDWIN MOORE.]

THE following remarks on the case were made by Dr. Habershon when the patient left the Hospital:—

In this case of acute rheumatism, the symptoms were well marked; and although no cardiac bruit existed at the time of admission, it soon became apparent that both the pericardium and endocardium were acutely and severely involved. The pericardial friction-sound was very distinct, but in a few days dulness in the cardiac region increased, and the friction-sound ceased in consequence of effusion into the serous sac. The pleura also, on the left side, became affected; and pain in the chest, which had previously been absent, now distressed the patient, showing the truth of a remark often made by Dr. Addison, that pain is not a sign of pericarditis; previously, the cardiac complication was accompanied with a sense of distress, but with the pleural affection the dyspnœa was more manifest. The pain in the joints soon subsided, but the effusion into the serous cavities, both of the pleura and pericardium, increased; an endocardial bruit became more distinct, and assumed a harsh, almost musical character. The patient was very ill, and the pulse soft and rapid. Wine and ammonia were given, and afterwards quinine. The distress then quickly subsided, and the effusion into the pleura rapidly lessened, whilst the pulse became more steady; at the same time, the endocardial bruit became less harsh, and has continued to lessen till the present period. The pericardial dulness has also steadily lessened, and the patient is now convalescent.

As to the treatment, potash salines and opiates were given, and mercurial purgatives were administered when necessary. Mercury, however, was not given so as to affect the system, and we regard his present condition as more favourable than if mercury had been so used; for we have seen acute pericarditis come on, and advance during salivation, and have witnessed effusion increase till the mercury was discontinued. Neither have we any proof that effusion upon the valves becomes lessened under its influence, but too frequently the patient is left for many weeks in a blanched, anæmic condition, and the cardiac disease advances more rapidly, and relapses after exposure seem to be more frequent.

W. C., a butcher, living in London (his previous health had been good), was admitted on May 29.

On Sunday, the 26th, he began to feel ill, with pains in the limbs and back, and a general feeling of chilliness, loss of appetite, headache, and languor.

On Monday, the 27th, he noticed that his ankles and knees were beginning to swell. His symptoms increased until his admission, on May 29.

He is a stout, muscular, florid-looking man. His countenance is now anxious, and expressive of great pain. He has slight headache, and his tongue is covered with a white fur; pulse, hard and full, 100; no cough; perspiration profuse; urine scanty and high coloured; ankles and knees swollen and painful; heart-sounds normal. ℞ Pil. cal. c. col., gr. xv., statim. ℞ Potassæ bicarb., gr. xv.; ex. julep. potassæ nitratis, ℥j., 4 hôris. ℞ Pulv. opii, gr. i., o.n.

30th.—Bowels have been freely acted on by the aperient. Shoulders, knees, and ankles swollen and painful; heart-sounds somewhat muffled, but no bruit; pulse 110, full, hard, and jerking.

31st.—A systolic bruit to be heard under the left nipple. It can be traced into the axilla. He complains of a sense of oppression in the cardiac region. Shoulders, elbows, and wrists most affected by the rheumatism; tongue very much furred. To continue the mixture and the opiate at night.

June 1.—Bruit much louder and musical, and he complained of pain in the left side. A blister was applied over the region of the heart.

2nd.—The blister has relieved his chest symptoms, but his tongue is very much furred, and his countenance anxious.

3rd.—To-day a "to-and-fro" murmur and a pleuritic friction-sound are heard under the left breast. He complains of pain over the region of the heart, increased no pressure and prolonged inspiration, and of dyspnœa. His pulse is 110, and smaller; his tongue is much furred; the joints a little less painful.

4th.—The friction-sounds are well marked, but he has less pain and dyspnœa, and his countenance is less anxious; tongue furred. An aperient of calomel and colocynth. To continue the mixture and the opiate.

5th.—Pulse 110; countenance more cheerful; pain in chest less, but friction-sound still distinct, and with it the systolic bruit also heard.

8th.—The friction-sounds are nearly inaudible; the endocardial murmur continues well marked; pulse 110; no pain in the chest. The hands, wrists, and elbows are much swollen, but are less painful.

10th.—No friction-sounds are now audible. There is dulness on percussion over the region of the heart to the extent of three inches and a-half. Joints better; tongue cleaner; pulse 110.

13th.—Joints less swollen and painful; pulse still rapid, but smaller and soft; tongue cleaner. ℞ Julep ammoniæ, ℥j., ter. die.

15th.—A blister to the region of the heart. Four ounces of wine.

19th.—The joints are much better; the countenance is still pale, but he is more cheerful. His tongue is clean, and his appetite much improved. The dulness over the region of the heart is a little less in extent, but there is evidently some effusion into the left pleural cavity; dulness on percussion, imperfect respiratory murmur and tactile vibration, and well-marked ægophony. To take now the mistura quinæ.

24th.—Joints nearly well; pulse very irregular in power, jerking, 100 in the minute; endocardial bruit very loud, most distinct about two inches to the left of the nipple; other chest symptoms continue much the same.

July 3.—Pulse still continues quick, but it is much more regular; pericardial dulness more than normal; in other respects the patient is better. Five grains of the ammonia citrate of iron three times a-day.

6th.—Loud pleuritic friction-sound heard over the whole of the lower half of the posterior aspect of the left side of the chest. No pain. Pulse more regular, 100.

10th.—The friction-sound has disappeared, and no fluid can be detected in the pleural cavity. Pericardial dulness less, but still exceeds normal limit. Pulse regular, 100.

He is free from pain and dyspnœa, and for some days has been walking about the ward. The endocardial bruit is still distinct; has now less harsh character.

HOSPITAL FOR SICK CHILDREN.

EXCISION OF THE HIP-JOINT—RECOVERY—SUBSEQUENT DEATH FROM PNEUMONIA—AUTOPSY.

(Under the care of Mr. HOLMES.)

MARGARET K., aged 4½ years, was admitted under Mr. Holmes's care on May 21, 1862, on account of an abscess communicating with the left hip-joint, attributed to an accident two and a-half years before, since which time she had always limped with that leg. The opening, which was near the trochanter, led down to diseased bone, and on moving the joint under chloroform grating could be felt. The child's health was good, and little pain was experienced when she was at rest.

The affection had been the subject of careful Surgical treatment during the last two years, but she continued to grow gradually worse. The viscera having been reported sound, it was decided to operate.

The operation was performed on June 28, under the influence of sulphuric ether. It was tedious from the depth of the parts, but not bloody. The head of the femur was found much eroded, flattened, and quite altered in form. In the neck, towards the base of the trochanter, was a large cavity, containing a fragment of dead bone. The finger passed into this cavity so readily that its edge was taken at first for the lip of the acetabulum. The section was made just above the

trochanter minor; the bone exposed by the section looked healthy. There was a good deal of superficial ulceration of the acetabular cavity. Its surface was freely gouged. The limb was then put on an interrupted splint, but so much pain and swelling followed the operation, that it was necessary to remove it. Suppuration having been established in the wound, the slight fever which followed the operation soon subsided, the splint was re-applied under chloroform, and matters went on quite well till the end of July, by which time the wound had begun to heal. The child was now attacked with measles, which retarded her convalescence. The disease, however, was not in a very severe form.

On September 1, it was noted that the wound had nearly healed.

By the 15th the splint was dispensed with.

In the early part of October the child was able to stand, and towards the end of the month she began to walk a little.

The wound healed in the month of November, and on December 6 she was sent to Brighton for change of air. She could then walk quite nimbly. There was a difference between the limbs of one inch and a-quarter in length. The spine did not appear at all twisted.

When she went to Brighton she seemed perfectly well, but after a short stay there she was sent back, with the report that she had taken cold and fallen off in health. Soon after her return, well marked double pneumonia showed itself, against which she struggled for a considerable time, but gradually became weaker. General œdema set in, and she died on February 10, 1863. The wound was ulcerating for some time before her death.

On post-mortem examination, a good deal of both lungs was found to be consolidated. No tubercles were discovered in the lungs, or any other part of the body. The kidneys were smooth, and rather increased in density. All the other viscera were healthy. The remains of the end of the femur were drawn up into the acetabulum by the tendon of the psoas muscle. The end of the bone was rounded off and enlarged by the deposition of a quantity of substance resembling cartilage. This was united to the surface of the acetabulum, in all parts of its circumference, by a large quantity of cellular adhesions, which, however, allowed of a good deal of motion between the bones. The cavity of the acetabulum was enlarged and its walls thickened by inflammation condensing the bone. The whole was enclosed by a capsule of thick, fibrous tissue, much resembling the original capsular ligament. The wound was separated from the bones (which were perfectly sound) by a thick mass of cicatrix. The preparation on the whole bore a very close resemblance to the one preserved in the museum of the College of Surgeons from the original operation of this kind, performed by Mr. White.

CLINICAL REMARKS ON THE ABOVE CASE, AND ON FOUR OTHER CASES OF EXCISION OF THE HIP-JOINT.

The above is given as a successful case of excision, inasmuch as the wound healed in a moderate time, and the patient was restored to a condition in which the limb was perfectly useful, and seemed likely to remain so. Unfortunately this has not been the case as a rule with the few operations of this nature which have been hitherto performed at this Hospital, where, notwithstanding the very large number of cases of diseased hip that are admitted, the excision of the joint has been but rarely practised. The number of cases of which some kind of record has been preserved is only five, and this is believed to be, if not the total, at any rate very nearly the total number of excisions of the hip performed since the establishment of the Hospital. Besides these five cases of complete excision of the joint, an exploratory operation was performed some years ago, on account of deformity, the result of disease, in which the neck of the femur was sawn through, and the limb restored to a natural position. (Holmes' "System of Surgery," iii., 814.) Of the five cases of complete excision, none of the others can be said to have succeeded, although in one case the operation has certainly been the means of saving the child's life. The case alluded to was under the care of Mr. Athol Johnson about three years ago, and the child was at that time rapidly sinking under the effects of the suppuration and irritation. He was seen at the Hospital the other day in good general health; but the wound and sinuses had never closed (although no bone could be found exposed in them) and the limb was still useless. In this case the disease was in an active condition at the time of the operation, and the part left behind was in a doubtful state. In another case, under Mr. Holmes' care, the section of the femur looked healthy, and the parts concerned in the operation went on tolerably well at first; but soon abscess showed itself in or near the opposite hip-joint; the child sank into a hopeless condition, in which he was discharged from the Hospital after a residence there of eight months, and died a few months afterwards.

The two other cases were operated on by Mr. T. Smith. One of them died about two months after the operation. On *post-mortem* examination quiescent tubercle was found in the apex of each lung. A good deal of the surface of the pelvis exposed at the operation was found to be carious, and there was an abscess between the innominate bone and the pelvic cellular tissue. The condition to which the name of diffuse phlebitis has been applied was discovered in the thigh operated on. In the fifth case the operation appeared to be followed by temporary improvement; but then the boy's health failed, and, after many months' residence in the Hospital, he was sent home with the wound unhealed, and with tubercular deposit commencing in the lungs. After the tolerably full account which we have given of the successful operation, it will not be necessary to repeat the details of these cases. They appear to bear out the conclusion (which seems to be the one usually adopted by those who have looked on this matter without prejudice) that successful cases of excision of the hip are of rare occurrence, and would be still rarer if only those cases were operated on which are not susceptible of a natural cure. The successful case, and still more forcibly the second partially successful operation, also show the great length of time which this operation requires before a cure is fully obtained. In the latter instance, although three years have passed away, during the whole of which the wound has remained open, and fresh abscesses have formed around it, it cannot be said at present that the operation has failed in its secondary object,—that of giving the patient a useful limb; while it has certainly succeeded in its primary one,—of preserving his life. On the whole, although this series of cases is not a very favourable one for the operation, they do not tend at all to condemn it; since in the first the operation succeeded in every particular; in the second it certainly saved the patient's life; and in the others, although it failed to prevent the bad issue of the disease, it had nothing to do with causing death, while it appeared rather to mitigate suffering.

CASES OF FISTULÆ IN VARIOUS PARTS OF THE BODY — CONTRACTION OF ANAL ORIFICE — IMPERFORATE NOSTRIL.

(Cases under the care of Mr. THOMAS SMITH.)

FISTULA IN THE PERICARDIUM (3)

M. C. D., aged 2 years and 4 months, living at Woolwich, was admitted on November 7, under the care of Mr. Thomas Smith, for a fistulous opening on the left side of the middle line of the abdomen, between the cartilages of the eighth and ninth ribs. A probe passed into the opening glided between the ribs and passed upwards towards the middle line of the chest for about four inches. When in this position the probe follows the movements of the diaphragm closely, that part of the instrument which is external ascending during inspiration, and descending as the diaphragm goes up in expiration. The end of the probe quivers with each pulsation of the heart.

The *history* of the case was as follows:—Five months ago the child was ill and had a swelling at the seat of the present fistula. This swelling was opened, and a pin was searched for, which the child was thought to have swallowed. No pin was found. The child was very ill and feverish after the operation, and the wound had ever since remained open, nor did it seem inclined to close. There was a scanty but persistent discharge from it.

CONGENITAL LACHRYMAL FISTULA.

J. K., aged 6½, was brought to the Hospital in October for an opening over the right lachrymal sac, as large as a pin's head; it had existed since birth. There was no obstruction to the lachrymal passage either in the eyelid or nose. A probe could easily be passed downwards through the fistula into the lower nasal meatus. Caustic applied to the edges and the actual cautery failed to close the opening, and the boy left off attendance after an unsuccessful attempt to cure the fistula by paring the edges and uniting them with metallic suture.

UMBILICAL FISTULÆ.

Among other fistulæ, two of an unusual kind have pre-

sented themselves at the umbilicus, from which bile has been, and still continues to be discharged.

The following is an instance of a more common form of umbilical fistula from patency of the urachus:—

Open Urachus.—A little boy, aged 2 years, was brought in July with a papillary projection at the umbilicus. In the centre of it was an opening, from which transuded at all times a fluid which was decidedly urinous in smell and appearance. A ligature was firmly applied to the button-like protrusion. After a few days it dried up and then fell off, and the fistula seemed permanently closed.

These papillary moist-looking projections at the umbilicus are not very uncommon; they are often quite unconnected with fistula—they are safely treated by ligature.

CONGENITAL CONTRACTION OF ANAL ORIFICE.

A girl, a few months old, came under care for a malformation, which, Mr. Smith said, was not unusual, though almost unrecognised.

On March 7, it was brought, with suspicion of having calculus, though its symptoms were great pain and straining, and difficulty in defecation. On examination, the anal orifice was found to be so minute as to account for the symptoms complained of. The orifice was about the calibre of a No. 6 catheter.

Mr. Smith said that on the next visit he should treat this child as he had done others with the same malformation, and he hoped with the same success. The plan hitherto adopted is to make an incision at the anal margin, in the middle line towards the coccyx, and, if necessary, on either side as well, and to tell the mother to insert from time to time a piece of oiled sponge pretty tightly screwed up so as to expand.

IMPERFORATE NOSTRIL.

A little girl, about 5 years old. The right nostril was closed, and had been so from birth. The corresponding ala of the nose was flat and unsightly, the nose being unsymmetrical in appearance. The child suffered inconvenience from the insufficient nasal aperture, snoring at night and snuffing by day. A narrow bistoury was passed into the nose through the united margins of the nostril, and these were then separated from one another to the required extent by main force; a piece of gum catheter was tied in. This was changed and replaced from time to time, and in three weeks' time was finally removed, the nostril being patent, and the corresponding ala nasi having assumed its natural position.

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Medical Times and Gazette.

SATURDAY, MARCH 28.

INSANITY AND CRIME.

The present assizes have been already unusually fruitful in cases which will cause great "exercisings of the mind" in, and much shedding of ink by two classes of reasoners: those who demand that capital punishment shall be abolished, as being a stain upon the enlightenment and civilisation of the age; and those who would virtually abolish it by declaring every great criminal insane.

To the first class of amiable enthusiasts—amiable that is to the criminal; their vials of wrath are ready enough for their opponents — we have nothing to say now. We confess, indeed, that we are by no means blind subscribers to the doctrine that "the worst use you can put a man to is to hang him." If the choice is to lie between that and the present Joshua Jebb system of secondary punishments, we are not at all sure that in some cases hanging is not the best thing for a man *qua* individual; and we are quite sure that it is the best use you can make of him *qua* member of society; as the fear of the lash has proved eminently effectual in deterring from some kinds of crime, so, we doubt not, the dread of the gallows may be made a powerful help to weak brutal men in restraining their impulses and passions—a successful schoolmaster for the wholesome education of the will.

But into this question we do not mean to enter. Hanging *is* the punishment awarded by the English law for the crime of wilful murder; so the only practical question is, in any given case, has a prisoner, having killed some one, been guilty of *wilful* murder? And here steps in the second class of enthusiasts, and say, "Every man who commits such a crime as this is mad; the prisoner undoubtedly has committed this crime, therefore the prisoner is mad; but no madman can be guilty of *wilful* murder, therefore the prisoner is not guilty of wilful murder." And when it is not possible to prove the existence of what is ordinarily understood by the term mad, they set up the plea of "uncontrollable impulse," or "homicidal mania," a plea which has failed to convince the jury in the cases of Fooks, Preedy, and Burton; and this result has been hailed with exultation by a portion of the press as a triumph of common sense over the fancies and refinings of the Medical Profession. "A few more such assizes as the present (says a writer in a powerful and well-known weekly journal), and we shall have heard the last of the doctrine of homicidal mania."

Now, our readers are aware that we do not entirely reject the doctrine of "homicidal mania." We are not prepared to deny that there have been a few cases in which insanity has declared itself suddenly, and solely through an irresistible impulse to commit murder; and if such cases have been, such cases may be again; but we entirely repudiate Mr. Justice Wightman's assertion, that "the Medical view is, that it is not enough that the criminal knew the act to be wrong; it must appear that he had the full control over the functions of the will." Some few Medical men—one or two especially among those who are rather maliciously called 'Mad Doctors'—may hold such a doctrine, but we deny that it is held by the Medical Profession generally. The *Saturday Review* is contemptuously wroth with Dr. Tuke for his evidence in the case of Fooks, but, it appears to us, very unjustly so. Dr. Tuke held that Fooks was a madman, in the ordinary sense of the term, and, that being a madman, he had an insane impulse to murder. He did not call it a case of "homicidal mania," or of "moral insanity;" he expressly stated that he "did not believe in kleptomania, pure and simple." We must therefore suppose that he does not believe in "homicidal mania," pure and simple; and no one will deny that a madman may be the subject of "homicidal and suicidal tendencies." But we are not disposed to criticise very harshly the evidence of Medical men in these cases; they are never brought into court as purely scientific witnesses, but as *advocates*, on the one side or the other; if they attempt to enunciate large and scientific views, they are liable to be snubbed as being unintelligible and vague; if they attempt to apply principles to particular cases, they are equally liable to be snubbed for "usurping the functions of the jury." We admit that this is a most undesirable state of things; but who can deny that it exists? Moreover, both Medical witnesses and jurors are apt to allow themselves to be influenced by the thought of the punishment which awaits the prisoner if found guilty,—a consideration with which they have nothing whatever to do; their sole business being to determine whether the charge be true, or the defence.

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The legal test of insanity, as settled by the judges in conference, is the consciousness of right and wrong. If you would prove a man insane, you must prove that he did not know that his acts were criminal. Undoubtedly this test is far from being a perfect one. Insane men have committed crimes knowing them to be crimes, but then it has been possible to adduce proofs of insanity entirely separate from the acts so committed; and so every case must be judged separately, by its history and circumstances. It is not possible to devise definitions and tests which can be rigorously applied to every case. We hold that, in the vast majority of cases, if a man *be* mad, it will be possible to bring forward proof of his insanity other than the commission of the deed which has brought him to the bar of justice; and we fully concur in the opinion that every attempt to erect crime alone into proof of insanity should be regarded with great suspicion and distrust. Even in the most striking cases of sudden, irresistible, evanescent impulse to murder,—the strongest cases of "homicidal mania," cases, namely, where women, in certain conditions, murder those dearest to them,—we believe that, in the large majority of such cases, proofs of insanity, prior to the commission of crime, can be found if carefully sought for. We confess to having very little sympathy with those who talk of "latent insanity;" nor do we profess to comprehend what is meant by "diseased will," as distinct from "insanity," or as a "partial insanity." The will, or volition, is not a separate faculty; it is the mind in action, under the excitement of our appetites, passions, and affections. According to Reid, it is "the determination of the mind to do, or not to do, something which we conceive to be in our power." Morell says: "An act of the will embodies the effort of the whole man, implying, at the same time, intelligence, feeling, and force; physiologically speaking, this state of mind will stand in correlation with the total affection of the nervous system. We regard it as an expression of the totality of our organic power, the whole governing the parts, and directing the fulfilment of one purpose." But there may be a perverted application of the will, as under the incitement of the delusions and impulses of insanity, or as in an hysterical girl who wills to lie in bed or on the sofa, under the delusion that she cannot use her limbs. Supply a motive, an incitement, religious or other, more powerful than the delusion, and she wills to get up and walk. In the same way a man may choose to will that which is wrong rather than that which is right. "Our bodies are our gardens, to the which our wills are gardeners, so that if we will plant nettles or sow lettuce, set hyssop and weed up thyme, supply it with one gender of weeds, or distract it with many; either to have it sterile with idleness, or manured with industry; why the power and corrigible authority of this lies in our wills." And a man may cultivate the weeds till they choke out all the flowers; he may voluntarily cherish and indulge thoughts of lust, revenge, and avarice, till his will feels only vicious incitement; and virtuous incitements and motives pale, fade, and die out. He "willfully makes himself a wretched thrall," and is a criminal in thought long before he is a criminal in act. But is such a one a whit less responsible for his acts than he who "puts an enemy into his mouth to steal away his brains?" Responsible in a degree varying with the extent to which his mind has been injured by his vicious indulgences, but always in a greater degree than the man who is insane "by the visitation of God;" and we would punish him, not by shutting him up in a lunatic asylum, but by subjecting him to hard labour, and such discipline of mind and body as might in time restore health to both. The recognition of such a distinction as this between the criminally insane and the insane by the visitation of God, would, we think, remove the difficulties now felt in judging many cases of crime. At present life-long imprisonment in a madhouse is the only alternative to the gallows; and dreadful as such an alternative is—cruel as the tender mercies of the wicked—it is life, and to secure it every effort is made to gain the verdict "Not guilty, by reason of insanity." Theories of disease are stretched and strained, and the refinements of the mental philosopher are still further refined, till there is danger lest man's prerogative of free-will should be subtilised away, and lest,—

> "divine Philosophy
> Should push beyond her marks, and be
> Procuress to the Lords of Hell."

THE PROPOSED CHANGE AT OXFORD.

On Tuesday, April the 21st inst., at two o'clock, a statute, having very important bearing upon the system of education at Oxford, will be put to the vote in Convocation. Many Oxonian members of our Profession living away from their University, but none the less entitled to vote, are possibly unaware of the exact nature of the question on which they are on that day invited to exercise their prerogative. In their behalf, as well as for our other readers, we will explain briefly what the proposed change is, and how it is likely to work, more particularly in the case of intending Medical Students. We would first, however, observe that it has already passed through Congregation by a large majority, and that it is strongly advocated by the larger and most distinguished section of the resident Professors and Tutors, the men of all others most competent to pronounce upon its merits.

Under the present system every candidate for the B.A. degree (or the corresponding status of S.M. Studiosus in Medicina), has to pass the following examinations, viz.: 1. Responsions; 2. The First Public Examination, commonly called Moderations; 3. The Second Public Examination.

This last has to be passed in two schools (a) that of Literæ Humaniores, (b) one other to be chosen by the candidate himself from the three Schools of Mathematics, Natural Science, Law and Modern History. These three, or practically four, examinations are at present imperative upon all students—upon classmen who acquit themselves with high credit, as well as upon passmen who "shave through" with little or none at all.

Now the gist of the proposed alteration is this: that (under certain reasonable conditions,* *classmen* should be *allowed the option* of passing their second public examination in a *single* school instead of being *obliged* to pass it in *two* schools. Passmen, be it observed, are in no way affected by the proposed change. The same amount of work will continue to be required of them as is required at present. It is the classmen alone (the "working classes" of the University, as they have been not inaptly termed) for whose benefit the measure has been framed; and when we consider that it amounts to nothing more than *a permissive exemption in favour of industry and ability*, we cannot foresee anything but good as likely to result from its adoption.

Its first and most obvious effect will be to induce many men to take a class who would otherwise take merely a pass. This alone would be a sufficient recommendation of it. Every one knows that pass-reading and class-reading differ as widely in their respective mental discipline as they do in

* What these conditions are will be apparent from the following clauses, which we quote from the Statute:—"3. Liceat tamen cuiquam pro primo gradu supplicare si modo in Schola Literarum Humanierum in classem primam vel secundam vel saltem tertiam, aut in Scholis Scientiarum Mathematicarum et Physicarum sive Scientiæ Naturalis sive Jurisprudentiæ et Historiæ Modernæ in classem primam vel secundam relatus fuerit. Proviso semper ut in hisce tribus Schollis nulli Candidato examinatio sua cedat pro forma, nisi prius Moderatoribus in tribus saltem libris, et Examinatoribus in Literis Humanioribus quoad rudimenta religionis et fidei, aut, si sit extra Ecclesiam Anglicanam et in rudimentis religionis examinari nolit, quoad libros hac in parte Examinationis substituendos satisfecerit. 4. Si quis autem quoad rudimenta religionis et fidei aut, si sit extra Ecclesiam Anglicanam et in rudimentis religionis examinari nolit, quoad libros hac in parte Examinationis substituendos jam examinatus ac ambiro classem primam vel secundam in Schola Mathematica et Physica aut in Schola Scientiæ Naturalis aut in Schola Jurisprudentiæ et Historiæ Modernæ professus fuerit, nec in classem primam vel secundam relatus fuerit, satisfecerit tamen Examinatoribus, liceat ei examen in Schola Literarum Humaniorum postea subire, et, si in ea Schola Examinatoribus satisfecerit, pro gradu primo supplicare."

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moral effect. The former is too often mere schoolboy cram; the latter is nearly always a course of more or less severe, solid mental training. Further, while in the one case the incentive to study is the degrading fear of a "pluck," in the other it is the ennobling ambition to stand high in the class-list.

But the proposed scheme will work well in another way. It will enable students at a period of their career earlier than is now possible, but still not too early for the purposes of a good classical education, to throw their whole energies into those studies for which they may happen to have a natural bent, or which will be practically useful to them in after life. It is in this latter respect that the scheme would prove such a boon to the intending *Medical* student. After passing Responsions and Moderations, *i.e.*, about the 7th or 8th term from his Matriculation, he would be permitted to lay aside classical studies, and to commence reading for his final school, which in his case would of course be that of Natural Science. He would then have a clear eighteen months or more to read for this Natural Science class, and this without the vexatious interruption of a third classical examination. In the meantime he would be mastering Human and Comparative Anatomy and Physiology, Chemistry, Botany, etc., *i.e.*, those very subjects which form the groundwork of his future Professional knowledge, and for whose study Oxford affords every conceivable facility. So that when the time comes for him to attend the Hospitals of London or other great cities, he will have all these subjects at his fingers' ends, and be able to devote his undivided attention to Pathology and the clinical study of disease.

Under the existing system, a man cannot commence the serious study of Natural Science, or of any non-classical subject, till after passing his third classical examination, *i.e.*, about the 12th or 13th term from Matriculation; and consequently, unless he defer his final school to the latest allowable period (the 18th term), which the Medical student with so much before him can rarely afford to do, he has barely sufficient time, without a pernicious system of cramming, to work for Honours in the same.

The fact of the proposed change finding favour with so large a majority of the resident Professors and Tutors is very strong evidence that the present system of examinations does not work satisfactorily. The present curriculum is too exclusively and too imperatively classical. Sufficient provision is not made for those whose mental idiosyncrasies unfit them for attaining classical Honours at all, but who could still attain even high Honours in other subjects,—say Mathematics, Law and History, or Natural Science. Many a poor fellow at present barely scrapes through the University, cowed by an ignominious succession of "shaves" or "plucks" in his different schools, who would have come off with flying colours, and braced up for the race of after-life, had he been allowed to give the bulk of his time and the freshness of his energies to studies more congenial to his taste. We should grieve to see classics superseded in Oxford, but let them not have undue preponderance. Make a course of classical study compulsory upon all *up to a certain point* (as is suggested in this new measure), but *after that* let the diligent and meritorious student take up whichever subjects may be most to his taste, or most practically useful to him in after life, be the subjects classical or non-classical. The thorough mastering of these, for his future and final "class," will do him far more good, mentally and morally, than a grudgingly-acquired smattering of authors and subjects he cares nothing about.

ARMY MEDICAL DEPARTMENT.

We took occasion, in a recent Number, (a) to advert to the lamentable state of the Army Medical Department. We confess that we were then unable to catch a glimpse of that silver streak which imaginative persons will tell you is present in every cloud. The statements of the Secretary for War, in answer to General Peel, upon Monday, the 16th, however, do yield some rays of hope. Sir G. C. Lewis announced that a Warrant was to appear, based upon the recommendations of a late Commission upon the pay and duties of Army Medical officers, which *he* trusted would satisfy all parties. Let *us* trust, on our parts, that there will be no longer any vexatious delay, for the department has been well trained in the lessons inculcated by deferred hopes. During the interval, we think it better to maintain silence upon this head. We desire to receive the revised Warrant in no carping spirit, but as a just concession to the rights of the Army Medical officers of both services. Let us hope that its terms will be more fairly interpreted and more honourably fulfilled than those of its now ill-famed predecessor.

We wish that we could say this promised Warrant was the result of some other cause than pressure from without—the appearance of fifteen candidates to fill forty-five vacancies in the Army Medical Department, for instance. We wish we could feel that it had resulted from the independent and sustained avowals of the Medical head of that department that its duties could no longer be carried on.

We now propose—in a candid and frank spirit, but we hope an impartial one—to say a few words upon the management and organisation of the department within the control of its own head and members.

The duties of conducting such a department as the Army Medical, confessedly must be onerous and difficult. The reticence imposed upon a Government official is such that he will often be blamed for labours not his own, and oftimes fail to obtain the praise which might be found rightly to belong to him, if all the facts were open for criticism and judgment. The feeling is evidently prevalent among Medical officers that they do not gain that support in the performance of their duties which obtained during the lifetime of the late Mr. Alexander.

It is essential that a Director-General should *identify* his wishes and interests with those general among the members of a department whose affairs he directs; and not only so, but, if he desires to attain popularity and respect, it must be felt that such is the case.

Now—with what amount of justice we do not pretend to decide—the fact is obvious that, however much Dr. Gibson may have fulfilled the first requirement, he has failed to make this generally felt. There is an undercurrent of feeling running through all the correspondence and articles which have been appearing of late in the public journals, whether military, Medical, or political, which is as unmistakable as it is lamentable.

By some means there has been a return to that working of the department of bygone days, which savoured so much of over-inspection, circulars, returns, and clerkwork, that it does not form a pleasant subject of contemplation.

Duties have been imposed upon Medical officers which they generally disliked, and which—to say the least of them—are not such as tended to elevate the tone of the Profession in the service, or to improve the capacities of those whose duties are, above all, the practice of their Profession.

We can only regard the present stringent regulations connected with the giving of any extra diet, however trivial, as framed to restrain the hand of the prescribing officer.

With regard to the mode in which soldiers are directed to be marked with the letters D. and B.C., we conceive that it might be strongly represented that the infliction of any part of a sentence of court-martial should be either on parade or in prison, and *not at the Regimental Hospital*; and that it is as false a position for a Medical officer to supply the instrument, and superintend and instruct his Hospital sergeant in branding, as it would be for him to supply the cat, and superintend and instruct a drummer in plying it at his Hospital.

(a) March 7, 1863.

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The duty of a Medical officer is very plain indeed in all these cases, and whatever tends to obscure it is injurious to the discipline of the soldier, and productive of a feeling in the Medical officer of his being put in a false position. He has to see that in the infliction of any punishment no unnecessary injury or risk to life or limb be caused.

Again, we can hardly conceive that the Horse Guards would have directed a Medical officer to pay for the kit of any recruit he might have passed with defective vision, if the occasional difficulties attending this had been fairly but firmly pointed out. If in any given case there had been obvious negligence upon the part of an individual Surgeon, it might surely be met by arming the Director-General with some discretionary power in the matter. As the rejection of a recruit must be by Medical Board, the Medical officer would hardly fail to perceive that justice had been rendered him.

Here we touch upon another matter, which has been the subject of very frequent remark. Some member of the department has taken some course which is open to grave reprehension. Now, however, although the case is an isolated one, it forms the subject of an Order, or Circular Letter, directed to the department generally! This can only prove vexatious and annoying to the zealous and honest workers in the department, who feel irritated at being "schooled" for an occurrence they would not dream of doing or taking part in.

If the case be worthy of notice it ought not to go unpunished; if it be one which is open to general misconception, then a Circular indeed is required.

These afford a sample of that for which we consider the Medical Department has only itself, in some way or other, to blame. With whom the fault rests we do not say; but this we may assert, that if it be desired to fill vacancies in the Department with the abler and better class of Professional students, these are not by any means subjects of secondary importance.

The practice of Medicine is becoming every day more and more a matter of science, and not one of administration of drugs: it is, we really believe, daily taking a higher and different position among Professions, and it will do least of all for Medical men occupying high positions to retard these beneficial changes or clog the steps of its progress.

We are sorry to see it stated by the Secretary for War—but we trust that this is capable of bearing a very different aspect when properly explained—that the recent reductions in the Medical Department were in accordance with the recommendations of the Director-General!

Not to mention any other result,—surely, considering the small amount of leave now enjoyed by the Army Medical Officer, any further reduction will prevent his having any at all.

MR. PROPERT AND MR. ADAMS.

The whole Profession have expected some explanation from Mr. Propert of his conduct towards Mr. Adams, and have expected it in vain. As we said in a recent article, the very least that Mr. Propert could do, judging from the facts then before us, was to send a handsome letter of apology to Mr. Adams, and a cheque for his costs. Mr. Propert continues obstinately silent; he neither justifies his position nor withdraws from it; we are therefore compelled, in the interests of the Profession, to make a brief note of the case as it stands.

Mr. Propert had been on friendly terms with Mr. Adams, when all at once, without the slightest notice to that gentleman, he assumes him to be guilty of conduct which, in the eyes of any man of the world, would be seen to be absurd or impossible at first sight. When explanations are formally and repeatedly offered him, he refuses even to examine them. As a kind of *official* personage—"*the* protector of Medical widows by common consent"—he comes to a conclusion, without inquiry, in a manner which smacks of personal bias, certainly not of official coolness. Although warned by persons of benevolence and experience, such as Mr. Toynbee and Mr. Kesteven, that Mrs. Russell and her daughter were not fit objects of charity, he backs their application to the Benevolent Fund. He distinctly, by his own confession, places the case of the Russells in the hands of his solicitor, sneers at Adams's protestations of innocence, and refers him to a jury. When one attempt at an action was made and given up, he visited the Russells at a sponging-house, and tendered his cheque for their costs. He is to this day, as we are informed, in friendly communication with the Russells, and supplies them with medicine from his own surgery in New Cavendish-street. He affirms, and does it with an oath, contrary to the practice of English gentlemen who rely on their word, that he had nothing to do with the late action. But setting this point aside, the inexplicable fact remains, that this protector of widows and orphans pursued a course which might have ruined a man less successful than Adams, and have crazed or killed one with less nerve. He has brought the honour of his whole Profession into jeopardy, by countenancing this most odious charge. He has diverted many a charitable act which men have done for stray and solitary women, but which they will now abstain from for fear. After this, we tell Mr. Propert that it is not a few easy-flowing tears, or appeals on behalf of an honest, hard-working Welshman, that will restore him to the confidence of his Professional brethren.

THE WEEK.

THE ORMSKIRK PROSECUTION.

The Branch Medical Council for England, at its last meeting, remitted to Mr. C. P. Symonds, of Ormskirk, the sum of £20 (the amount of a penalty which the treasurer of the Council had received), towards defraying the expenses of a prosecution under the 40th Section of the Medical Act. Mr. Symonds undertook that prosecution in August last, by the desire and with the support of the Medical gentlemen of that neighbourhood, against a person named Josiah Archer Bowen, "for falsely pretending to be and using the name and title of a Surgeon, and then and there giving a certificate of death . . . and writing under his name the letters 'Sub. M.R.C.S. Eng.' implying thereby that he was recognised by law as a Surgeon." The magistrates of Ormskirk inflicted on the defendant the full penalty of £20, and costs, which costs were taxed against the defendant at £25. Notice was given of appeal to the Court of Queen's Bench, but the intention to appeal was presently abandoned. It ought to be more generally known that convictions may be obtained under the 40th Section of the Medical Act, and that the Medical Council are ready to remit any fines that may be recovered, in order that they may be applied towards defraying the expenses of successful prosecutions.

PARLIAMENTARY.

On the 23rd inst. Sir Robert Peel moved the second reading of the Irish Vaccination Bill. The chief objection to it as a measure appears to us to be, that it enforces more unpaid labour on the Medical Profession. The Registrars of Births and Deaths are to be registrars of vaccination, but they are not to be remunerated for the trouble when they themselves have been the vaccinators. When the Registrar is not the vaccinator, he is to be allowed the magnificent fee of threepence for making the registry. With this exception, the Bill appears likely to be a useful one. Sir R. Peel stated that,

"From the census returns, he found that no fewer than 50,000 persons had died of smallpox in Ireland since 1841; and in 1860 there was a diminution of 33,000 in the number of vaccination cases as compared with those of the previous year. The cost of the proposed measure would be very trifling. The Registrars of Births and Deaths would also act as registrars of vaccination. The Treasury would bear the

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expense of the books, but in cases in which the Registrar himself was not the vaccinator he was to be allowed a fee of threepence for making the registry. Under an existing Act, dispensing Doctors were allowed about a shilling a head for each child they vaccinated. There were about 200,000 children born in Ireland each year, and it was calculated that of these, three-fourths, or 140,000, would receive gratuitous vaccination. The total expense imposed on each of the Poor-law Unions by the Bill which he now proposed would be about £3 16s. 8d.—a mere trifle compared with the benefits which it would confer on the country."

Several members objected to the measure on various grounds. An adjournment of the debate was moved, and ultimately agreed on.

In the House of Lords, on Tuesday night, their lordships went into Committee on the Irish Births and Deaths Registration Bill. The Marquis of Clanricarde had previously presented petitions from the King's and Queen's Colleges of Physicians, and from two Boards of Poor-law Guardians, the former urging objections to the appointment of superintendent registrars to be placed over the Medical men who were to act as registrars, the latter praying that the whole expense of carrying on the act might be defrayed out of the Consolidated Fund.

"Clauses up to 21 inclusive were agreed to, with amendments.

"In clause 22, the Marquis of Clanricarde moved an amendment altering the title to be given to clerks of Unions from 'superintendent registrars' to 'superintendents of registers.'

"The Earl of St. Germans opposed the amendment.

"After a short conversation their lordships divided, when the numbers were:—

"Contents	32
"Non-contents	5
"Majority against the amendment .	—27

"The clause was then agreed to, as were also the remaining clauses of the Bill."

In the House of Commons, Mr. Hubbard moved his resolution affirming the principle—

"That the incidence of an income-tax touching the products of invested property should fall upon net income, and that the net amounts of industrial earnings should, previous to assessment, be subject to such an abatement as may equitably adjust the burden thrown upon intelligence and skill as compared with property."

Mr. Hubbard's motion was, of course, opposed by the Chancellor of the Exchequer, and finally negatived by 118 to 70. Mr. H. Lewis's motion for a return of the number of persons killed in the city on the night of the illuminations was replied to, on the part of the Corporation, by an amendment, moved by Mr. Norris, that the number of persons killed on the occasion of the funeral and lying-in-state of the Duke of Wellington should be appended, together with a copy of any order issued by the metropolitan police authorities, with a view to prevent a recurrence of such accidents. The motion as amended received the assent of the House.

THE REGISTRATION OF BIRTHS AND DEATHS IN IRELAND.

A COMMITTEE has been appointed by the King's and Queen's College of Physicians to examine Sir R. Peel's Registration Bill. They have sent in their report, and, as might be expected, it presents several exceptions to particular provisions, although the committee approve of the general character of the measure. They argue that as the Registrar-General, officers, and clerks are to be paid out of the Consolidated Fund, so also the registrars' salaries should come from the same undeniable source. The bill, it will be remembered, proposes that the Medical registrars should be paid by the guardians of each union. We can quite understand the repugnance of the committee to such a distinction. They argue the question, however, fairly, on political grounds.

"The statistical and sanitary objects of a Registration Bill do not come within the same category as the support of the poor, the maintenance of public institutions for prisoners, or asylums for the insane, or improvements of roads, etc., which are all objects more or less directly local necessities, or advantages for the district, and therefore, in the same degree, may be considered justly chargeable on the locality. The objects of the Registration Bill now under consideration are imperial. The results are for the benefit of the whole United Kingdom; the statistical and sanitary data furnished by the poorest union in the country may prove of more advantage to the wealthiest district in the United Kingdom than they ever can be to the district which furnishes them."

The committee express a regret that there is no provision in the bill for obtaining returns of endemic and epidemic sickness, and they urge that the central authority, whose business it is to exercise a supervision over vital statistics and mortality tables, should be a highly-educated Physician. They cite the instances of the Army and Navy in which such duty is delegated to a Medical officer:—

"The civil statistics of a country as regards health, sickness, and death, are much more complicated and more difficult to comprehend and supervise than those of the Army and Navy; and if there be a country in Europe that stands in need more than another of high scientific professional attainments in the central authority to superintend its statistics of disease and mortality, it is Ireland, from the frequent visitations it has suffered from epidemic and endemic diseases. A Registrar General of births and deaths, who does not possess the qualifications referred to, no matter what his other attainments may be, will be ever reading a language in the returns which he does not comprehend, and supervising tables the true value of which he cannot estimate, and must therefore be incapable of directing inquiries to lead to useful results."

Another point to which they take exception is the proposed salary of the Registrar, which is less than in England or Scotland. That the duties of the Registrar are in Ireland to be performed by Medical men and gentlemen, is, we suppose, the reason that the framers of the bill propose to lower the price of the labour.

"The remuneration for the duties of registrar must, under any circumstances, be very small. By the Bill now before us, it is proposed to fix it at one shilling per entry. Under the English Act, section xxix., 6 & 7 Wm. IV., cap. 86, it is, 'for the first twenty entries of births and deaths in every year, two shillings and sixpence each, and one shilling for every subsequent entry.' In Scotland, the registration of marriages is included, being an additional source of fees, and the remuneration is higher:—It is 'for the first twenty entries of births, deaths, and marriages, *in each half* year, two shillings each, and one shilling each for every subsequent entry.'—17 & 18 Vic., cap. lxxx. The income-tax is the same in England, Ireland, and Scotland. Railways have equalised the expenses of living throughout the United Kingdom, and it is only justice that the State should pay the same sum for the same services whether in England, Ireland, or Scotland."

We need scarcely add that the committee, by this temperate and well-reasoned report, have well represented the interests and feelings of the Profession.

DR. BROWN-SÉQUARD'S LECTURES.—LECTURE VI.

THE sixth and last lecture of this course was upon epilepsy, and was delivered on the 12th inst. Much light has been thrown upon the nature of this disease by Dr. Brown-Séquard's remarkable discovery that an affection resembling, if not identical with it, may be produced in animals by injuring the spinal column in any part above the third lumbar vertebra, but more especially in the part intervening between the third lumbar and the fifth or sixth dorsal vertebra. Animals so injured begin to have fits, which come on spontaneously—and which may be induced if the animals are irritated in a particular manner—about three weeks after the date of the injury. Various forms of lesion will produce the fits: for instance, a complete transverse section of a lateral half of the spinal column; a transverse section of its two posterior columns, together with the posterior cornua of grey matter and a part of the lateral columns; a transverse

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section of either the posterior, the lateral, or the anterior columns, only; a complete transverse section of the whole column; or, finally, a simple puncture, may each severally result in producing the fits. But some of these sections have much more power than the others in producing them, and that of a lateral half of the cord appears to be invariably attended with this result. Two guinea-pigs, which have been operated on in the manner last mentioned, were exhibited: by irritating the side of the face, a fit was immediately induced in one of them; the other one, having, as the lecturer suggested, probably been in a fit recently, did not respond to the like stimulus. The fit of the guinea-pig first introduced was certainly wonderfully like that of ordinary epilepsy. In these animals there is one particular part of the skin, irritation of which is almost invariably followed by a fit,—indeed invariably, if the animal irritated has not had a fit a short time previously. The part in question is limited by the following four lines:—One drawn from the ear to the eye; a second from the eye to the middle of the length of the inferior maxillary bone; a third from the lower end of the line last mentioned to the angle of the lower jaw; and a fourth, forming half a circle, from this angle to the ear, the convexity of the half circle being towards the shoulder. Such is the irritability of this area, that merely blowing upon it will often induce a fit; and at times, when the animal shows a tendency to have a fit, a mere movement of the head will bring it about. This irritability resides in the extremities of the nerves which ramify in the skin itself. Irritation of the trunks of the nerves— as, indeed, is often observable in man—fails to induce a fit. In both these animals there is opacity of the cornea, a phenomenon which sometimes presents itself in man when the spinal cord is injured, and which may rapidly disappear. Such an opacity, presenting itself in a case of spinal injury under the care of Velpeau, speedily disappeared, to the great astonishment of that distinguished Surgeon. It is thought that the power of action of muscles and nerves, and their excitability, are equal or co-ordinate; but this is not the case. Of two muscles, one atrophied and one healthy, the former may respond to a certain stimulus, while the latter will not; a weak person will jump or start on hearing a noise which will produce no effect on a strong one. Animals whose spinal cords have been divided during six months will, by their sudden movements, show themselves peculiarly impressionable by external influences, which by healthy animals are either unfelt or disregarded. This is strikingly exhibited if both the injured and uninjured animals be submitted to the galvanic current. These facts illustrate the nature of epilepsy. Epileptics are usually very weak, often partially paralysed: their reflex excitability is increased, while their voluntary muscular power is lessened. This departure from the proportion normally subsisting between reflex excitability and voluntary muscular power constitutes the condition of, and tendency to epilepsy, and should be carefully distinguished from the immediate or occasionally exciting cause of the fits. The tendency to epilepsy having become established, the fits are often induced by some exciting cause existing in the periphery of the body. This is proved by the fact that the frequent and well known prelude to the fits—the aura epileptica—may often be traced to its origin in some external or excentric influence or abnormal condition of the skin. It is probable that certain nerves which are incapable of transmitting the ordinary sensations of pain are the media of an aura epileptica, or the proximate cause of fits, even when the patient is wholly unconscious of its existence. There are nerves which are not sensitive, but which are capable of producing reflex actions. It is well known that worms in the intestines often bring on fits, although in such cases the irritation which they undoubtedly cause, and which is propagated to the spinal cord, is not consciously felt. A great variety of sensations and excentric influences will induce fits in persons in whom the epileptic tendency exists; but pain will not necessarily do so. The parts of the cerebro-spinal axis usually affected in epilepsy are the medulla oblongata and the upper portion of the spinal cord; but the seat of the disease in each particular case is that part of the nervous centre directly related to the special area of the periphery from which the aura, felt or unfelt, proceeds. Now that pathologists have entered on that new and inestimably important field of Medicine comprehending the action of nerves on blood-vessels, they are enabled to appreciate the significance of many phenomena of epilepsy, the nature of which was until recently wholly unknown. Of the two well ascertained influences which nerves exert on blood-vessels, viz., contraction—arresting or decreasing the circulation, and dilatation—increasing it, the former is explicable, the latter not yet completely so. Contraction of the blood-vessels of the face causes the paleness often observable in the first stage of an epileptic fit; contraction of those of the brain induces syncope of that organ only, and of course loss of consciousness at the same time. This contraction of the cerebral vessels is analogous to the first contraction in organic muscles. The variety of effects from irritations is surprisingly great: the sensation of light will produce an increase of blood in the tubercula quadrigemina; singing in the ear may in like manner cause contraction of the veins; sudden and general paralysis may occur, as in the case of the son of a Medical man, mentioned by Dr. Brown-Séquard, whose consciousness and breathing power alone continued; there may be loss of memory of words only; or, suddenly, a paleness of the face; a peculiar affection of the eyes; a flow of tears, or of saliva; the bladder alone may contract; or there may be simply an ejection of semen; or the irritation may show itself in some one superficial muscle, as in the case of a boy who had frequent and sudden pain in the belly—only one muscle of the abdominal wall being much enlarged, and for years subject to cramps, which were ultimately followed by complete epileptic fits. Dr. Brown-Séquard does not believe that the epileptic aura ever originates in the healthy womb itself, but he is of opinion that when the irritation is propagated from that organ, it results from an abnormal change in the quality of the blood within its vessels, or of its secretions. In the *petit mal*, or minor fits only of epilepsy, the patient loses consciousness more or less completely; the pulse is not weak, but often strong—sometimes especially so—and is thus emphatically distinguishable from that of syncope; the blood-vessels of the face, animated by a branch from the cervical portion of the sympathetic, may contract and cause sudden paleness; and there is always more or less contraction of the muscles of the neck and face. In a case of *typical* epilepsy, the fit is ushered in by an aura, felt or unfelt, or, in other words, by an excentric irritation propagated to some part of the cerebro-spinal axis, the first results of which are contractions of the blood-vessels of the cerebrum and of the face, and tonic spasms of some muscles of the eye and face; then follow loss of consciousness and paleness of the face; blood accumulates in the base of the encephalon, and in the spinal cord, resulting in *tonic* contractions of the laryngeal, cervical, and respiratory muscles. These contractions produce asphyxia, in the course of which the sudden cry and fall occur; the asphyxia is succeeded by general *clonic* convulsions; then may supervene contractions of the bowels, of the bladder, of the uterus; erection; seminal emission; increase of various secretions; efforts at inspiration; and, finally, muscular relaxation, with cessation of the fit, followed, possibly by coma, but most usually, by fatigue, headache, and sleep. Among the forms of curable epilepsy are those due to syphilis, to slight inflammatory states of the base of the brain, to diseases of the nerves or spinal cord, to worms in the intestines, and to disturbances of the uterine system. In fact, whenever a connexion between the fit and some disease from which the patient is suffering can be traced, there is much reason for hoping to effect a cure. Persons having had a blow

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head, and subject to fits many years afterwards, may often be cured by blistering the spot where the blow was received. Application of the actual cautery (a), or a blister to any part from which an aura may proceed, will often prove effective. If the aura or irritation proceed from the hand, arm, foot, or leg, a blister, an inch wide, may be applied round the limb. A ligature round the limb will also often stop the fits. Both it and the blister produce their effects by causing a modification of the parts of the brain to which the nerves acted upon are related. Blisters are most effective when the base of the brain is affected. Narcotic injections sometimes effect a perfect cure: half a grain of sulphate of morphia, a sixtieth of a grain of atropia, and a minim of dilute sulphuric acid, in fifteen minims of water, should be injected into the part where the *aura* originates. The morphia and atropia, each of which used separately would be dangerous, when used together counteract each other: the one contracts the pupil, the other dilates it, and the general action of each on the system is correspondingly different. The best remedies for epilepsy induced by syphilis are the iodide and the bromide of potassium, taken together or separately. The dose of the bromide must be fifteen or twenty grains two or three times a-day. When taken in large doses for a considerable time, it causes congestion of the brain and loss of feeling in the urethra, and probably in the seminal vessels. If the pulse of the epileptic patient be weak, he should take ammonia and quinine. Contrary to the advice of Dr. Watson, iron, which he recommends, should be avoided, unless the fits be due to anæmia or chlorosis. Iron causes alterations of circulation in the brain of a kind not conducive to the cure of epilepsy. If it must be given, the ammonio-citrate of iron, along with aconite in suitable doses, is the best form in which to administer it. The same salt of iron, together with strychnine, may also be given sometimes with advantage. Epileptic coma is best treated by Junod's boot, applied with great care during half an hour. Or ligatures may be placed round the four limbs, in order to impede the venous circulation, and thus the return of blood to the brain. In some cases of paralysis, even when there is no hysteria, a cure will follow a series of epileptic fits. In such cases the cure is probably due to absorption of effused fluid, promoted by the increase of circulation occurring during each fit. This very interesting, but necessarily very hurried, lecture was concluded by the exhibition of several illustrative cases; among them was a girl who has suffered from hemiplegia and paraplegia, from both of which she recovered after having had several fits; and a man who had stopped his own fits "hundreds of times" by clasping his legs, by using ligatures and blisters, and by burning himself.

REPORT ON THE PHYSIOLOGICAL ACTION OF PODOPHYLLIN.

By FRANCIS ED. ANSTIE, M.D., M.R.C.P.,
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In commencing an inquiry into the action of podophyllin upon the organism, the following appear to be the chief questions, to the solution of which research ought to be directed:—*a*. The doses respectively in which podophyllin is a safe, and those in which it is a poisonous agent. *b*. The nature of the catharsis set up by different doses respectively. *c*. The symptoms and anatomical appearances resulting from medicinal, and those resulting from poisonous, doses administered to mammalian animals.

Such are the objects of the present inquiry, but I shall not follow the order above indicated. It appears to me that inasmuch as there is far more certainty about the results obtainable from animals which it is in our power to examine anatomically, than in those observed in human beings with regard to whom we have no such privilege, the record of experiments upon animals should come first. Accordingly I proceed to this at once.

I must premise that in the first series of the following experiments I have used always a uniform alcoholic solution of the resinous extract of podophyllin, kindly prepared for me by Mr. Morson, and containing four grains in each drachm. I was not without misgivings, at first, that the effects of the alcohol would seriously interfere with the success and value of the experiments, but multiplied trials proved conclusively that this was not the case; and that, provided the error of giving a fatal dose of alcohol were avoided, the symptoms proper to the action of podophyllin were regularly produced.

The mode of introducing the agent into the body which was adopted was that of injection of the above-described solution into the peritoneal cavity. Large experience of the effect of various agents upon the peritoneum gave me the belief (which it will be seen was just) that neither the quantity of alcohol, nor the podophyllin contained in it which would be required for any experimental purpose of mine, would excite peritonitis.

The animals experimented on were dogs, cats, and rats.

Experiment I.—3ss. of the alcoholic solution was injected into the peritoneal cavity of a full-grown dog (about eighteen inches in height). The animal was not at all discomposed by the operation, and a few minutes after was eating food.

Up till ten hours afterwards the dog was perfectly lively, and showed no signs of uneasiness. He now commenced retching violently, and brought up only a little mucus. This symptom continued, and was soon accompanied by purging; the stools consisted of glairy mucus; and, after a time, were mixed with blood; the animal whined constantly, and seemed in pain, it also drank water eagerly. Four hours from the commencement of the symptoms, the breathing was shallow and hurried, and the pulse rapid and feeble. During the next four hours the animal could not be watched; at the end of that time it was found lying on its side, totally insensible, with glazy eyes, heart's action slow and very weak; respiration consisted of from four to six convulsive gasps per minute. In this state it lay, with little change, for the next eight hours. At the end of this time a slight general convulsion occurred, and the breathing ceased about two minutes and a-half later. The thorax was quickly opened, and the heart was found still beating; it continued to pulsate for five minutes, and its irritability persisted for some time after this. On post-mortem inspection, there was no fluid of any kind in the peritoneal cavity, and the membrane was quite smooth and polished and transparent. The kidneys were rather congested; the liver was moderately congested; the gall-bladder contained a very little bile.

The alimentary canal was slit open from end to end. The pharynx, œsophagus, and stomach were healthy, except that the stomach contained some bloody fluid, evidently brought into it from the intestine by repeated retching. The mucous membrane of the whole small intestine was intensely inflamed, especially that of the duodenum; in the latter situation were nine ulcers, rather less in size than a threepenny piece, and there was one smaller ulcer near the lower end of the ileum. The mucous membrane of the whole small intestine was covered with tenacious bloody mucus. The inflammation ceased abruptly at the ileo-cæcal valve; the large intestine was healthy; nowhere was any bile observed in the bowels. Mucous membrane of bladder slightly congested.

This dog had never showed any signs of alcoholic intoxication, except a slight drooping of the hind quarters, which went off in five or six hours.

Experiment II.—Fifteen minims of the solution (equal to one grain podophyllin) were injected into the peritoneal cavity of a small dog (fully grown). The animal was rather frightened; but evidently suffered no pain, and ran about immediately afterwards as if nothing had happened. No symptoms whatever of uneasiness were observed during the next twenty hours. At the end of that time the dog was taken with vomiting, and soon afterwards purging commenced. The vomiting soon ceased, but the purging continued with violence, and the stools soon came to consist entirely of thick mucus mixed with a very little blood. The purging continued for eight hours, and then ceased, and the animal lay in an extremely exhausted condition; the breathing was very slow and gasping, though not so much so as in Experiment I. Temperature of the body very low.

(a) When the instrument is heated to a white heat it gives little pain and leaves no scar.

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Two hours later, the animal, though still very much depressed, was evidently recovering from the effects of the drug, as it was able to get on its legs and stagger feebly along. The carotid artery was now opened; this quickly caused a general convulsion, in which the heart ceased beating, before any very large hæmorrhage had occurred.

Post-mortem examination showed that the peritoneum was not in the least inflamed. The mucous membrane of the whole small intestine was pretty deeply congested, especially that of the duodenum, and there was much thick bloody mucus on its surface. There were no morbid appearances in the large intestine. Liver slightly congested; gall bladder empty. Kidneys slightly congested.

Experiment III.—Fifteen minims of the solution (one grain of podophyllin) were injected into the peritoneal cavity of a dog, about the same size of the subject of the last experiment, but not fully grown. No symptoms were developed for the next fifteen hours; at the end of this time the animal was seized with vomiting and purging, and moaned a good deal, as if in pain.

The purging continued during the next five hours, and then ceased; but the animal had now become entirely insensible; the respirations were ten per minute, sighing; circulation 75, irregular and intermittent. One hour and a quarter later respiration ceased; the heart continued to beat a few minutes longer.

Post-mortem examination showed an entire absence of peritonitis. The appearances in the alimentary canal were similar to those observed in Experiment II., but more pronounced; in the lower part of the duodenum were three small ulcers of the mucous membrane. No bile-coloured matters in the intestines, so far as could be observed by the eye; liver of a natural appearance, perhaps somewhat congested; gall-bladder empty.

Experiment IV. was a test experiment with alcohol, a mere repetition of what I had often done before, to satisfy my mind that the influence of alcohol had not produced the effects described in the experiments already narrated. ʒss. of rectified spirit (P. L) was injected into the peritoneal cavity of a dog of about the same size as the subject of Experiment I. The only effect of any kind which was produced was, that two hours after the operation the dog began to mope a little, and vomited two or three times; there was, however, no severe retching or straining, and no purging; in an hour or two the animal was perfectly well again, although a little weak in the hind quarters, and rather staggering in its gait. No further ill effects followed.

Experiment V.—A young but strong cat had ʒss. of the alcoholic solution (containing two grains of podophyllin) injected into its peritoneal cavity at 4·50 p.m.

5.3 p.m.—The cat vomited.

5.8 p.m.—The cat vomited and passed solid fæces.

5.15 p.m.—Being roused up, and made to walk, the cat exhibited some of the phenomena of alcoholic intoxication—*e.g.*, it staggered and dragged its hind-quarters somewhat.

6 p.m.—The cat has just vomited again, but otherwise it seems quite lively. There is still some remaining weakness of the hind-quarters.

11.30 a.m. (about nineteen hours from the injection of the podophyllin).—The characteristic effects of the alcohol have now completely disappeared, and no symptoms of irritant poisoning have appeared. The animal is quite lively, and eats food eagerly.

12 o'clock.—Forty minims more of the alcoholic solution (equivalent to three grains of podophyllin) were injected into the peritoneal cavity.

12.30 p.m.—The ordinary signs of alcoholic intoxication, in its early stages, are exhibited. The animal vomits now for the first time since the second injection.

4.15 p.m.—The animal is lying down, as it has been doing for some time past. On rousing it, paralysis of the hind-quarters is seen to exist to a considerable extent, and the animal staggers.

4.22 p.m.—The cat falls on its side. Examined, it is found to be totally insensible. Circulation 90, weak and irregular. Respiration 45. During the last hour or two the animal has been almost incessantly purged, and recently the dejections have contained blood.

4.25 p.m.—The cat is violently convulsed in all its limbs. Respiration rapid and panting. Profound insensibility. Circulation 120, forcible.

4.28 p.m.—The convulsions are incessant; they affect chiefly the fore-legs, the eyelids, and the anterior muscles of the neck.

5.10 p.m.—Convulsions incessant. Respiration 75. Circulation 124, very weak. Profound insensibility.

This state of things continued, with little alteration, except the gradual failure of the strength of circulation and respiration, up to 8 p.m., when the animal expired, the final struggle leaving all the limbs extended.

On post-mortem inspection, the body (a few hours after death) was perfectly rigid, the limbs extended. On opening the belly, a few drops of fluid were found effused in the peritoneal cavity; this was clear, straw-coloured serum. On the surface of the intestines, at one point, was found scattered a small quantity of a dark-coloured resinous powder, which was evidently the residual podophyllin, which had not been absorbed. There was no effusion of lymph, nor adhesion of the coils of intestine, but there were spots of inflammation around the grains of podophyllin.

The alimentary canal was slit open from end to end; pharynx and œsophagus healthy; stomach very much congested in patches, possibly owing to the severe vomiting which had taken place.

In the duodenum, and throughout the small intestine, there existed traces of the most violent irritation of the mucous membrane. The whole surface of the membrane was thickly sown with bloody points, and a layer of tenacious bloody mucus covered the membrane; there was, however, no actual ulceration. The cæcum and the first part of the colon were similarly affected, but in a less degree.

The liver was somewhat congested, but otherwise presented a perfectly normal appearance; the gall-bladder contained a small quantity of healthy bile.

The bowels were encumbered with dead specimens of *tænia crassicollis*; kidneys slightly congested; bladder healthy.

Experiment VI.—Forty minims of an alcoholic solution (equivalent to three grains of podophyllin) were injected into the peritoneal cavity of a remarkably strong young cat at 1.8 p.m.

1.45 p.m.—Decided symptoms of alcoholic intoxication, but not very profound.

2.30 p.m.—The signs of alcoholic intoxication have persisted, and now, for the first time, the cat vomits.

3 p.m.—The symptoms of alcoholism are subsiding, but the cat seems very uneasy. Circulation, 100; respiration, 30.

3.20 p.m.—The animal utters cries, and passes solid fæces.

3.32 p.m.—The animal cries loudly, and passes a liquid, dark-coloured stool.

4 p.m.—Another liquid stool, attended with much straining, the animal uttering loud cries.

4.30 p.m.—The animal cries almost constantly, and is evidently in much pain; purging very frequent, with a great deal of straining, and occasionally the passage of a little blood.

5.50 p.m.—The purging has continued at intervals till lately; at present this has ceased, and the animal lies exhausted, and apparently insensible, on its side; breathing slow and gasping.

At 8.30 p.m. the animal died, respiration and the heart's action gradually ceasing.

Post-mortem examination showed a complete absence of peritonitis. The cavity of the peritoneum did not contain, apparently, five drops of liquid, nor was there any effusion of lymph, or any external reddening of the intestines. Pharynx and œsophagus healthy. Mucous membrane of stomach a good deal congested, in patches. Duodenum, jejunum, and ileum, from end to end, exhibiting most intense and bright-coloured injection of the mucous membrane; this was particularly well-marked at the lower part of the duodenum. No positive ulceration; mucous membrane a good deal softened, however, in places, and covered with bloody mucus. Only a very slight degree of inflammation in the cæcum and colon; none in the rectum. Liver quite natural in appearance. Gall-bladder contained a small quantity of bile. Kidneys healthy.

Experiment VII.—One grain of podophyllin (in fifteen minims of alcohol) was injected into the peritoneum of a young and healthy cat at 12.30 p.m. The animal evidently suffered no pain from the operation, and a few moments after was purring.

6.30 p.m.—Up to the present time no symptoms whatever have presented themselves.

9.30 p.m.—The cat has not shown the least sign of uneasiness.

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7 a.m.—The animal is quite well and lively this morning, it has evidently passed its urine during the night, but no fæces, neither has it vomited.

9.45 a.m.—The cat has just passed one solid, pretty copious dejection; of perfectly natural appearance.

10.30 a.m.—The cat has passed one more dejection, rather softer in consistence than the first, but there is nothing like purging, and the animal is lively and apparently quite free from pain. At this moment I administered 3ss. of Scheele's hydrocyanic acid, which was immediately fatal. Even while the heart was still beating I opened the abdomen freely, and was able to observe the appearance of the liver: this was entirely natural, there was nothing that could be called "congestion." The gall-bladder was nearly empty.

The intestines were observed to be writhing actively in a vermicular movement. On opening the alimentary canal, the stomach proved to be quite healthy; the duodenum exhibited a slight rosy tinge of its mucous membrane, which was found, on close inspection, to depend upon the existence of numerous fine points of injection. Slighter appearances of the same kind were noted at several points of the small intestines. A good deal of whitish mucus was present in the bowels. The cavity of the peritoneum was quite free from fluid, and the surface of the membrane everywhere smooth and polished.

(To be continued.)

REVIEWS.

Researches on the Nature, Pathology, and Treatment of Emphysema of the Lungs, and its Relations with other Diseases of the Chest. By A. T. H. Waters, M.D., etc. London: Churchill. Liverpool: Holden. 1862.

We are glad to meet Dr. Waters in the field of practical medicine. Having won no inconsiderable position amongst contemporary investigators of healthy structure by his prize essay on the anatomy of the lungs, he has now given us what we hope is only an instalment of results to be achieved by the application of his powers of observation and research to the phenomena of disease. We conceive that the most valuable portions of his book are those which treat of the morbid anatomy, pathology, and mechanical production of emphysema. On the first topic, Dr. Waters' observations enable him to speak authoritatively. With regard to the pathology, determining causes, and mechanism of emphysema, his views, although theoretical, are to a considerable extent supported by observed facts, and may probably prove to have anticipated future discovery.

Three forms of vesicular emphysema are described by Dr. Waters. The anatomical differences between them are simply those of extent, although he believes that the two first differ from the third both in pathology and mode of mechanical production. The first, which he calls "partial lobular emphysema," is that in which small patches only of dilated air-sacs occur, principally along the margins of the lobes. The second, "lobular emphysema," is the most common form of the disease, and involves one or more lobules in different parts of the lung. It is more especially found along the margin of the base at the anterior border and apex. It is the form of the disease so frequently met with in persons who have died phthisical. The third form, "lobar emphysema," is the most important. It consists of emphysema of the whole pulmonary tissue of a lobe or lung. The author has found it more commonly attacking both lungs than one, and the lower as well as the upper lobes. It frequently destroys life at an early period.

The anatomical changes which have taken place in the diseased lung have been examined by Dr. Waters by the same methods which he employed in his researches on the healthy lung tissue, viz., by inflation through a bronchial tube and desiccation. In some instances he previously injected the blood-vessels with a coloured solution of gelatine. We prefer to give his account of the anatomy of vesicular emphysema in his own words:—

"In the early stages of the disease we recognise a simple dilatation of the air-sacs, an increase in the size of the alveoli, and a diminution in the height of the alveolar walls, which, yielding with the distending cavities, become partially obliterated. As the disease progresses, the air sacs become still more distended, and the alveolar walls in some instances completely obliterated, so as to give a regular and smooth appearance to the inner surface of the air-sacs, instead of the honeycombed appearance characteristic of their normal state. This distension of the air-sacs is necessarily attended with a divergence of the elastic fibres which enter into their composition, and with a general thinning of their walls—a condition which prepares the way for the next stage in the progress of the disease, viz., a perforation of the walls themselves. This at first is but slight; here and there a circular or oval opening may be seen in the membrane; as the disease progresses these openings become more numerous and larger; in some instances the whole of the walls of the air-sacs, and the septa of the alveoli being perfectly riddled with small openings, so that a horizontal section of the lung-substance has a general cribriform appearance. These openings are for the most part either circular or slightly oval. They exist in all parts of the walls, and are often seen in the septa between the alveoli, before the air-sacs are sufficiently distended to obliterate the septa."

"The subsequent steps in the progress of the disease consist in a further distension of the air-sacs, an enlargement of their perforations, and a rupture of the fibres of which their walls are composed. As these results take place, the walls become more and more imperfect, and the openings in them coalesce. A further breaking down of the walls then occurs, so as to leave but very partial partitions between the cavities; and in the most advanced stages of the disease these partitions undergo other changes, and are reduced to mere membranous shreds, or thin, fibrous cords, passing in various directions, traversing, in fact, the distended sacs, two or more of which, by the destruction of their walls, have united to form a single cavity. These cavities occasionally assume a large size, and project from the margin of the lung; they sometimes also form appendages, being connected with the body of the lung merely by stalk-like processes." Pp. 15, 16.

The author observes that distension of the air-sacs may exist to a considerable extent, with, at the same time, but little or no perforation; and, on the contrary, that extensive perforation may be found with even a less amount of dilatation than in the former instances. Those cases in which the dilatation is considerable as compared with the perforation, are usually cases of lobular emphysema, whilst those in which perforation is in excess, are generally of the lobar form of the disease. The conclusion drawn is that rupture under an amount of distending force which in other cases is insufficient to produce such rupture must be referred to some previous degeneration of the lung-tissue.

Emphysematous lung tissue is anæmic. In the early stages, when there is simple distension, the capillary meshes are wider, and the vessels farther apart. On perforation and further distension taking place, the capillaries become ruptured, and give rise to the hæmorrhage which is occasionally observed in the progress of the disease. In the further stages, where the air sacs are converted into large cavities traversed by membranous septa and shreds, small blood-vessels are seen to course along the latter; but their vascularity is but slight, and their respiratory function can be but inconsiderable. Occasionally, dilatation of the bronchial tubes, the marks of acute or chronic bronchitis, and an increased development of the circular muscular fibres surrounding the bronchial tubes, are collateral anatomical changes. The increased development of the muscular fibres is especially found in old cases of lobar emphysema.

Interlobular emphysema, an infiltration of the areolar tissue with air, has never been seen by the author except in conjunction with extensive vesicular emphysema, when it is present, to a greater or less extent, in almost every case. Dr. Waters differs from Lebert as to the period of the vesicular form of the disease at which the interlobular becomes superadded. Lebert speaks of it as an early result. The author has rarely seen it except where vesicular emphysema has been largely developed.

The pathology of the disease, or the nature of the morbid action which results in the anatomical changes above described, is confessedly a difficult subject. Dr. Waters is of opinion that all cases of emphysema cannot be referred to the same determining cause. He believes that the cases of partial emphysema, where the disease has supervened on chronic bronchitis, or other disease of which cough has been a prominent symptom, must not be classed, as regards their pathology, with those cases in which the disease has commenced and crept on insidiously, the patient probably being a young

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person, and having never suffered from severe or long-continued cough. The changes in the former cases may be attributed to mechanical violence. In the latter they owe their existence to some morbid degeneration of the lung tissue, and involve large portions of one or both lungs. What the exact form of degeneration is which gives rise to "lobar emphysema," it is not easy to determine. By Mr. Rainey and Dr. C. J. B. Williams it has been considered to be fatty change. Dr. Jenner, on the other hand, holds it to be "fibrous degeneration—the consequence of the exudation of that variety of lymph which escapes from the capillaries, when they are the seat of slight but long-continued congestion." Dr. Waters' observations have not led him to adopt either of these views in its totality. With regard to the former, he writes:—"In the large majority of cases I have found no indications whatever of fatty matter; in some few instances, however, I have seen deposits of fat in the walls of the air-cells." He therefore believes that the production of fat is an occasional accompaniment of the disease and not its essential cause. The theory of degeneration arising from congestion, although it may apply to those cases where emphysema is secondary to chronic bronchitis, does not appear to account for the primary form of the disease, which comes on without any pre-existent congestive affection of the bronchial membrane. Although Dr. Waters' actual observations have not led him to positive results, their value must not be underestimated. He has investigated the condition of the blood-vessels from their commencement to their termination in the pulmonary plexus, surmising that they would probably be found to be the seat of atheromatous or fatty change. In some cases he has found atheroma existing in the pulmonary arteries and their capillaries, but in others no indication of it: and he has made the further observation, that atheroma does not occur in the pulmonary arteries without its being found in the aorta as well, proving that the affection of the former vessels is the result of a general tendency to arterial degeneration, rather than that it is connected specifically with the production of emphysema.

The result of his examination of the elastic fibres of the emphysematous lung is that there is no marked distinction between the diseased and healthy fibres, except that the outline of the former is sometimes less regular, and that they have less disposition to curl at their ends. But he has never observed any structural change in the fibre.

Although, however, unable to define the exact form of tissue degeneration which he believes to be the first step in the production of lobar emphysema, he insists on the existence of such a change, not only on the grounds which we have already noticed, viz., the supervention of the disease unpreceded by cough, and the large portion of the organ involved, but also because of the known hereditary character of emphysema, and the good effect produced by those remedial measures of a tonic and supporting character which act beneficially on other diseases attended with degeneration of tissue.

Our limits will not allow us to give an analysis of Dr. Waters' argument on the determining cause and mechanism of emphysema. He agrees with Dr. Jenner in adopting an expiratory theory where emphysema has followed bronchitis, pertussis, and other affections in which long-continued and violent coughing is the most marked symptom. But in cases which fall under the other category, where there has been no cough or bronchitis, and where the disease involves the greater part of the lung, the expiratory theory will not apply, and he is then disposed to think that the distension is brought about by inspiration. He believes "that in these cases the lung tissue, being in an unhealthy condition, and abnormally weak, gives way before the pressure which it would, in a state of health, resist, and that, having once yielded, it is unable to recover itself, from having lost its elasticity. Consequently, it undergoes further distension, as increased efforts are made to dilate the chest in order to meet the requirements of respiration; until at length, the thorax having reached its extreme point of dilatation, no further enlargement of the lungs can ensue.

The remainder of Dr. Waters' work contains chapters on the symptoms and physical signs, sequelæ, and treatment of emphysema. As a whole, we can most conscientiously recommend it to our readers. We think it one of the most valuable contributions to pathology made during the past year.

MASON, FRANCIS, F.R.C.S., Assistant-Surgeon to King's College Hospital, has resigned the post of Surgeon to the St. Pancras and Northern Dispensary.

PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

March 16.

SINCE the date of my last letter there has been some increase of fever in this town, and I think that a few facts and figures in reference to it may not be without value to those who are interested in the effort to ascertain the true relation between Lancashire famine and Lancashire fever.

The following tables show, first, the total number of deaths from "fever," *i. e.*, all cases registered as typhus, typhoid, or gastric fever this year, and the average of the corresponding week for the last ten years; and, secondly, the number of cases under treatment in the Parish Fever Hospital, with the mortality resulting therefrom during the present year and the corresponding part of last year:—

1. *Deaths from Fever in the Borough of Liverpool.*

Date.	No. of Deaths.	Average.
January 3, 1863 . . .	24	11
,, 10 ,, . . .	35	8
,, 17 ,, . . .	28	10
,, 24 ,, . . .	22	9
,, 31 ,, . . .	20	9
February 7 ,, . . .	18	9
,, 14 ,, . . .	14	10
,, 21 ,, . . .	25	10
,, 28 ,, . . .	19	10
March 7 ,, . . .	14	10

2. *Cases Admitted into the Parish Fever Hospital.*

	1863.		1862.	
	Cases.	Deaths.	Cases.	Deaths.
January 7 . .	90	6	21	1
,, 14 . .	83	9	32	2
,, 21 . .	70	5	46	3
,, 28 . .	71	5	34	6
February 4 . .	94	3	53	1
,, 11 . .	96	7	64	2
,, 18 . .	110	6	69	4
,, 25 . .	134	7	76	6
March 4 . .	134	11	71	6
,, 11 . .	130	7	70	3

There have been scarcely any cases of typhoid fever at the workhouse. Most have been true typhus, with well-marked mulberry rash. I find on inquiry that these cases have come mainly from the fever foci, which, in spite of the Health Committee, still exist in the courts and alleys, where whole families are huddled into single rooms, where there is much dirt, and little light and air, where the food is bad, and the drink worse still.

I have no doubt matters might have been much worse had it not been for the supervision which is exercised in neighbourhoods in which the disease is known to exist, by the inspectors on the staff of the Medical Officer of Health, and for the removal of the cases which the Medical officers of the parish send into the Workhouse Hospital. One good result is likely to be brought about in consequence of the pressure which the multitude of fever cases has thrown upon the parochial Fever Hospital: namely, that it has been resolved by the Select Vestry to pull down the present Hospital and build another on its site.

The present building was erected in 1800, at the instance of the celebrated Dr. Currie, and contains ninety beds. The Medical officers reported to the vestry that the space it afforded might suffice for the treatment of sixty patients—a number much beyond the average of the past few years—but that it was not adapted to meet any extra demands that might arise. It is now proposed to erect an Hospital that shall accommodate 150 patients. I may add here what I thought of saying in my last letter, that I hope the experience of the past winter at Preston may convince those who have influence in that wealthy town, that the want of some Hospital accommodation superior to that which can possibly be afforded by the "House of Recovery" is one which ought to be met, and I trust that when some future local historian comes to reckon up the effects of the cotton famine he may have among the positive advantages which have, under the merciful hand of Providence, resulted from the lessons learnt in these hard times, to include the establishment

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Hospital worthy of the town of Preston, which the "House of Recovery" assuredly is not.

An important addition is about to be made to the Liverpool Royal Infirmary by the erection and endowment of wards devoted to the treatment of the special diseases of women, the sum of 10,000*l.* having been some time since placed at the disposal of the committee for this purpose by Mrs. Thornton, of West Derby. The plans are now under the consideration of the committee, and will, I hope, soon be carried into effect. It is, I think, most satisfactory that in this instance the arrangements for the treatment of these special cases are made in connection with a general Hospital, and that we have not another to increase the already numerous Medical Institutions of this town, to which two additions have just been made, to wit, a Dispensary for Diseases of the Skin, in Brownlow-street, and an Hospital for Cancer and Diseases of the Skin, in Roscoe-street. What public necessity called these establishments into being is an inscrutable mystery. Skin diseases and cancer are not excluded from the Hospitals and Dispensaries, nor are their physicians and surgeons incompetent to the treatment of these diseases. It would be a great benefit to the profession, and, I believe, to the public also, were it possible for us to arrive at some definite opinion as to the use and abuse of special Hospitals and Dispensaries. Whether still further division of labour is desirable—whether, for example, as we have institutions for diseases of the skin, it might not be well to inaugurate some for the diseases and injuries of bones, and thus cut out the "bone-setters;" and having got thus far, whether we ought not to provide special help for diseased mucous and serous membranes. Is it not worthy of consideration whether, as the eyes, ears, and teeth are already specially cared for, the nasal organs might not claim a share of attention, and so on *ad libitum*. On the other hand, may it not be suggested that we have as many special Institutions as are needed. I do not doubt that separate Hospitals for obstetric cases, for fever, etc., for diseases of the eye, may do good service by accommodating patients who cannot be attended to elsewhere; but it does appear to me, that Institutions for cases which are received at any Hospital cause a waste of public money if supported by voluntary contributions, help to aggravate the evils of gratuitous advice, impair the clinical opportunities of other Hospitals, and hinder rather than help true science.

An interesting discussion took place at the Medical Society on February 5, in reference to a case in which Mr. Higginson tied the internal iliac artery, in order to arrest hæmorrhage from the gluteal region. Five weeks before admission, the patient had fallen, and received a severe blow a little behind the great trochanter of the femur. Under the treatment of Dr. Thomson, of Argburth, he appeared to have nearly recovered, when, after walking about a mile, suppuration occurred in the gluteal region. The collection of matter was opened—no hæmorrhage took place then; but four days after there was bleeding to a considerable extent. Pressure stopped the bleeding for the time, but the pus which was discharged was tinged with blood; and about eight days after the first hæmorrhage a second attack occurred; a compress was then put on, and the patient sent to the Southern Hospital. Mr. Higginson found that the finger passed through a large cavity filled with pus and sloughing tissues to the bony edge of the sciatic notch, and that bleeding was still going on. The internal iliac artery was tied without difficulty, and without any loss of blood; but the man gradually sank, and died fourteen hours after the operation. At the post-mortem, there was found fracture of the sacrum, the soft parts around ecchymosed and sloughy, but it was impossible to ascertain the precise source of the hæmorrhage.

There was considerable diversity of opinion as to whether or not it would have been more advisable to have laid open the abscess and tied the wounded vessels. Mr. Higginson believed that the danger to the patient would have been greater had he been subjected to the further loss of blood, which must have occurred during the search for the bleeding point, than that which was incurred by the shock of the operation. He regretted that the man had not had the chance of recovery which transfusion would have afforded him, and mentioned a case, hitherto unpublished, which occurred at the Southern Hospital in 1860, in which a man reduced to an almost hopeless condition by profuse suppuration and repeated hæmorrhage was saved by the injection of about twelve ounces of blood into his veins. This being another case to add to the seven previously published by Mr. Higginson, which will be found in the first number of the *Liverpool Medico-Chirurgical Journal*.

It is, I think, to be regretted that this operation is not more frequently adopted, now that experience has demonstrated its safety and its efficiency.

REPORTS OF SOCIETIES.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, FEBRUARY 20.

Dr. BAINES, Vice-President, in the Chair.

A PAPER, by Dr. ANSTIE, was read on

THE THERAPEUTICAL VALUE OF COD-LIVER OIL IN CHRONIC CONVULSIVE DISEASES.

The author's attention had first been directed to cod-liver oil as a remedy for affections of this class in consequence of his obtaining some years ago an unexpected success with it in a case of chorea, which had resisted all the ordinary modes of treatment. The convulsive diseases in which the author has employed cod-liver oil are paralysis agitans, simple epilepsy, chorea, and mercurial tremor, and in all these affections it has appeared to be more constantly useful than any other medicine. Of paralysis agitans, four cases were detailed, of which three were very decidedly improved, and one of them may have been said to be cured, although the affection had been very severe. Of chorea, one case was detailed, and others were alluded to in which the benefit produced was very marked. Of mercurial tremor, one most remarkable case was related, in which the cause of the mischief was a very unnecessary salivation inflicted by Medical authority some thirty years previously; the patient was attacked immediately afterwards with dreadful tearing pain in the muscles of the forearms and calves, and with violent muscular tremors, and ever since that time she has been liable to a recurrence of the symptoms when much fatigued or depressed from any cause. On application to Dr. Anstie, at the Chelsea Dispensary, cod-liver oil was prescribed and persisted with for five weeks, at the end of which time all the symptoms had perfectly disappeared, the patient declared that she had never been cured before in less than six or eight months, and she doubted whether any other medicine than the oil had ever really done her any good. Twice since she has had slight recurrence of the symptoms, but a short course of cod-liver oil has on each occasion given complete relief. Of simple epilepsy, twenty cases were given, in which the treatment had been confined to the use of cod-liver oil. Of these there were five upon whom no good effect whatever was produced; seven had completely recovered; two had disappeared from supervision at a time when they were rapidly improving, although they could not be said to be cured; in two others the mental symptoms had greatly improved, but the fits remained as before. Four patients remain still under supervision; in two fits have ceased, although there are still frequent prodromata; and in the remaining two but little good has yet been effected. Besides this general summary of results, Dr. Anstie detailed the particulars of three cases which from their severity might be said fairly to test the remedial power of the oil. The patients were respectively a girl, aged 17, a boy, aged 13, and an infant, aged 7 months; in all of them the fits were very frequent and severe, and the nervous system exhibited signs of great depression. The case of the infant was specially noticeable, because it was proved by microscopic inspection that the milk of the mother was very deficient in oily matter, and it appeared that in a former infant of the same mother precisely the same train of symptoms had appeared, and had terminated fatally. In all these three cases the treatment had proved perfectly successful, and the author commented strongly on the fact that in all these cases the general nutrition of the body had been excellent, and only that of the nervous system had appeared deficient, and said that conclusion appeared inevitable that the oil had expended itself in enriching the nervous centres. This, indeed, was the principal point of the paper. The author directed attention to Dr. Radcliffe's remarks on the necessity of fat to the nutrition of the nervous centres, and mentioned the fact that that gentleman had found cod-liver

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oil of the highest value in the treatment of convulsive diseases. He observed, also, that the beneficial action of cod-liver oil was quite consistent with what we know of the action of the few other remedies which careful therapeutical investigation has credited with a really beneficial action in chronic convulsive diseases. Steel, arsenic, quinine, all these may fairly be spoken of as foods. With regard to sedatives, the author remarked that in the first place the good effects which could be expected from them were chiefly temporary, and such as result from breaking through for a time the evil habit, so to speak, of convulsive action. Secondly, and this was most important, there was strong reason to believe that it is not the really narcotic effect of these remedies which are of service in preventing or arresting convulsive action, but merely the stimulant effects which can be obtained from small doses; for there is no class of remedies which is more useful in preventing or arresting convulsions than the pure stimulants. The author concluded his paper by deprecating strongly any return to the absurd system of hunting about blindly for "specifics" for chronic convulsive diseases. The progress of clinical observation was blasting the reputation of one after another of the strange, out-of-the-way remedies which had once been accepted with the blindest faith, and was pointing unmistakably to a rational treatment of convulsive diseases by means of medicines whose action it is possible to understand.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, March 19, 1863:—

Charles Edward Candia, Henfield, Sussex; Walter Rumbell, Ramsbury, Wiltshire; Charles Henry Alfrey, Stamford-hill; Alfred Averill, Broadway, Worcestershire; George Herbert Holden, Prestaign, Radnorshire.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

COTTRELL, T. S., has been appointed Certifying Surgeon under the Factory Act.

DAVIS, JOHN HALL, M.D. Lond., has been appointed Lecturer on Midwifery at the Middlesex Hospital.

GRAHAM, F. L., has been appointed Certifying Surgeon under the Factory Act.

HARRIES, GWYNNE, M.R.C.S. Eng., has been appointed Physician-Accoucheur's Assistant at King's College Hospital.

HART, ERNEST A., M.R.C.S. Eng., has been appointed Lecturer on Ophthalmic Surgery at St. Mary's Hospital.

HEAD, EDWARD, M.B. Lond., has been appointed Professor of Botany at the Charing-cross Medical School.

HUNTER, GEORGE YEATES, M.D., of Margate, has been appointed a Cinque Port Justice of the Peace.

KEAL, WILLIAM, M.R.C.S. Eng., has been elected Coroner for the County of Rutland.

MEADOWS, ROBERT, M.D., has received a Commission as an Assistant-Surgeon in the Anglo-Chinese Squadron.

OFFICER, Dr., has been elected Speaker of the House of Assembly, Tasmania.

RADDALL, JOHN, M.D. Lond., has been appointed Lecturer on Medical Jurisprudence at St. Mary's Hospital Medical School.

SMITH, H. SPENCER, F.R.C.S. Eng., has been appointed Surgeon to St. Mary's Hospital.

TAYLOR, GEORGE, M.D. Glasg., has been appointed Principal Medical Officer of Chatham Garrison.

DEATHS.

GROGUHAN, GEORGE E., L.Q.C.P.I., late of Rathmines-road, Dublin, at New York, on February 13.

HOLLIER, EDWARD, M.R.C.S. Eng., at Hammersmith, on March 18, aged 72.

HUTCHISON, WILLIAM, M.D. Edin., at 4, Bath-place, Wellington-square, Ayr, N.B., on March 24.

OSLER, EDWARD, M.R.C.S. Eng., at Truro, Cornwall, on March 7, aged 65, Editor of the *Cornwall Gazette*.

PHILLIPS, GEORGE, F.R.C.S. Eng., at Haverfordwest, on March 19.

SMITH, DR. RICHARD, at Elmbank, Lasswade, Edinburgh, on March 16, aged 69, Surgeon R.N.

SODEN, JOHN SMITH, F.R.C.S. Eng., at Sydney-place, Bath, on March 19, aged 85.

THE students of St. Bartholomew's Hospital have forwarded to the Mansion-house Fund, for the relief of the Lancashire distress, a further subscription of £12 13s. 6d., in addition to the sum of £38 forwarded by them in December last, thus making a total of £50 13s. 6d. subscribed by the students of the above-named Hospital for this object.

SCARLET FEVER IN THE TRAINING SHIPS, DEVONPORT.—Scarlet fever has appeared among the boys on board the training ships *Impregnable*, 78, Commander F. S. Tremlett, and the *Implacable*, 24, Commander Samuel B. Dolling, in Hamoaze, Devonport. There are about 22 cases on board the *Implacable*. Her complement of boys is 400, but she has at present 450; of these 226 have been sent to a sanitary hulk.

DR. S. FENWICK being on the eve of leaving the parish of Tynemouth, where he has practised for many years, the local clergy were desirous of marking their high esteem for his character as a man, and his skill as a Physician. They have therefore united in presenting him with a very handsomely bound Bible, in which was inserted an inscription on vellum, designed and written by Edward Offor, of Leadenhall-street, London. Dr. Fenwick will be greatly missed, not only by his personal friends, but by the large labouring population of North Shields, to whom his Professional services were freely given.

THE HUNTERIAN MUSEUM.—This collection has been enriched with a magnificent series of preparations illustrating the pathology of the human eye, nearly 300 in number, and about 500 microscopic slides prepared from the same specimens. The whole have been made with consummate ability by Dr. C. Bader, of the Royal London Ophthalmic Hospital, and a former assistant in the museum of the College of Surgeons. The preparations are accompanied with a description of the appearances at present exhibited by the specimens, with a history of the case, and a general and microscopic description of the morbid appearances presented by the eye when recent. Such a collection does not exist at home or abroad, and great credit is due to the Council of the College for securing it for their unrivalled museum.

PROPOSED NEW HAT FOR THE CITY POLICE.—It will be recollected that some time since Mr. G. Borlase Childs, Surgeon to the City police force, recommended, among other improvements in the dress of the police (some of which have been adopted), a new description of hat, which he proposed to call the "Britannia Hat," and which was designed after the Greek *pilos*. It has been manufactured by Messrs. Hall, and is thus described by a writer in the *City Press*:—"The hat, which is a modified form of helmet, certainly appears to be a very desirable substitute for the present cumbrous shape. In form it is admirably calculated to resist a blow, so also is it in substance, though it is not heavier than the hat now worn. It is next to impossible to knock it off the head—a great desideratum—and, indeed, with the strap under the chin, which may or may not be worn, it appears quite impossible. It is well ventilated, has a neat and not conspicuous appearance, and possesses also a covering, which may be worn at pleasure, for the ears. A similar hat has been adopted for the police force of two towns in the north of England.

THE APOTHECARIES' COMPANY OF IRELAND.—The King's and Queen's College of Physicians of Ireland have addressed a letter to the Irish Poor-law Commissioners on the subject of the licence of the Irish Apothecaries' Company. They assert that the certificate or licence which the Apothecaries' Company of Ireland are empowered to issue is only such as specified in sect. 18, 31st of Geo. III., cap. xxxiv. Irish, viz.—"That we think him properly educated or qualified to become an apprentice or journeyman (as the case may be) to learn or transact the business of an Apothecary." And in sect. 22—"That no person shall open shop, or act in the art and mystery of an Apothecary within the kingdom of Ireland, until such person shall have been examined as to his qualification and knowledge of the business," etc. They go on to state that there is neither in these clauses, nor in any part of the Act, any authority given to grant any licence or certificate in Medicine; and on this point it seems requisite to observe that, in the case submitted to Sir R. Bethell, there is a mis-statement calculated to mislead counsel, where it is stated that, "Such, then, was the legal and recognised position of the Irish Apothecary, analogous in every respect to that of the Apothecary in England, when the Medical Registration Act (21 and 22 Vic., ch. 90) was

passed," etc., etc. They, moreover, go on to show that the constitution of the Board of Governors of Apothecaries' Hall of Ireland, from whom the examiners must be selected, under the Apothecaries' Act, is not such as to insure a satisfactory guarantee that the examiners are competent examiners in the science and practice of Medicine.

An Examination for three Foundation Scholarships, and also for three Minor Scholarships, will be held in Downing College on Monday, the 18th of May next, and the two following days, and will begin at 9 a.m. on Monday. The examination will be chiefly in classics and elementary mathematics, but some weight will be given to proficiency in French and German. To the candidates for Foundation Scholarships two additional papers will be set, one on moral philosophy in connexion with the principles of jurisprudence, the other on the elements of the natural sciences (human and comparative anatomy, physiology, chemistry, mineralogy, and botany) in connexion with Medicine; and in awarding two of these Scholarships considerable importance will be attached to any special proficiency in the legal or in the Medical subject. Persons who have not been entered at any college in the University, or who have not resided one entire term in any such college, are eligible to the Minor Scholarships, which will be of the value of £40 per annum, and tenable for two years, if the holder be not elected before the end of that time to a Foundation Scholarship. Students of the college, or of any other college in the University, who have not kept more than six terms, will be eligible to the Foundation Scholarships, which will be tenable for three years, and of the value of £50 per annum, with rooms, and with commons during residence in term time. Those Foundation Scholars who shall obtain a first-class in any tripos will be entitled to hold their Scholarships till they are of standing for the degree of Master of Arts, or, if they should be elected fellows of the college before that time, until such election. No one elected Scholar will receive any emoluments until he has commenced residence as a student of the college. Satisfactory testimonials as to their moral character must be sent to the Master by all candidates for these Scholarships, on or before Wednesday, May 13. Further information will, if required, be given by the Rev. W. B. Pike, tutor, Downing College.

Death from Rupture of the Stomach.—On Tuesday last Mr. Humphreys resumed, at Stepney, an inquiry respecting the death of Jane Utting, aged 18 years. The evidence went to show that deceased was a single woman, residing with her mother in White Horse-lane, Stepney. She had been in her usual health, and on the night of Tuesday, the 10th inst., she proceeded to King William-street and London-bridge to witness the decorations. Soon after returning home she complained of extraordinary violent pains in the chest. A doctor was sent for, but all treatment was unavailing, and she died shortly afterwards. It was supposed that she received some fatal injuries in the crush. Dr. Sykes said that he was quite surprised at the suddenness of deceased's death. He could not see any cause other than the alleged crushing to account for death without a *post-mortem* examination, which he had made, and death he found had resulted from rupture of the stomach from old disease. There was a dark patch externally, but he could not say that it had been produced by violence. The coroner said that in his opinion nearly all those who had perished in the fearful crushes in the city during the late rejoicings had been previously in a state of disease of the heart or other internal organ. It was a matter of some interest as well as importance to ascertain the fact beyond doubt, both to reassure the general public and also to warn persons so afflicted of the great danger into which they inevitably ran in subjecting themselves to the pressure and excitement of such scenes, and the *post-mortem* examinations made placed the fact beyond a doubt. A verdict of "Death from rupture of the stomach" was returned.

Odontological Society.—At the meeting of the society on the 2nd inst., a paper was read by J. Walker, M.D., M.R.C.S., "On Dental Exostosis: its Pathology and Diagnosis." The author commenced by defining what was to be understood by the term exostosis, and described the various forms of the disease, which were illustrated by diagrams and specimens. He then considered the causes of exostosis regarding inflammation of the peridental membrane as the first step in the morbid process leading to an exudation of organisable lymph which is converted first into fibrous and then into osseous tissue. The causes of inflammation of the peridental membrane were caries, concussion, looseness of the tooth, and its apparent elongation from rising in the socket, rheumatism, syphilis, gout, and mercurialism. Hence exostosis may affect the fangs of sound as well as of carious teeth, though in a less degree. Speaking of rheumatism, the author expressed his opinion that this was a much more common cause of periostitis around the fangs and in the sockets of the teeth than is generally supposed, and one chief reason for this opinion was the very great relief from pain which he had repeatedly seen follow the use of iodide of potassium when all other remedies had failed. The last division of the subject was the diagnosis of exostosis from other diseases about the face and mouth, particularly neuralgia and incipient disease of the temporal bone from otitis: he placed its chief distinction in the character. In exostosis the pain comes on gradually, is continuous, and often severe. In neuralgia it is intermittent, often severe from the commencement, but the patient has intervals of ease. In otitis the pain is always increased by pressure about the ear, and at length is relieved by the occurrence of a discharge of puriform matter. Hearing will also be impaired or confused. The author more completely illustrated this division of the subject by cases occurring in his own and in the practice of others; he showed also an interesting specimen of a monkey's head with the cancellous structure of the bones of the face highly hypertrophied, without extending to the bones of the skull, from irritation and inflammation arising from a diseased canine tooth, the fang of the tooth being exostosed.

The Negro Race in America.—In the South, where they are well cared for, the negroes increase and multiply. In the North, where nobody cares for them—for Abolitionists never talk of the free black man, but only of the slave—the race is perishing. The last official census of the United States gives the figures. "In the interval from 1850 to 1860," says Mr. Kennedy, the official Superintendent, in his preliminary report to Congress, "the total free coloured population of the United States increased from 434,449 to 488,005, showing an annual increase of one per cent. This result includes the number of slaves liberated and those who have escaped from their owners. . . In Boston, during the five years ending in 1859, the number of coloured births was one less than the number of marriages, and the deaths exceeded the births in the proportion of two to one. . . In Philadelphia, during the last six months of the census year, the new city registration gives 148 births against 306 deaths among the free coloured people. . . In the State registries of Rhode Island and Connecticut, where the distinction of colour has been specified, the yearly deaths of the blacks and mulattoes have generally, though not uniformly, exceeded the births. . . . . Owing, among other causes, to the extremes of climate in the more Northern States, and in the Western States to expulsive enactments of the Legislatures, the free coloured race shows a decrease of numbers in Indiana, Maine, New Hampshire, New York, and Vermont." The Superintendent says nothing of the social misery and degradation of the negroes in the North—misery and degradation that break what little spirit is possessed by the race; but, doubtless, these operate injuriously on their health and fecundity, and aggravate the rigours of a climate for which their constitution and temperament are not suited. But while thus dying out of the North and West by slow, though sure decay, the condition of the Southern negroes shows a totally different result. "The slave population of the South," says Mr. Kennedy, "amounts to 3,950,000 persons. During the decennial period from 1850 to 1860 their numbers advanced no less than 749,931, or at the rate of nearly 23½ per cent." These figures show that if the condition of the Southern negro be slavery, it is slavery with health and life; and that if the condition of the Northern negro be liberty, it is liberty with disease and death, as well as with social degradation. The English Abolitionists should look these facts in the face, and make the best of them; not forgetting, at the same time, that Mr. Lincoln, who proposes to set free the great bulk of these poor people, also proposes to deport and expatriate every one of them to Central America, or back again to Africa.—*Times Correspondent.*

Proportion of Births and Deaths in Austria.—This varies exceedingly in the different provinces of the empire. Of *births* there take place in the Military Frontiers and in Galicia 1 in 20 inhabitants; in Hungary, 1 in 21; in Silesia, Croatia, and Bukowina, 1 in 23; in Dalmatia and Venetia, 1 in 24; in Lower Austria, Bohemia, and Moravia,

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1 in 25; in Siebenburgen, 1 in 27; in Craniola and Styria, 1 in 30; in Upper Austria, Carinthia, and the Tyrol, 1 in 32; and in Salzburg, 1 in 33 inhabitants. *Deaths* occur in the Military Frontiers in the proportion of 1 in 25 inhabitants; in Hungary, 1 in 30; in Lower Austria, Galicia, and Venetia, 1 in 31; in Salzburg, 1 in 32; in Upper Austria and Croatia, 1 in 33; in Craniola, 1 in 34; in Styria and the Tyrol 1 in 35; in Bukowina, 1 in 36; in Carinthia and Moravia, 1 in 37; in Bohemia and Silesia 1 in 38; in Siebenburgen, 1 in 41; and in Dalmatia, 1 in 45. A consequence of these differences is an unequal increase of the population. This is greatest in Dalmatia (2·06 per cent.) exceeds 1¼ per cent. in Silesia, Galicia, and in the other Slavonic and Hungarian provinces is more than 1 per cent. The German crown provinces exhibit an increase of less than 1 per cent., while in Salzburg for a series of years the number of deaths has exceeded that of the births.—*Wien. Allg. Med. Zeit.*, 1862, No. 45.

Deaths in Berlin during 1861.—The entire number of deaths amounted during 1861 to 15,177, viz., 1 death for 36·0 inhabitants, and 100 deaths taking place for 134 births. As is usually the case, the greatest mortality took place in July and August, almost exclusively caused by infantile diarrhœa and marasmus. The smallest number occurred in February. As in every year, phthisis was the cause of the greatest number of deaths. Next in frequency came infantile convulsions—this disease, together with the diarrhœa and marasmus of children, constituting 28 per cent. of the mortality. Still-born children amounted to 6·4 per cent., being 4·6 per cent. of the new-born infants. Deaths from acute diseases of the chest were 4·1 per cent., from inflammation of the brain 4·0 per cent., from fever 3·2 per cent, from croup 1·4 per cent., and from puerperal fever 0·9 per cent. Apoplexy is returned at 4·9 per cent., and pulmonary paralysis (?) at 3 per cent. The fatality of scarlatina, measles, and pertussis was almost confined to the first ten years of life, increasing in scarlatina until the fourth year, the maximum in measles and pertussis being attained by the second year. Erysipelas chiefly proved fatal in children in early life. The greatest mortality from typhus tock place between the twentieth and thirtieth years. Inflammation of the brain prevailed most in infancy, but it also occurred very frequently between the ages of thirty and forty. Phthisis killed chiefly between twenty and thirty, the deaths continuing frequent even until the fiftieth year. Thus, of 100 deaths from all causes between the ages of twenty and thirty, 44 per cent. (49 males and 38 females) died from phthisis, as did 39 per cent. between thirty and forty, and 32 per cent. between forty and fifty. Illegitimate children formed 20 per cent. of the entire number of dead children, while they only constituted about 16 per cent. of the entire births. The suicides were returned at 7·4 per 1000 of deaths, 85 per cent. being males, and 15 females. It is probable, however, that several of the persons found dead in the water were suicides. Most suicides took place in July, fewest in January. After drowning, hanging was the favourite mode of death, then came shooting (only in males), and next running over on railroads. Accidental deaths were returned at 13·8 per 1000, the great majority occurring through the agency of water.—*Preuss Medicin. Zeitung*, 1862, Nos. 37-42.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

We have received a statement from Mrs. Russell which is denied, and would have nothing to do with her charge against Mr. Adams if it were admitted.

M D.—1st. 12,500. 2nd. About 5 per cent. The exact number may be obtained by counting up the names, with the prefix of non-registration attached, in Churchill's Medical Directories.

Chloroform Accident—Recovery.

The following has been sent us by Dr. Kidd for publication:—

The following is an important instance of recovery from chloroform death, so to term it,—the first, we are assured, in which a peculiar form of electricity has been tried in the human subject. A lady, of the middle period of life, was placed under chloroform one day this month, in a public institution in London, previous to a plastic operation in the perineal region. It was observed, at first, that she did not "take" the anæsthetic well; she gasped and held her breath in a hysterical manner. The Surgeon about to operate thought the "inhaler" at fault. Then a handkerchief was tried; then sulphuric ether substituted for the chloroform; till, finally, the patient became, at the expiration of about ten minutes, fully narcotised in the ordinary degree for such operations, the anæsthesia being kept up by small doses of chloroform and ether, mixed in a drachm measure glass.

The operation was commenced, and about half performed, when, at the expiration of about ten minutes more, the pulse was noticed to waver, then suddenly to stop; there had been some unavoidable hæmorrhage, and the sudden change was ascribed to this circumstance. Cold dashing of water, and fanning the patient with a lady's fan, restored the pulse again, but its beat was uncertain and slow. The sutures were now being quickly inserted, and the chloroform was put away. There was no steady rally, however, of the patient; respiration had stopped. The pulse, which had been carefully watched all along by Dr. Kidd (who assisted another gentleman in the administration), was noticed again to flicker and stop, the face quickly assuming the fixed, cold aspect of death; the face and neck were so cold that it was thought better to cease the cold dashing. The utmost alarm seized some thirty Surgeons—bystanders; one cried to draw out the tongue; another to turn the patient on her side; ammonia was placed to the nostrils in vain. A sense of agonising suspense ensued; there was no pulse; no breathing; death had set in, or was setting in fast. The great desideratum in such cases is to re-establish the action of the diaphragm and respiratory muscles. It is idle to attempt to act on the heart or pulse except through the respiration; the right side of the heart is gorged with blood which the fixed lungs and thoracic parietes do not receive. It is very difficult even to notice if the respiration is going on; the patient may remain as in catalepsy—fixed and staring, the heart still receiving blood into its right cavities from the rough manipulations and pressure and rubbings of bystanders on the surface to restore life. All this took place in the present case. The arm was raised, and the "Sylvester method" tried, but all in vain; there was still no rally, no pulse, no breathing; the eyes had assumed the opaque, ghastly stillness of death; the face was like white paper. Nearly all the usual resuscitation methods had obviously failed; three, five, ten minutes elapsed; tracheotomy was next thought of! but, rushing away for a moment, Dr. Kidd brought his portable electric battery, and, pulling a pin out of his necktie, stuck it into the region of the phrenic nerve as it lies in the sterno-mastoid, another pin into the diaphragm, and quickly applying the wetted sponges of the "Faradisation" current, the effect astonished himself and every one present; where, a quarter of a minute before there was to all intents a body all but stone dead—cold, ghastly, and still as death—now the chest heaved and fell with each interruption of the galvanic circuit, the sterno-mastoid was thrown into strong contractions; there was a moan, a sigh, followed by natural breathing, and a gradual flicker of the restored pulse.

We are assured, as the result of a long series of experiments with chloroform on the lower animals, that electricity in any other shape is not effectual, or even this form of electricity on the old theory of "cardiac syncope" of Snow, direct to the heart itself; and Dr. Kidd, who explained these facts to the Surgeons assembled, mentioned a remarkable case of apparent death from drowning, the man supposed to have been an hour under water, at any rate pronounced by every one irretrievably dead, where a triumphant recovery followed the same method of resuscitation.

Hemicrania a Sequela of Influenza.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Perhaps some of the contributors to your columns of "Notes and Queries," etc., would kindly say if, during the late epidemic of influenza, they have noticed the disease to be followed in many instances by hemicrania, or more rarely facial neuralgia? I have observed it in too many cases for me to think it a mere coincidence. So far as I have noticed, the pain subsides on the accession of returning strength without any special treatment. I am, &c. Hugh Norris.

South Petherton, Ilminster, March 19.

[We find four grains of quinine, every two or three hours, *the* treatment.]

Extraordinary Death.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have thought you might be willing to reprint, among the varieties or memoranda, the enclosed (from this evening's paper), as the case is by no means unique.

In the Anatomical Museum of the Edinburgh University there is a sole-fish preserved (eight inches long and two and a-half broad) which, many years ago, caused the death of a fisherman precisely in the same manner as the mullet did in the case here mentioned. The man was in a boat drawing a net, and, having his hands engaged, seized the fish by his teeth to prevent its escape through the meshes. A sudden convulsive effort carried the animal down his throat, and, after death, the head was found within an inch of the cardiac orifice of the stomach. The man died from suffocation before the boat gained the shore.

I am, &c.

Zoological Society of London, March 24. T. Spencer Cobbold, M D.

"Extraordinary Death.—The Toulon journals relate the following:—'A warder of the bagne here, named Durand, has just met with his death in an extraordinary manner. He was amusing himself, while off duty, with fishing in the dock from a narrow floating raft, when having caught a mullet, and not knowing where to place it to prevent it escaping into the water, he conceived the idea of holding it between his teeth while he baited his hook. The fish, struggling in the convulsions of death, ended by slipping its h ad first into the mouth of the man and then down his throat, completely filling up the cavity. The man rushed out of the dock for Medical aid, but soon dropped dead from suffocation. The autopsy, which took place on the following day, showed that there had been no possibility of saving the man's life. The position of the fish, and the action of the viscous matter with which the scales were covered, while facilitating the mullet's entry into the gullet, had rendered its extraction impracticable without such injuries to the throat as would also have caused death. The author of this involuntary homicide measured about seven inches long and two broad.'"

Hunterian Society.—Recent Changes of Law.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have just received the report of this society's last annual meeting, and finding that each year brings with it some constitutional change tending to vest the entire control of the society in the hands of a clique who are practically self-nominated, I ask permission to bring this matter before those distinguished men, who, while remaining with us in name, yet manifest no personal interest in our welfare, and as it is well known that our meetings are free from that redundant eloquence and ability which so often embarrasses the less oriental societies, to ask that those members will throw their occasional presence into the gap, and dispel a suspicion that they are ashamed of an old connection. Reference to last year's report will show that the presidency has been made biennial instead of annual, and that the mode of electing the council has been changed, "so

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that the services of the more active members may be retained from year to year." Again, the present year's report states that the council have deemed it desirable to introduce a new bye-law, and the wording of this is such, that though its precise effect evades the perceptions of any ordinary intellect, yet it shows that the alteration is another step in the same direction, and it appears to give the council power to propose the resignation of any member for whom they may have a personal distaste. At the same time it contains no sort of provision for making such member acquainted with his offence, or for providing him with an opportunity for defending himself.

As no preliminary notice of this last innovation accompanied the circular which announced the annual meeting, it was not known that anything more than mere formal business would be transacted, and the meeting was, I am informed, an exceedingly select one, consisting, indeed, principally of the aforesaid council, although other members would certainly have availed themselves of the opportunity to express their sentiments upon the proposition had they been acquainted therewith. Moreover, this new bye-law is the more questionable in its present unguarded terms because the council just now rest under a charge of sheltering a tale-bearer among their number, and of having given currency to his statements in every way but that which would enable the injured party to meet them, and it may be suggested that this new bye-law is a mere matter of self-defence on the part of the council in the shape of an *ex-post facto* law, devised for the purpose of unconstitutionally menacing a member who has brought against them a charge which they are unable to answer.

Should, however, those now in office feel that they are gifted with a prestige and a sagacity which justify them in ignoring the laws of jurisprudence and in violating the forms of justice when dealing with the personal character of an individual member, I nevertheless hope that we may be favoured with a preliminary notification of any further improvements which the council may deem it desirable to introduce.

I am, &c. A MEMBER AND WELL-WISHER.

INSANITY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Your able article of last week on this question has suggested a few thoughts which I beg permission to express. Can it be wondered at when learned doctors disagree on cases of this kind before a legal tribunal that the lawyers should claim the right of deciding upon careful investigation and evidence before them? and also when persons believe that ordinary intelligence and practical association with mankind will qualify them for deciding a question of insanity the same as any other. I wish to advert only to one description of case—an individual who has abandoned himself to his impulses, or passions, or drink, commits murder; he is responsible; the same individual, we will suppose, has allowed himself to advance to delirium tremens and hallucinations, doing a number of extravagant things, and ending with murder. Is he, or should he be then responsible? Suppose a repentant consciousness of crime wakes up reason in this instance, as it frequently does in that of passion and intoxication, are not the deeds to be viewed under divine and human intelligence much the same? If the state of mind under the second condition persisted, then I can believe a difference must be allowed. Another instance occurs to me which I think the law has dealt too leniently with: an imbecile who has strong passions and is at large and employed, commits murder by a scheme or mental process to get the victim within his power; he is let off on the plea of insanity. I think unjustly so to the victim and society. Monomania and homicidal mania, where the persons are like others except in the one particular, ought such persons to escape penal law in the commission of their particular propensities? if they employ concerted means to an end, as they mostly do, why should they be considered irresponsible?

I am, &c.

March 24. AN OLD SURGEON.

"THE PLEA OF INSANITY."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I, in common, I am very certain, with most Physicians who devote themselves to practice in mental disease, was cordially glad to read the enlightened leading article of last Saturday's *Medical Times and Gazette*, entitled, "The Plea of Insanity." It constitutes a weighty and well-merited protest against both the artificial and conventional dogmas of written law on the subject of mental alienation, and the absurd exposition of lawyers who adopt that, and not actual occurrence and reason, as the basis of their disquisitions and judgments, and, unfortunately, of their application to particular cases.

If it can be demonstrated, by an induction of numerous unmistakable cases—if it is true, on the strongest and most indubitable evidence that human reason can desire—that moral insanity does exist unassociated with any intellectual aberration; that, in the case of a particular individual, given some special moral impression,—say association, suggestion, temptation, inducement, inclination, or opportunity—a corresponding and correlated mode of action or conduct, which is manifested in all men, and in certain circumstances rightly and suitably, in this case is, instantly, constantly, inevitably, thoughtlessly, and inconsiderately, exhibited, without care of consequence or power of restraint; or that many or any such impressions arouse, each its proper and co-ordinated expression, as conduct, act, etc., while the individual knows what he is about, can descant intelligently enough on the moral quality and consequences of actions, and even his own actions, can perceive, attend, observe, remember, compare, abstract, and judge as well as most men, and has no delusions, crotchets, whims, or eccentricities,—is it rational, far less just and humane, to ignore the reality as a general fact, resting on hosts of particular instances, and rely in reasoning and judgment upon a delusion or fiction? Numerous cases might be related of individuals who could as soon help existing as help committing some fault, crime, or sin, or several or any faults, crimes, or sins (for the inevitable tendency exists in every degree of generality), when a stimulus thereto acts upon them, as a moral impression, and yet could discourse most excellently on the evil of moral delinquency, or their own delinquency, and satisfy every test which the most ingenious alienist or lawyer could devise as to their intellectual soundness.

In such cases it is not the knowing of moral principles and relations of actions that is at fault, it is the caring; not the perception but the sense. In fact, according to my way of thinking, the knowing without the caring—the perception without the sense of wrongness—renders the commission a greater act of madness than in the case of an utter lunatic, destructive, dirty, noisy, incoherent, who steals, lies, strikes, fornicates, or kills when temptation allures and opportunity offers, without thought or compunction. Indeed, in as many cases, or more, of intellectual derangement or defect, the moral perception and sense is preserved and powerful as an informant of wrongness in act and conduct, and causal motive, as it is lost and powerless in the intellectually sane.

Such being undoubtedly the state of matters in existence and reality, and the nature of the written law of the subject being what it is, what are we to do? How are we, in accordance with the principles of science and dictates of common sense, to proceed in the way of amendation? 1. The first step should clearly be the thorough renovation of the law—the total expunging of that which absurdly and erroneously ignores and denies the existence of a positive fact, and the substitution of statute based upon multitudinous observation and ascertained reality. 2. The next step should meditate such a general description and definition of cases of pure moral insanity as will embrace in general terms every known instance of the malady and its essential features, and exclude cases of delinquency with moral sense and responsibility—actual crime. 3. After this has been done, and not till then, the question of treatment should be fairly discussed, and, as far as possible, settled, taking into account the causation, nature, and pathology of the malady, as well as social bearings, differentiating special divisions and groups of cases for special modes of treatment—punitive, reformatory, segregative, medicinal, etc. 4 In considering any case judicially, the next step of the process, the questions arise—(1.) Does it fulfil the description, definitions, or conditions of moral insanity—fall, in fact, under the category? This involves investigation and diagnosis. (2.) What form of moral insanity is it? This will be determined by the causation, nature, and pathology of the particular instance. Lastly, What kind of treatment is most suitable?

Such is an indication of the only mode of dealing with the perplexity of moral insanity which can ever in reason and reality satisfy justice and tend to good. Founded on the basis of human intuition as well as strict scientific method, its only possible failure must consist in and result from imperfection and ignorance of those who frame and apply.

As these yield to science and enlightenment, possibility of failure will become more distant, justice will be more surely satisfied, humanity will triumph, and goodwill accrue. The foregoing statements may appear to the blindly conservative Utopian, but, assuredly, the sooner that the present delusive and fictitious law is abolished, and a more rational, equitous, and scientific procedure instituted in such cases adopted, the better for the credit of law makers and dispensers, and the sake of the unfortunate morally insane.

I am, &c.

Durham Co. Asylum, March 23. KENNETH MCLEOD, A.M., M.D.

ETYMOLOGY OF "PYTHOGENIC."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—"F.R.S." undertakes to resolve my difficulty as to the derivation of "Pythogenic," and informs me that the word is derived from πυθομαι and γενομαι. He says, indeed, from the *root* of the Greek verb πυθομαι; but where is this root to be found as a separate word? Surely this is a very unusual mode of origin for a Greek compound. Will "F.R.S." oblige me by citing, from good authors, a few examples of Greek adjectives compounded of two verbs? The words he quotes as being similar to pythogenic in their mode of formation,—γηγενης, κεφαλογενης, πυριγενης,—are, unfortunately, specimens of a directly opposite kind, being all compounded of a verb and a noun.

"F.R.S." triumphantly refers to *pyogenic* as "a similar word to *pythogenic*." On the contrary, it is quite dissimilar, being formed from a noun and a verb, like the three Greek adjectives above quoted. It is surely very unreasonable to make the term "pyogenic" perform the double duty, assigned to it by "F.R.S.," of signifying, when applied to a membrane, a *producer* of pus; and, when applied to a fever, a *product* of pus! If pyogenic membrane be a membrane *producing* pus, then pythogenic fever, according to "F.R.S.'s" rule, should mean a fever *producing* putridity.

I *did* "refer to a good dictionary," probably the same from which "F.R.S." obtained his learned-looking bit of Sanskrit, and, as far as I have looked into Liddell and Scott, I do not find that two verbs are ever yoked together in composition to form such adjectives as "pythogenic."

"F.R.S." winds up by saying that "the word enteric, which Dr. Tweedie and 'Quærens' so strangely agree in upholding, . . pledges one to an opinion that the fever is the result, and not the cause, of the intestinal lesion." The word pledges one to nothing of the kind; it simply announces the fact that intestinal phenomena and a certain form of fever are always associated together.

I signed my first letter of inquiry "Quærens;" but, after "F.R.S.'s" explanation, I am quite content,—quoad bad Greek,—to accept his proffered cognomen of QUÆRENS.

March 21.

POISONING WITH MORPHIA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—My attention has just been drawn to a letter from Dr. Morell Mackenzie, in your Journal of March 14, in which that gentleman disputes the accuracy of my statement that opiates are absorbed with equal rapidity from the rectum as from the stomach. As Dr. Mackenzie seems to think that this doctrine is peculiar to myself, and based on a solitary case, I must now state the very substantial reasons which enforce it.

First, as to the *à priori* argument from anatomy, I am quite unable to understand Dr. Mackenzie's allusion to "structural" differences which make the rectum inferior to the stomach as an absorbent. The structural conditions which are necessary to the effective performance of absorption of soluble matters are, I take it, a delicate mucous membrane, and a copious supply of sub-mucous veins; and it is difficult to imagine that the stomach can be superior, as regards this combination, to the rectum.

Secondly, as to the argument from clinical and experimental facts.

1. So far is it from being true that alcoholic liquors act comparatively slowly when introduced per rectum, that I have often known undoubted symptoms of the constitutional action of alcohol to commence within two or three minutes after the injection of an ounce of brandy, or a corresponding dose of wine. Moreover, it is possible (as is probably known to every practical toxicologist) to intoxicate animals with the greatest rapidity by injections into the bowel, which is only inferior, as a conduit for this agent, to the peritoneum.

2. Liebig mentions (*Animal Chemistry*) that a solution of common salt, in the proportion of one part to eighty of water, disappeared so completely in the rectum, that an evacuation one hour afterwards was found to contain no more than the usual proportion of salt.

3. I have repeatedly observed typhoid fever patients in whom cinchonism has been produced very quickly by injections of quinine. One patient of my own was decidedly cinchonised within forty minutes of using a single injection containing one scruple of quinine.

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4. With regard to opium and its preparations, it happens that the evidence is particularly copious. A very common measure for the arrest of colliquated diarrhœa in patients who are greatly exhausted, is the injection of a small dose of laudanum (ten minims is amply sufficient); and it is a frequent occurrence for the miserable sense of nervous depression to be greatly relieved in from ten to fifteen minutes after this has been done, and for a general stimulant effect to be produced, which is obviously due to the drug. Again, I have in several cases observed the pain of severe cystitis to be soothed, and sleep produced within half an hour, by the use of a suppository containing no more than one-fourth of a grain of morphia; and I have been informed by Surgeons that the same remedy is very effectual in relieving chordee.

Lastly, I have made direct experiments as to the comparative rapidity of action, upon myself, of morphia introduced by different routes into the body, and I am completely satisfied that, with me, the rectum (proper precautions being taken) is a more rapid channel of introduction than the stomach, though not so convenient; in fact, it is about on a par with the cellular tissue as to the celerity with which morphia enters the system through it; and I have found that in cats, next to injection into the veins or the serous cavities, there is no more rapid mode of poisoning by opium than the use of rectal injections of morphia.

In short, the more we extend our observations, the more probable does it become that for all soluble substances the rectum forms quite as effective a channel as the stomach. I need not say, however, that the bowel must be empty at the time of the injection, or its absorption will be delayed; possibly it is the neglect of this precaution which has led to the idea which I have combated. I am, &c.

15, Onslow-square. FRANCIS ED. ANSTIE, M.D.

THE PROGRESS OF SCIENCE.—RESPIRATION ABOLISHED, "OWING TO THE EXCELLENCE OF ARTIFICIAL LIGHT!"

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I saw it stated the other day in a scientific journal that Dr. Gibb, who was demonstrating his larynx at St. George's Hospital, "was enabled to open and shut his glottis at pleasure, without breathing." Perhaps one of the spectators will kindly inform me, as I am a great collector of curiosities, whether the experimenter turned blue in the face from want of breath, and how the air was prevented from passing into and out of the air-tubes during this extraordinary feat. I am, &c.

Lowther Arcade, Monday. GOBEMOUCHE.

Vide *Lancet*, March 21, 1863, *Medical News*, "Auto-Laryngoscopic Demonstrations."

INSURANCE SOCIETIES AND MEDICAL FEES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The enclosed correspondence may be interesting to the Profession.

(Letter No. 1.)

"High-street, Stourbridge, March 21, 1863.

"SIR,—Henry Grove, who is insured in your office, applied to me this morning to sign a certificate respecting the nature of his injuries, with many other questions respecting the date when the injury was received, and its probable duration, etc.

"I shall be happy to supply you with information on these subjects on the receipt of a fee. "I am, sir, yours obediently,

"THOS. MASSEY HARDING.

"To the Secretary of the Norwich and London Accident and Casualty Insurance Company, St. Giles'-street, Norwich."

(Reply.)

"Norwich and London Accident and Casualty Insurance Association, St. Giles'-street, Norwich, March 23, 1863.

"SIR,—You seem to be labouring under some mistake in supposing that an office which takes a few shillings a year can afford to pay medical fees the same as if the premium were pounds. We do not desire to obtain any information from Medical men without its being paid for, only we say that we are not in a position to pay it. The directors will not recognise Henry Grove's claim without a Medical certificate; see the fifth condition on his policy. We have settled nearly 4000 claims, and this is only the second time of being asked to pay a fee.

"Yours obediently,

"T. M. Harding, Esq., Stourbridge." "CHAS. R. GILMAN.

(No. 2.)

"High-street, Stourbridge, March 24, 1863.

"SIR,—I have received your letter, in which you say that I seem to be 'labouring under some mistake,' etc. It is not a question of amount, nor do I wish that my fee should be in any way out of proportion to the amount insured. You require information respecting an injury for your own guidance and protection, and in my opinion you ought to pay for it. If you intend to throw that expense upon the person insuring, you should take care that the insurer fully understands his position. I simply decline to give any information to your office without a fee, and, if you will not pay it, Mr. Grove must.

"If you have occasion to favour me with any further correspondence, be pleased to remember that I do not 'labour under any mistake.'

"I am, sir, yours obediently,

"THOS. MASSEY HARDING.

"To the Secretary of the Norwich and London Accident and Casualty Insurance Association."

"High-street, Stourbridge, March 21, 1863.

"SIR,—Mr. Bristow, of this town, who is insured in your office has asked me to sign a certificate respecting the nature of his injuries, the date when received, probable duration, etc., for your information.

"I shall be happy to give the information on receipt of a fee.

"I am, sir, yours obediently,

"THOS. MASSEY HARDING.

"To the Secretary of the Railway Passengers' Assurance Office, 64, Cornhill, London, E.C."

(Reply.)

"Railway Passengers' Assurance Office, 64, Cornhill, London, E.C.

"DEAR SIR,—I am in receipt of yours of 21st inst., but am at a loss to understand why you apply to me for a fee in Mr. Bristow's case, as I have never applied to you for a certificate. I require of Mr. Bristow, as of any other claimant, certain evidence in support his claim, and it is for him to obtain that evidence, and if necessary pay for doing so.

"I supposed that giving a certificate if required was as much incidental to the attendance of a Surgeon as the supply of pills and plasters; but, so far as forming an opinion on any case, I find it more useful to retain a Surgeon as our referee in most districts, and Mr. Freer acts for us in yours.

"I am, Sir, yours truly,

"W. J. VIAN."

"High-street, Stourbridge, March 24, 1863.

"SIR,—I have received your letter this morning. I am of opinion that the information required in the certificate offered to me for signature is for your guidance and protection, and ought therefore to be paid for by you, but of course you can leave it to the person insuring to pay for it if you think proper. I am also of opinion that your system of employing a Medical gentleman to call upon and examine the patients of other practitioners for your satisfaction is a very offensive mode of obtaining information, which would be more naturally obtained from the gentleman who has the actual charge of the patient.

I beg to say that it is my intention to send the correspondence to the *Medical Times*, that the question may receive the attention of the Profession. "I am, Sir, yours obediently,

"THOS. M. HARDING.

"To the Secretary of the Railway Passengers', &c."

COMMUNICATIONS have been received from—

MRS. RUSSELL; MR. HUGH NORRIS; MR. JAMES ADAMS; DR. JAMES EDMUNDS; DR. KIDD; MADRAS; M. S. R.; DR. LATHAM; DR. LURGEN; DR. K. MCLEOD; THE REV. H. Y. THOMSON; THE SECRETARIES OF THE HARVEIAN SOCIETY; QUERENS; GOBEMOUCHE; DR. GRAILY HEWITT; DR. ANSTIE; DR. T. SPENCER COBBOLD; MESSRS. MAPPIN BROTHERS; MR. LLOYD; MR. STOKES; DR. FRAS. HAWKINS; MR. T. MASSEY HARDING; DR. JAMES DEANE; THE SECRETARY OF THE ANTHROPOLOGICAL SOCIETY; DR. FOOT; DR. T. K. CHAMBERS; DR. R. WALKER; DR. RAMSBOTHAM; DR. ALTHAUS; MR. CHATTO; DR. CHILDS.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 21, 1863.

BIRTHS.

Births of Boys, 1129; Girls, 1102; Total, 2231.
Average of 10 corresponding weeks, 1853-62, 1800·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	822	802	1624
Average of the ten years 1853-62	660·9	626·1	1287 0
Average corrected to increased population..	..	..	1416
Deaths of people above 90	..	..	7

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	12	10	8	3	9	4	..
North ..	618,210	10	4	31	2	14	20	..
Central ..	378,058	3	6	8	1	11	2	..
East	571,158	10	4	14	1	15	19	2
South ..	773,175	10	10	15	5	22	5	3
Total.. ..	2,803,989	45	40	76	12	71	50	5

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·774 in.
Mean temperature	41
Highest point of thermometer	57·9
Lowest point of thermometer	28·1
Mean dew-point temperature	34
General direction of wind	N.E.
Whole amount of rain in the week	0·23 in.

APPOINTMENTS FOR THE WEEK.

March 28. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Max Müller, "On the Science of Language" (Second Series).

30. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Dr. Palfrey, "On Obstructive Dysmenorrhœa Treated by Incision of the Cervix Uteri;" and other Communications.

31. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

April 1. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

OBSTETRICAL SOCIETY OF LONDON, 8 p.m. Dr. Swayne (Bristol), "On a Case of Cæsarian Section." Other Papers by Dr. Skinner (Liverpool), Dr. Tyler Smith, Dr. Eastlake, Dr. Gervis, etc.

2. Thursday.

Operations at St. George's, 1 p.m; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

HARVEIAN SOCIETY, 8 p.m. Dr. Pollock, "On Pneumothorax."

3. Friday.

Operations, Westminster Ophthalmic, 1½ p.m.

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PICHOT & MALAPERT'S CARBONIFEROUS PREPARATIONS.

Extensively used in all the French Military and Civil Hospitals.—(See Notice in Med. Times and Gaz., *March* 7, 1863, *p.* 248.)

Carboniferous Charpie, in 1 lb. and ½ lb. boxes, 7s. 6d. per lb.; Bags of ditto, ditto, each box containing 10, 4s. per box.
Carboniferous Paper for Compresses (containing 100 Dressings), 2s. 3d. per packet;
Ditto, ditto, large size (containing 25 Dressings), 1s. 4d. per packet; Ditto, ditto, Tissue, 9d. per sheet.

May be had of all Respectable Chemists.

WHOLESALE AGENTS—S. MAW & SON, 11, ALDERSGATE-STREET, LONDON, E.C.,
Of whom Pamphlets on its uses and mode of application may be had, post free, on application, gratis.

Pulvis Jacobi ver, Newbery

is the Original & Genuine, was Established A.D. 1746,
And is Prescribed, with the greatest success, "by the highest authorities," for Fevers, Ague, Cerebral Congestion, Rheumatism, Chills, Influenza, &c. &c.
FRAS. NEWBERY & SONS, 45, ST. PAUL'S CHURCHYARD.
Prices for Dispensing—1 oz., 9s.; ½ oz., 3s. 4d.

NEPENTHE, OR ANODYNE TINCTURE.

OBTAINED EXCLUSIVELY FROM OPIUM.

Prepared only by FERRIS, TOWNSEND, LAMOTTE, & BOORNE, Manufacturing Chemists and Wholesale Druggists, Bristol.

Messrs. FERRIS and COMPANY take leave to direct the attention of the Medical Profession to a selection from various reports upon the use of this most valuable form of Opium. NEPENTHE may be used with perfect safety in every case where an opiate is indicated; and, from the peculiar process by which it is prepared, it is deprived of all constituents which render the Tinctura Opii, and most other forms of opium, in numerous instances, wholly inadmissible. NEPENTHE is always of uniform strength, and, in this respect, possesses high advantages. It may be procured direct from the Manufacturers, Messrs. FERRIS and COMPANY, Bristol, or through the leading Wholesale Druggists in London, and from most respectable Dispensing Chemists in Great Britain and Ireland. Every bottle has a fac-simile of Messrs. FERRIS and COMPANY'S Signature pasted over the Cork, to imitate which is forgery.

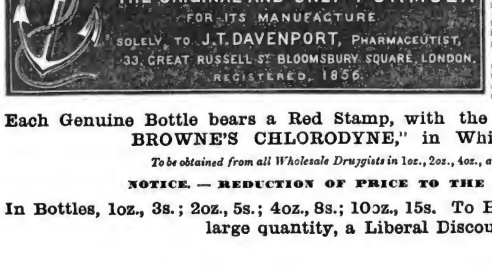
The price of NEPENTHE to the Profession is 8s. per lb., and the dose the same as the Tinctura Opii.

Report from F. PORTER SMITH, Esq.

I have pleasure in bearing testimony to the decided advantages possessed by Messrs. Ferris and Company's preparation of Opium called "Nepenthe" over other preparations of that important drug. I have used it for several years in Cancer of the Uterus, continuing it, with scarcely abated advantage, as a sedative, in one such case, for the long period of eighteen months, in doses of, at the utmost, half a drachm, which served the purpose to the end. I have used it in "Subcutaneous Injection" for Neuralgia, without producing any local irritation, such as abscess, &c. in the cases of unusually severe "after-pains" in connexion with labour, I can strongly recommend and endorse its successful and satisfactory employment. I have never met with any unpleasant symptoms, such as sometimes occur in some constitutions after the administration of morphia, &c., during an extensive use of this valuable addition to that "Practical Pharmacopœia" which waits for no "imprimatur" from College or Council.

F. PORTER SMITH, M.B. Lond.,
Associate of King's College, London, &c.
Evercreech, March, 1862.

*** Fresh Reports will be published in the Medical Journals from time to time.—Bristol, 1862.



NOTIFICATION.

The attention of Medical Men is directed to the Piratical application, by some parties in the Trade, of the term "Chlorodyne" to various mixtures compounded of Chloric Æther Opium, Indian Hemp, and Peppermint, in Imitation of the ONLY Genuine preparation of this name.

The dangerous expedient of encouraging or advocating the assumption of a name specifically indicating a particular property or remedy—such as *Chlorodyne* is to spurious imitations and substitutions—ON THE GROUND OF CHEAPNESS, is a subject of surprise and grave reproach, supremely so, when the adulteration, sophistication, and tampering with Drugs, becomes so serious and important a consideration in the successful practice of Medicine.

The fact of these Piracies must fully convince the Profession of the extraordinary efficacy of the Genuine Chlorodyne; whereas the sad results and disappointment arising from the use of spurious compounds cannot be expressed.

Each Genuine Bottle bears a Red Stamp, with the words, "Dr. J. COLLIS BROWNE'S CHLORODYNE," in White Letters.

To be obtained from all Wholesale Druggists in 1oz., 2oz., 4oz., *and* 8oz. *Bottles.*

NOTICE. — REDUCTION OF PRICE TO THE PROFESSION.

In Bottles, 1oz., 3s.; 2oz., 5s.; 4oz., 8s.; 10oz., 15s. To Hospitals and Charities in large quantity, a Liberal Discount.

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Medical Men Remunerated in every Case Submitted to them.

STAR LIFE ASSURANCE SOCIETY,

48, MOORGATE-STREET, LONDON.

Directors:

CHAIRMAN—CHARLES HARWOOD, Esq., F.S.A., Judge of the County Court of Kent, and Recorder of Shrewsbury.
DEPUTY-CHAIRMAN—JOHN CHURCHILL, Esq.

EDWARD BALL, Esq.
ADAM BEALEY, Esq., M.A., M.D.
WILLIAM BETTS, Esq.
WALTER GRIFFITH, Esq.
THOMAS HOLMES, Esq.
JOSEPH LEATHER, Esq.
JOHN J. LIDGETT, Esq.
WILLIAM McARTHUR, Esq.
WILLIAM MERRY, Esq.
JONATHAN BILLS PIGGEON, Esq.
WILLIAM H. SMITH, Esq.
JOSEPH THACKRAY, Esq.
GEO. F. UHLING, Esq.
JOHN VANNER, Esq.
JOSEPH M. WARE, Esq.

Extracts from the Report of the Directors presented at the Annual Meeting held at the Society's House, March 2, 1863:—

The Directors of the Star Life Assurance Society have much pleasure in presenting to the members their Nineteenth Annual Report.

During the year 1862, 1108 proposals for assurance were submitted to the consideration of the Directors, and 1007 policies were issued for the assurance of £375,197, yielding in annual premiums £12,562 7s. 9d. 86 were declined, and 43 stood over for completion at the end of the year.

It will be observed that the sum assured is still an increase of that of the preceding year, and is the largest on record in the history of the Society. The premiums are slightly less; but this only shows that the average age of the new assured is younger than that of 1861.

By the auditor's report, the Society's income on the 31st December last amounted to £114,562 12s. 7d.; and its accumulated fund, irrespective of the capital stock, at that date was £484,976 14s.; showing an increase of £70,745 8s. 3d. during the year.

Claims by death have arisen under 84 policies, and the sum of £23,844 17s. 8d., which includes bonuses to the extent of £1,244 1s., has been paid to the representatives of 80 persons deceased. These claims are less, both in number and amount, than those of the previous year, and consequently are within the estimated average.

The following table will best illustrate the progress of the Society during the last seven years:—

Year.	Number of New Policies issued.	Sums Assured thereby.	Annual Premiums therefrom.	Total Accumulations from all sources.
		£	£ s. d.	£ s. d.
1856	603	204,451	6,597 18 3	202,110 7 2
1857	572	221,122	7,735 9 5	238,055 1 7
1858	658	235,350	8,562 0 9	274,797 15 4
1859	812	294,495	10,172 19 6	380,444 5 2
1860	902	336,290	11,312 15 9	360,530 3 0
1861	1,115	361,960	12,868 3 11	414,231 5 2
1862	1,007	375,197	12,562 7 9	*484,976 14 0

By order of the Board,

JESSE HOBSON, Secretary.

* Since this report was closed the accumulated fund has so increased as to raise it above £500,000.

(ABRIDGED PROSPECTUS.)

THE SANATORIUM ASSOCIATION

(LIMITED),

For the Care and Treatment of those who are Mentally or Nervously Afflicted.

Capital £80,000, in 8000 Shares of £10 each. Deposit 10s. per Share on Application, and £1 10s. on Allotment.

The Company being incorporated under the Joint-Stock Limited Liability Acts 1862, the Shareholders will be only liable to the extent of their unpaid portion of their respective shares.

CHAIRMAN—Colonel BROWNLOW KNOX, M.P., Governor of St. Luke's.
ARCHITECT—CHARLES FREEMAN, Esq., 60, Lincoln's-inn-fields, W.C., and 20A, St. James's-place, S.W.
SOLICITORS—Messrs. CHILTON, BURTON, YEATES, and HART, 25, Chancery-lane, E.C.
BANKERS—Messrs DRUMMOND, Charing-cross, S.W.
OFFICES—38, REGENT-STREET, WATERLOO-PLACE, S.W.

A Copy of the Deed of Association may be seen at the Offices of the Solicitors, the Architect, or the Company, where also may be obtained detailed Prospectuses and Forms of Application for Shares.

WALTER WYATT, Secretary.

Vide Advertisement, "Medical Times and Gazette," March 7, 1863.

DR. DE JONGH'S

(Knight of the Order of Leopold of Belgium)

LIGHT-BROWN COD-LIVER OIL.

SELECT MEDICAL OPINIONS.

Sir HENRY MARSH, Bart., M.D., Physician in Ordinary to the Queen in Ireland:—"I consider Dr. de Jongh's Cod-liver Oil to be a very pure Oil, not likely to create disgust, and a therapeutic agent of great value."

Dr. BARLOW, Senior Physician to Guy's Hospital:—"I have been well satisfied with the effects of Dr de Jongh's Cod-liver Oil, and believe it to be a very pure Oil, well fitted for those cases in which the use of that substance is indicated."

Dr. LANKESTER, F.R.S., late Lecturer on the Practice of Medicine, St. George's School of Medicine:—"I consider that the purity and genuineness of this Oil are secured by its preparation by the personal attention of so good a Chemist and intelligent a Physician as Dr. de Jongh, who has also written the best Medical Treatise on the Oil with which I am acquainted. Hence I deem the Cod-liver Oil sold under his guarantee to be preferable to any other kind as regards genuineness and medicinal efficacy."

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CLERICAL, MEDICAL, AND GENERAL

LIFE ASSURANCE SOCIETY,

ST. JAMES'S-SQUARE, LONDON, S.W.

Established 1824.

Directors.

CHAIRMAN—JOSEPH HENRY GREEN, Esq., D.C.L., F.R.S.
DEPUTY-CHAIRMEN—Right. Hon. J. R. MOWBRAY, M.P.; WILLIAM BOWMAN, Esq., F.R.S.

PATRICK BLACK, M.D.
Rev. ALFRED BUTLER CLOUGH, M.A.
Rev. THOMAS DALE, M.A.
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GEORGE H. PINCKARD, Esq.
JOHN SODEN, Esq.

Actuary and Secretary.
GEORGE CUTCLIFFE, Esq.

Financial Results of the Society's Operations.

The **Annual Income** exceeds..	**£200,000**
The **Assurance Fund** safely invested is over	**£1,330,000**
New Annual Premiums for the last year	**£10,017**
Bonus added to Policies at the last Division	**£275,077**
Total Claims by death paid	**£1,781,779**

The following are among the Distinctive Features of the Society:—

CREDIT SYSTEM.—On Policies for the whole of life, one-half of the Annual Premiums during the first five years may remain on credit, and may either continue as a debt on the Policy, or be paid off at any time.

LOW RATES OF PREMIUM FOR YOUNG LIVES, with early participation in Profits.

INVALID LIVES may be assured at Premiums proportioned to the increased risk.

PROMPT SETTLEMENT OF CLAIMS.—Claims paid thirty days after proof of death.

THE ACCOUNTS AND BALANCE SHEETS are at all times open to the inspection of the Assured, or of persons proposing to assure.

Tables of Rates and Forms of Proposal can be obtained from any of the Society's Agents, or of
13, St. James's-square, London, S.W. GEORGE CUTCLIFFE, *Actuary and Secretary.*

The Reversionary Bonus, at the Quinquennial Division in 1862, averaged 48 per Cent., and the **Cash Bonus** 28 per Cent., on the Premiums paid in the 5 years.

The next Division of Profits will take place in January, 1867.

BRITON MEDICAL AND GENERAL LIFE ASSOCIATION,

WITH WHICH IS INCORPORATED

THE NEW EQUITABLE LIFE ASSURANCE COMPANY.

OFFICES—429, WEST STRAND.

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R. PARTRIDGE, Esq., F.R.S.
FRANCIS WEBB, Esq.
JOHN PROPERT, Esq
W. TYLER SMITH, M.D.

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Standing Counsel.

THOMAS W. GREENE, Esq., Q.C.

Solicitors.

Messrs. DELL, STEWARD, and LLOYD.

Secretary.

JOHN MESSENT, F.S.S.

By the peculiarly equitable manner of dividing the profits, the Policies issued by this Association *become payable during the lifetime of the person Assured without extra Premium.* After having been in force a period of five years, all Policies are absolutely indefeasible and indisputable.

Attention is directed to the facility afforded by this Institution for the assurance of declined or diseased lives. The experience of the large staff of Medical officers connected with this Association has enabled the Directors to prepare a set of tables which they believe place such lives on an equitable footing in relation to other assured Members of the Company.

Qualified Medical Attendants who are named by Proposers to this Association are consulted as the Medical Advisers of the Directors, by whom all Medical Fees are discharged.

Every description of Life Assurance transacted; terms for which, with detailed Prospectuses and every information, may be had on application to JOHN MESSENT, F.S.S., *Manager and Secretary.*

Applications for Agencies are invited.

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ORIGINAL LECTURES.

PROFESSOR HUXLEY'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

LECTURE III.

(*Being the Second of Six Lectures on Classification.*)

(Continued from page 314.)

In the next group, that of the *Lamellibranchiata*, which comprises those creatures which we know as mussels, cockles, and scollops, all the fabricators of the so-called bivalve shells, we meet with an important advance in organization. The body in all these animals, as is exemplified by this diagram (Fig. A) of a freshwater mussel (*Anodon*), is included within a mantle or "pallium," which is formed by a prolongation of the dorsal integument,—a structure in principle quite similar to that which we met with in the *Brachiopoda*. But there is this essential difference between the two,—that whereas in the *Brachiopoda* the mantle lobes corresponded with the anterior and posterior regions of the body, in the *Lamellibranchiata* they correspond with the right and left halves of the body. The intestine, which always terminates by a definite anus between the mantle lobes at the posterior end of the body, has its first flexure neural. There is always a well-developed heart, which is much more complex than that of the Ascidians or Brachiopods, being divided into distinct auricular and ventricular chambers. Commonly, there are two auricles and one ventricle, as is the case in *Anodon*; but in other *Lamellibranchiata*, such as the oyster, there is a single auricle and a single ventricle, and in some exceptional cases there are two auricles and two ventricles, forming two distinct hearts. Distinct respiratory organs, which usually have the form of lamellæ, as the name of the class implies, are found in all *Lamellibranchiata*, and are situated upon each side of the body, in a chamber which extends between the foot and the mantle lobes in front, and between the mantle lobes posteriorly (Fig. B). The branchial organs may consist of distinct filaments, or of plates composed of tubular rods supporting a network of blood-vessels, and covered with cilia, by the action of which they are constantly bathed by currents of water.

Fig. A.

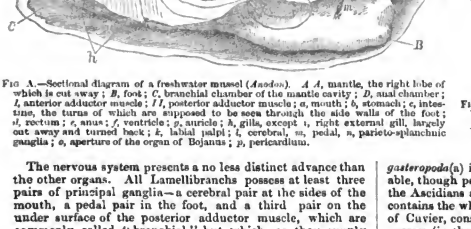

Fig. A.—Sectional diagram of a freshwater mussel (*Anodon*). *A A*, mantle, the right lobe of which is cut away; *B*, foot; *C*, branchial chamber of the mantle cavity; *D*, anal chamber; *l*, anterior adductor muscle; *l l*, posterior adductor muscle; *a*, mouth; *b*, stomach; *c*, intestine, the turns of which are supposed to be seen through the side walls of the foot; *d*, rectum; *e*, anus; *f*, ventricle; *g*, auricle; *h*, gills, except *i*, right external gill, largely cut away and turned back; *k*, labial palpi; *l*, cerebral, *m*, pedal, *n*, parieto-splanchnic ganglia; *o*, aperture of the organ of Bojanus; *p*, pericardium.

Fig. B.

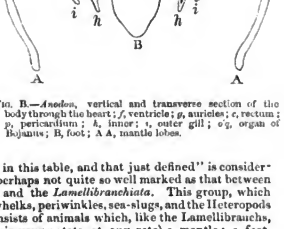

Fig. B.—*Anodon*, vertical and transverse section of the body through the heart; *f*, ventricle; *g*, auricles; *c*, rectum; *p*, pericardium; *h*, inner; *i*, outer gill; *o'q*, organ of Bojanus; B, foot; A A, mantle lobes.

The nervous system presents a no less distinct advance than the other organs. All Lamellibranchs possess at least three pairs of principal ganglia—a cerebral pair at the sides of the mouth, a pedal pair in the foot, and a third pair on the under surface of the posterior adductor muscle, which are commonly called "branchial," but which, as they supply not only branchial, but visceral and pallial filaments, may more properly be termed "parieto-splanchnic." Three sets of commissural filaments connect the cerebral ganglia with one another, with the pedal, and with the parieto-splanchnic ganglia. The inter-cerebral commissures surround the mouth, and the other two pairs of cords extend respectively from the cerebral to the pedal, and from the cerebral to the parieto-splanchnic ganglia.

Finally, there is always in these animals an external shell, which is formed as an excretion from the surface of the lobes of the mantle, and is composed of layers of animal matter hardened by deposits of carbonate of lime, which may or may not take a definite form, and so give rise to "prismatic" and "nacreous" substance. As the lobes are right and left, so the valves of the shell are right and left, and differ altogether from the valves of the shell of the Brachiopods, which are anterior and posterior. The valves of the shell can be brought together by adductor muscles. Of these one (I I) always exists posteriorly on the neural side of the intestine. A second (I) is commonly found anteriorly to the mouth on the hæmal side of the intestine.

The hiatus between the next class, which is termed *Branchiogasteropoda*(a) in this table, and that just defined" is considerable, though perhaps not quite so well marked as that between the Ascidians and the *Lamellibranchiata*. This group, which contains the whelks, periwinkles, sea-slugs, and the Heteropods of Cuvier, consists of animals which, like the Lamellibranchs, possess (in their young state, at any rate) a mantle; a foot, which is the chief organ of locomotion; and three principal pairs of ganglia—cerebral, pedal, and parieto-splanchnic. When they are provided with a heart, which is usually the case, it is divided into auricular and ventricular chambers; but the mantle, instead of being divided into two lateral lobes, is continuous round the body, and when it secretes a shell from its surface, that shell is either in a single piece, or the pieces are repeated from before backwards, and not on each side of the median line. The shell of a Branchiogasteropod may, therefore, be univalve, or composed of a single conical piece, straight or coiled; or it may be multivalve—formed of a number of segments succeeding one another antero-posteriorly; but it is never bivalve.

Sometimes a shelly, horny, or fibrous secretion takes place from the foot, giving rise to a substance resembling the byssus of some Lamellibranchs, or to the so-called "*operculum*," which serves to protect the animal when retracted into its shell; but as these structures are developed from the foot and not from the mantle, they have obviously no homology with

(a) I have here changed the order in which the classes were treated of in my Lectures, though the substance of what I said is unaltered.

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the valves of either a Brachiopod or a Lamellibranch. The *Branchiogasteropoda* commonly possess a distinct head, provided with a pair of tentacles and a single pair of eyes, both of which are supplied with nerves from the cerebral ganglia. Cephalic eyes of this kind are not known in the *Lamellibranchiata*. But the characters which most definitely distinguish the *Branchiogasteropoda* are to be found in the alimentary canal. The cavity of the mouth is invariably provided with an organ which is usually, though not very properly called the tongue, and which might more appropriately be denominated the "odontophore." It consists essentially of a cartilaginous cushion, supporting, as on a pulley, an elastic strap, which bears a long series of transversely diposed teeth. The ends of the strap are connected with muscles attached to the upper and lower surface of the hinder extremities of the cartilaginous cushions, and these muscles, by their alternate contractions, cause the toothed strap to work backwards and forwards over the end of the pulley formed by its anterior end. The strap consequently acts, after the fashion of a chain-saw, upon any substance to which it is applied, and the resulting wear and tear of its anterior teeth are made good by the incessant development of new teeth in the secreting sac in which the hinder end of the strap is lodged. Besides the chain-saw-like motion of the strap, the odontophore may be capable of a licking or scraping action as a whole.

The other peculiarity of the alimentary canal of the *Branchiogasteropoda* is that the alimentary canal is always bent upon itself, at first, not to the neural, but to the hæmal, or heart side of the body—the rectum very commonly opening into the mantle cavity above the cephalic portion of the body.

In most *Branchiogasteropoda* the foot is a broad, flat, muscular body, without any distinct division of parts; but in some forms, such as the *Heteropoda* of Cuvier, it is divided into three very well-marked portions—an anterior, a middle, and a posterior, which are termed respectively the *propodium*, *mesopodium*, and *metapodium*, while the *Aplysiæ*, in which the foot proper has the ordinary form, exhibit developments from its lateral and upper surfaces in the form of great muscular lobes, which serve as a sort of aquatic wings to some species, and are termed *epipodia*.

The *Branchiogasteropoda* are such of the *Gasteropoda* of Cuvier as breathe water either by means of the thin wall of the mantle cavity (*Atlanta*, *e.g.*), or by special pallial branchiæ (*Pectinibranchiata*, *Tectibranchiata*, etc.), or by certain parts of the integument of the body (*Nudibranchiata*) more or less specially modified. The next class, the *Pulmo-gasteropoda*, (b) on the other hand, are the Pulmonate *Gasteropoda* of Cuvier, the snails and slugs, which agree with the *Branchiogasteropoda* in the general characters of their body, mantle, nervous and respiratory systems, and in possessing an odontophore, but differ from them, not only by breathing air by means of the thin lining of the pallial chamber, but, as I believe, by the direction of the flexure of their intestine. A careful dissection of a common snail, for example (Fig. D), will prove that, though the anus is situated in the same way as in the *Branchiogasteropoda* on the dorsal or hæmal side of the body, the primary bend of the intestine is not to the hæmal but to the neural side, the eventual termination of the intestine on the hæmal side being the result of a second change in its direction.

Fig. C.

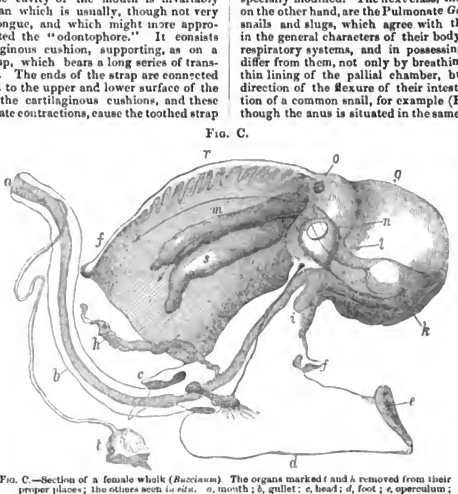

Fig. C.—Section of a female whelk (*Buccinum*). The organs marked *t* and *h* removed from their proper places; the others seen *in situ*. *a*, mouth; *b*, gullet; *c*, head; *d*, foot; *e*, operculum; *f*, free part of the mantle; *g*, that part which invests the visceral mass lodged within the shell; *h*, a gland of unknown function connected with the gullet; *i*, crop; *k*, stomach; *l*, intestine; *m*, rectum; *n*, heart; *o*, aperture of renal organ; *r*, mucous gland developed from the wall of the mantle cavity; *s*, oviduct; *t*, salivary gland. The arrows indicate the position of the branchiæ. The cerebral, pedal, and parieto-splanchnic ganglia closely surround the gullet, and the latter send off a long ganglionated cord towards the head and branchiæ.

Fig. D.

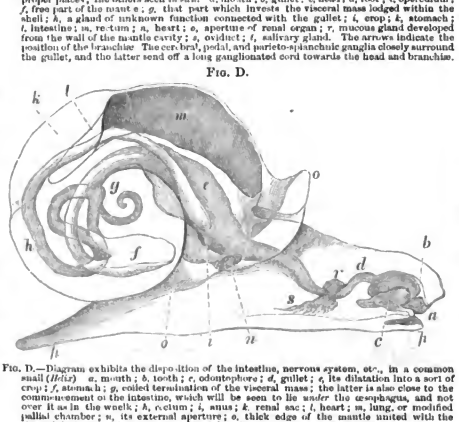

Fig. D.—Diagram exhibits the disposition of the intestine, nervous system, etc., in a common snail (*Helix*) *a*, mouth; *b*, tooth; *c*, odontophore; *d*, gullet; *e*, its dilatation into a sort of crop; *f*, stomach; *g*, coiled termination of the visceral mass; the latter is also close to the commencement of the intestine, which will be seen to lie under the œsophagus, and not over it as in the whelk; *h*, rectum; *i*, anus; *k* renal sac; *l*, heart; *m*, lung, or modified pallial chamber; *n*, its external aperture; *o*, thick edge of the mantle united with the sides of the body; *p*, foot; *r*, cerebral, pedal, and parieto-splanchnic ganglia aggregated round the gullet.

The members of the class *Pteropoda* are small or even minute mollusca; all marine in habit, and for the most part pelagic, or swimmers at the surface of the deep sea. Like the two preceding groups, they possess three principal pairs of ganglia, an odontophore, a mantle, which is not divided into two lobes, and which secretes a univalve shell, if any. But the propodium, mesopodium, and metapodium are usually rudimentary, and locomotion is almost wholly effected by the epipodia, which are enormously developed, and in most of the genera perform the office of aquatic wings still more efficiently than those of the *Aplysiæ*. Furthermore, the intestine is flexed towards the neural side of the body, and the head with the organs of sight are usually quite rudimentary. I include in this group not only *Cymbulia*, *Cleodora*, *Hyalosa*, *Pneumodermon*, etc., but

(b) I adopt these convenient names at the suggestion of my friend Professor Greene

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also the aberrant genus *Dentalium*. The last class of which I propose to speak to-day, is that of the *Cephalopoda*—the Cuttle-fishes, the Squids, and the pearly Nautilus; a group definable by most marked and distinct characters from all the preceding, though it resembles them in fundamental characters. Thus, the mantle is related to the body as in *Pteropods* and *Gasteropods;* when an external shell exists it is composed of a single piece, and the *Cephalopods* have an odontophore constructed upon just the same principle as that of the other classes. The nervous system, the foot, and the epipodia exhibit the same primary relations as in these groups, and there is a marked head with ordinarily well-developed optic and olfactory organs. That which essentially characterises the *Cephalopoda*, in fact, is simply the manner in which, in the course of development (as Kölliker long since proved), the margins of the foot proper and the epipodia become modified and change their relations. The margins of the foot are produced into more or less numerous tentacular appendages, often provided with singularly constructed suckers or acetabula; and the anterior lateral parts of each side of the foot, extend forwards beyond the head, uniting with it and with one another, so that at length, the mouth from having been situated, as usual, above the anterior margin of the foot, comes to be placed in the midst of it. The two epipodia, on the other hand, unite posteriorly above the posterior margin of the foot, and where they coalesce, give rise either to a folded muscular expansion, the edges of which are simply in apposition, as in *Nautilus;* or to an elongated flexible tube, the apex of which projects beyond the margin of the mantle, called the "funnel" or "infundibulum."

The *Cephalopoda* present a vast number of the most interesting features, to which it would be necessary to devote much attention if we were studying all the organic peculiarities manifested by the class; but it is in the characters of foot and of the epipodium that the definition of the class must be chiefly sought. In addition, the flexure of the intestine is, in all cephalopoda, neural; and the mouth is always provided with a horny or more or less calcified beak, like that of a parrot, composed of two curved pieces, which move in the median antero-posterior plane of the body, and one of which, that on the neural side, is always longer than the other.

[The publication of the figure illustrative of the structure of the *Cephalopoda* is unavoidably postponed.]

ORIGINAL COMMUNICATIONS.

NOTES ON CAUSES OF EARLY MORTALITY.

By J. WHITEHEAD, M.D.

No. V.

General Death-rate.

It was previously shown that the highest rate of mortality of the viable human product occurs at the moment of birth; for, according to the French records, the percentage of still-births amounts to 4·27, representing the events of a day, while the general diurnal rate after birth is only ·24 for France, and ·18 for England. But to compare the deaths at birth with those of the most fatal epoch of life, namely, of the first seven days, it is found that the percentage for this period is 2·77, or ·4 per day; so that the rate of mortality on the first day is at least ten times greater than on any one day afterwards.

The first year's death-rate for England in 1859 was 15·29 to 100 births; that for France in 1856, 16·02. As from the first to the fourth week during the first month, and for each succeeding month during the first year, as was exhibited in the preceding article, so also in similar order, though with lessening pace at each move, does the death-rate decrease, from 15·29 per cent. of the births in the first, down to ·29 per cent. in the fifteenth year,—the lowest annual estimate until after the age of seventy years.

In France the same order of decrease is observable, and takes place with like regularity; the number of deaths being,—

During the first year	451 daily.
From 1 to 5 years	259 ,,
,, 5 to 10 ,, ...	86 ,,
,, 10 to 15 ,, ...	54 ,,

After which the estimate, as in England, gradually increases, and is not again so low until after the age of seventy years.

Hence it would appear that at or about the age of fifteen years the system is much less susceptible of diseased action, or more powerfully resistant of its assaults, than at any other time of life; and that at this season it possesses in highest perfection the qualities of energy of reparation and resiliency,—the integrity of the physical functions being no longer liable to be imperilled by infantile maladies, and the soul as yet unharassed by care.

It has been roundly stated, and seems to be popularly believed, that half of the children born die before they have attained the age of five years. This erroneous notion, for erroneous it is, has probably had its origin in a solitary instance, or possibly in a few instances of a high death-rate in some unhealthy locality, or during the prevalence of an unusually fatal epidemy, and has acquired a general meaning by repetition. Such examples, indeed, it would be possible to adduce. At the present rate of mortality in this country, however, the proportion of deaths in relation to births does not amount to fifty per cent. until after the age of sixty years; the number of deaths which had occurred at this age in England in 1859 being 49·7 to 100 births.

Even during the two most fatal years that have been known in France in the present century, when the number of deaths considerably exceeded that of births, the death-rate did not reach fifty per cent. of the births until after the age of thirty years. In the year 1854, for instance, with a notable failure of the crops—not only of cereals, but of all alimentary substances—the ravages of the most fatal cholera epidemic which that country has yet known, and the exhausting demands of the Crimean war, the number of deaths exceeded that of births to the amount of 67,318; and in the following year, although the force of this compound panic exhibited signs of considerable amelioration, the deaths were still in excess of the births to the amount of 37,274. Yet in the former of these two years the death-rate reached fifty per cent. of the births only at 31½ years, and in the latter at about 33½. Again, in 1857, the deaths, although considerably below the births in number, still exceeded the normal average by about 25,000, the rate of mortality did not reach fifty per cent. until the age of 41½.

The general death-rate in England for the twenty-three years ending with 1860 stands, in its relation to births, at 67·27 per cent. Dividing this term of twenty-three years into two periods of thirteen and ten years respectively, the following average percentages will be furnished:—

	To 100 births.
From 1838 to 1850 . .	69·73 deaths.
,, 1851 to 1860 . .	65·06 ,,

Showing a diminution in the rate of mortality for the last as compared with the first of these periods to the amount of 4·67.

This result, however, is not to be looked upon as a fair representation of the actual decrease, seeing that with the first group are included the years of the Irish famine, whereby the death-rate was augmented to a pitch considerably above the usual average. Setting aside therefore the five years—from 1846 to 1850—during which this panic and its immediate consequences continued to operate, we have in contrast the results of two remote periods, in each of which the public health was uninfluenced by any disturbing agency sufficiently powerful to change the relations beyond the ordinary scale of fluctuation.

	To 100 births.
From 1838 to 1845	67·50 deaths.
,, 1851 to 1860	65·06 ,,

So that the average amount of decrease in the general death-rate between the first and second of these periods is represented by 2·44.

But the actual amount of increase in the duration of life which has taken place during the twenty-three years specified is much greater than the above figures would seem to indicate. The death-rate having in fact undergone a gradual declension—with the exception of the interruption caused by the Irish famine, from 1838 to 1860, as may be seen by the subjoined figures—passing over the disastrous period referred to:—

	Total births.	Total deaths.	To 100 births.
1838	492,574	312,547	69·54 deaths.
1844	540,763	356,933	66·00 ,,
1851	615,865	395,396	64·20 ,,
1860	684,048	422,721	61·79 ,,

The difference between the first and last items in the last column of the preceding table is 7·75, which sum, in fact,

represents the real value of improvement in the duration of life which has been effected in this country during the twenty-three years ended 1860.

The year 1860 was remarkably healthy, the proportion of deaths having been lower in that than in any previous year on record, and probably as low as we need expect it to be for some time hence. It would be strange indeed were the duration of life to increase during the next quarter of a century in an equal ratio with that of the last, and would go far towards realising M. Flourens's estimate of man's natural term of life at 100 years instead of threescore and ten.

In producing a statement, therefore, of the death-rate at different ages, it may be well, instead of adopting the results furnished by this one very favourable year, to take the average of the three years ending with 1860, as follows:—

Average Death-rate at Different Periods for 1858, 1859, *and* 1860.

	Deaths to 100 births.		
	Males.	Females.	Total.
1st year . .	8·55	6·74	15·29
2nd ,, . .	2·74	2·57	5·31
3rd ,, . .	1·38	1·36	2·74
4th ,, . .	0·92	0·93	1·85
5th ,, . .	0·65	0·67	1·32
5 to 10 years .	1·50	1·51	3·01
10 to 15 ,, .	0·71	0·75	1·46
15 to 20 ,, .	0·92	1·03	1·95
20 to 25 ,, .	1·04	1·14	2·18
25 to 35 ,, .	1·83	2·20	4·03
35 to 45 ,, .	2·04	2·10	4·14
45 to 55 ,, .	2·08	1·90	3·98
55 to 65 ,, .	2·53	2·35	4·88
65 to 75 ,, .	2·86	3·40	6·26
75 to 85 ,, .	2·26	2·65	4·91
85 to 95 ,, .	0·58	0·84	1·42
95 and upwards .	0·03	0·06	0·09
	32·62	32·20	64·82

Thus, for every 100 births during the three years ended 1860, there had occurred—

At the age of 5 years . . .	26·51	deaths.
,, ,, 20 ,, . . .	32·93	,,
,, ,, 50 ,, . . .	45·27	,,
,, ,, 60 ,, . . .	49·70	,,
,, ,, 95 ,, and upwards	64·82	,,

The first and most remarkable feature noticeable in the preceding table is the high preponderance of male over female deaths during the first year; the proportions being 126·8 males to 100 females. In the second year the proportions stand at 106·6 to 100. From the end of the second to the fifteenth year these events occur in nearly equal proportions, fluctuating sometimes on one side, sometimes on the other, but on either side to a degree so fractionally small as to leave the general results almost equal—the widest variation between the two sexes, for the whole thirteen years, amounting only to ·06.

From the age of fifteen to forty, the preponderance is very decidedly and unvaryingly on the female side, the proportions being—from fifteen to twenty years, 112 females; from twenty to twenty-five, 109·6; from twenty-five to thirty-five, 120·2; and from thirty-five to forty, 103 to 100 males respectively.

At forty, and often for two to five years later, the rates for the two sexes occur in nearly parallel order, after which they are reversed; the male deaths preponderating undeviatingly until about the age of sixty-eight, to an extent represented as follows:—From forty-five to fifty-five, 109·4 males; from fifty-five to sixty-five, 107·2; and from sixty-five to sixty-eight, 102 to 100 females respectively. After the age of sixty eight the order is again reversed, the female death-rate being thenceforward, less or more, in excess to the end of life's limit.

In alluding once more to the popular notion respecting the high rate of infant mortality, it will be seen, on reference to the table, that the sum of deaths to 100 births at the age of fifty-five, stands at 47·26, and that at sixty years it is still ·3 below 50 per cent. If, instead of the half of all born, it be meant that the half of all the deaths which happen occur before the age of five years, the assumption is still far wide of the truth. For instance:—The general death-rate being 64·82, it is evident that the half of this amount, namely, 32·41, will be found to have been completed at about the age of nineteen, as the sum of deaths up to twenty years—32·93—is only ·52 in excess of the half.

(To be continued.)

NECROSIS OF THE FEMUR AFTER FRACTURE — SUCCESSFUL OPERATION.

By ROBERT KNAGGS, Surgeon.

The following case demonstrates that even under the most unfavourable circumstances Surgical operations may be attended with partial success:—

Michael K., aged 12, a pale, strumous-looking boy, of distinctly and decidedly scrofulous parents, fell, in May, 1860, from the roof of a house at Baranquilla, South America, producing compound fracture of the shaft of the left femur. Part of the bone which extruded was sawn off, and the leg "set" after some fashion.

Early in the following year he came under my charge. There were two sinuses leading to necrosed bone; stiff knee (even allowing slight retroflexion); inverted foot, and dreadful deformity, which, of course, affected his gait (Fig. 1). I proposed to divide and reset the bone, at the same time removing the sequestrum, but owing to the difficulty of obtaining a chain-saw, I was unable to carry out my plan before August 13.

Fig. 1.

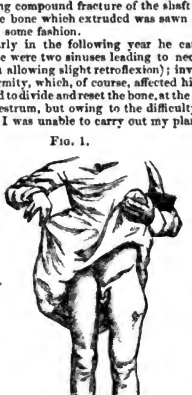

Fig. 2.

Assisted by Drs. Bleckley, of H.M.'s 14th Regiment, and Peschier, I made a longitudinal incision down to the bone, extending it from one inch below the trochanter-major to three inches above the external condyle. In doing this I liberated the sequestrum, of which I annex a sketch (Fig. 2). Natural dimensions, showing the sawn surface, whence bone was removed at the operation in May, 1860.

I then freed the adherent muscles of the thigh as much as possible from their morbid attachments to joined fractured portions and surface of the femur, passed the chain-saw in the line A B in the diagram (Fig. 3) around the point of union, severed it, sawed off a small portion of the upper fragment of the old fracture, to allow of its adjustment to the lower portion, brought the wound together, and treated the case as one of compound fracture.

In four months the sinuses had healed, the wound cicatrised, and the boy was on crutches, the foot being straight, the leg rather longer than prior to the operation, and flexible at both hip and knee-joints, and the femur straight, the point of union being apparently embedded in callus.

But after a few months one of the old sinuses re-opened, which I probed, discovering a small, movable necrosed wedge lying to the inner side of the junction. This I removed, and the sinus at once healed; but to this occurrence I date the lateral bend (which you see in the photograph) in the point of

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union, producing deformity and comparative weakness of the limb.

Fig. 3.

Fig. 4.

In this case the gains (in spite of scrofulous predisposition) by the operation, were sixfold:—

1. Improved health and gait.
2. Satisfaction of patient.
3. Healed sinuses.
4. Removal of sequestrum.
5. Flexion of the knee-joint.
6. Corrected direction of the foot (Fig. 4). He now walks without assistance.

Trinidad.

A MODEL HYSTERIC.

By ROBERT ELLIS,
Obstetric Surgeon to the Chelsea and Belgrave Dispensary.

I have at length succeeded in permanently curing one of the most inveterate and obstinate cases of hysteria which I have ever known, or of which I have ever seen a record. As the lady has presented me with copious notes as to her previous history, which offers many points of interest, and some of practical value, I venture, with her consent, to offer a sketch of the case.

Miss A. B., an unmarried lady, in easy circumstances, in the winter of 1829 first became the victim of a disorder which, true to its protean character, assuming many aspects, never wholly left her for thirty years subsequently. She was at that time an excitable and impressible girl of eighteen; but I have been unable to discover any distinct emotional cause for the development of her hysteric disposition. She had a cough and pain in the right side, which was treated in the manner customary at that period,—by the repeated application of leeces. In the following spring she was taken to Dr. Abercrombie, who advised leeches again, followed by a blister, and this was repeated for several months, the purely hysteric element in her case never having been recognised. In 1831 she became a patient of the late Sir H. Marsh, who, recognising the real type of her disorder, prescribed, with a temporary relief, shower-baths and fresh air. But, her pain becoming very severe as winter approached, she again returned to Dublin, and this time was cupped on the side. From that moment a new symptom made its appearance in complete paralysis of the bladder. This was at first overcome by injections of turpentine and castor-oil and warm hip-baths. But in a short time these remedies lost all influence, and she was allowed to remain with the bladder unrelieved for thirty and forty hours. Sir Philip Crampton, who then saw her, and was apparently perplexed by her state, directed the catheter to be used twice daily. This, however, aggravated her distress from the excessive irritability of the urethra, to relieve which large doses of laudanum were administered. She was now blistered on each side of the spine, and occasionally over the pubes, with but little good result. Issues were opened at intervals down the spine, and kept discharging for a considerable time. Thus the unhappy sufferer dragged on a painful life until 1834, when the hysteric cough came back, and was again attacked by repeated blisters. She had now fully learned the soothing influence of morphia, and was supplied with as much as she required. The disorder again returned to the bladder, and was this time overcome in a rational manner by the use of enemata of starch and opium into the rectum. So effectual was this remedy, that for many months the disorder did not recur; but the cough returned with its disappearance, and probably would have continued but for an intercurrent attack of diarrhœa, which left her quite free from all hysteric symptoms for several months.

In 1836, great domestic sorrow and anxiety prepared the way for a return of the old disorders. The bladder became as helpless as ever, and the old treatment of escharotics and issues to the spine was had recourse to. The hideous seams and numerous white cicatrices still visible on the back of this unhappy lady would almost suggest her having passed through some sanguinary field of battle. It was perhaps unfortunate for her that this violent treatment afforded a temporary relief, since it was persisted in to a most formidable degree. Suddenly the bladder acted as well as if nothing had happened, and now the patient got into a fresh trouble. She was taking pills with a minute quantity of strychnia. "I do not know whether the pills did me good or harm, but about this time I got a trick of falling down when I attempted to walk, and after a laudanum injection; but by keeping quite quiet came all right again." The hysteric paralysis had seized the voluntary muscles this time. Headaches and confusion of intellect now occurred, and offered a new and tempting opportunity for vigorous treatment. She was dry cupped again and again on the nape of the neck, and as soon as the glasses were removed a seton was inserted. Her dose of laudanum now reached two drachms.

In this state she became a patient of an eminent Physician at Leamington. There was now, instead of dysuria, a constant flow of pale urine. Her treatment commenced with calomel in cold gruel, and the laudanum was stopped. She became much reduced, and all her distresses were aggravated, especially at the menstrual periods. A tonic treatment was attended with a better result, and in a few months she became for a time tolerably well. Occasionally, however, the palsy of the bladder would recur, and was relieved by a dose of Jeremie's solution of opium. Then diarrhœa seemed to take its place, and I think there can be little doubt that this symptom had a purely hysteric origin. The old seductive influence of the opiates became again felt, and they were freely used.

In May, 1843, the bladder again giving trouble, suddenly, and without any previous warning, a severe attack of trismus ensued. The first invasion of this new malady was short, lasting only an hour or two at a time, and *invariably induced by irritation of the bladder.* Soon, however, it fully established its claim to a place in the chain of her morbid tendencies. The jaws would continue closed for a day, then for days, and at last even for months, with intervals of respite. In one of these the eyes suddenly closed and remained shut for a whole month! resisting all treatment and efforts to open them. During this period, the hysteric irritability being apparently at its height, she lost the use of every limb, and was perfectly helpless. The shock of being roughly carried down stairs and into a new house broke this spell, and in a tempest of hysterical passion she opened her eyes, and they only occasionally closed again for short periods. The trismus, however, would not let her go, and one long fit lasted for nine months, terminating, as usual, suddenly. She was taking much opium all this time. Sometimes she appeared comatose for eighteen hours, and then woke with an open mouth. If the trismus had lasted for days it was always at an end immediately on the occurrence of a fit of hysterics. Sometimes it yielded (as, indeed, might have been expected) on the sudden application of scalding water to the cheek.

Down to 1850 the state of this lady remained with little alteration, the trismus and the urinary difficulty only occasionally abating, and never wholly leaving her. In that year, during a period of home trial, the trismus relaxed, and was replaced by a violent spasm of the muscles on one side of the face, distorting the countenance in the most horrible manner.

and entirely preventing her swallowing even liquids. The inhalation of chloroform was then commenced, and proved effectual in subduing this spasm for a time. This new malady held its ground for a long time, and the chloroform became a necessity in order to enable her to take her meals. An attempt was then made to bring her under the influence of mercury, and she had the advantage of a scruple of calomel for a dose once a week! but no salivation ensued—in all probability the bowels and kidneys carrying out the drug. Profuse salivation was, however, at last the reward of a persevering inunction of mercurial ointment, with smaller doses of calomel often repeated. The spasm and trismus then vanished for two months.

An investigation into the state of the uterus was now made, and it was discovered that a small polypoid growth was hanging from the cervix. This was twisted off, but no change in her state ensued. She became rather worse, and used up at least a pound of chloroform every three weeks! Thus the case continued down to 1855, to the dismay of all who attended her. In the spring of that year a mimic paralysis agitans appeared on the scene, occurring with marked violence at the return of each menstrual period. In this state of hysteric oscillation, from the semblance of one disease to that of another, she came under my care. This was in the autumn of 1858.

The chloroform bottle, the opiate, and the catheter were now indispensable to her. She was sallow, haggard in expression, nervous and emotional in the highest degree. She still menstruated with great regularity, and her trismus and inability to empty the bladder remained as bad as ever. The teeth of the upper jaw, from constant pressure on the corresponding teeth below, were worn down in a remarkable degree, and the masseter muscles on each side had undergone a degree of hypertrophy very significant of their constant exertion during so long a period. A careful examination into her case, removed from it, with two exceptions, every trace of organic disease. The uterus was unhealthy. There was mild congestion and some enlargement of the cervix and from its posterior lip hung down a small polypus, half the length of the little finger. There was in addition an unhealthy bunch of inflamed piles. After removing the polypus, and by repeated applications of nitrate of silver, and once or twice of stronger escharotics, the cervix was got into a perfectly healthy state. During this time a great amelioration took place in her state of general health. We had agreed to put the chloroform and the opiate on the shelf, and the catheter was also locked up. I then removed the piles, some by excision and some by ligature; "and from this," writes the patient, "I rose up in about ten days more free from pain than I had been for years." She then went into the country, and in a few months gained so much in strength and flesh as to be a wonder to herself and others—chloroform, opium, and the catheter were all disused and nearly forgotten.

It was certainly a triumph over the hysteria, but, as it proved, it was not of very long duration. The menstrual crisis was now approaching, and we were to have one more long struggle with this obstinate, often beaten, but unconquered foe. The monthly discharge beginning to occur irregularly, was at last attended on one occasion with much pain and discomfort and a feeling of bearing down, in fact a state of physiological congestion without relief by the usual flux. The old irritation appeared to leap back into its accustomed seat, and in April, 1859, this poor lady presented herself again as bad as ever, and, I am sorry to add, the opium had resumed its accustomed place on her dressing-table. I once or twice applied two or three leeches to relieve the uterine congestion, and always with benefit to her other symptoms, but as it was obvious this could not be repeated constantly, it became desirable, if possible, to overcome the hysteric disorder in some other way.

As there appeared to be some irritation in the canal of the urethra, relief was given to that by smearing the catheter with a little extract of belladona. Hypodermic injections of morphia and other anodyne substances into the arm were then used, and invariably opened the mouth in a few minutes; occasionally also chloroform was given. In fact, the old routine was being gradually reopened, during the time I was awaiting the completion of one of Legendre and Morin's instruments for applying the electricity of induction, which Duchesne has called after the name of its discoverer "araday. Upon the application of this remedial agent (the only means as yet untried) my hopes of success were grounded, and, as the result showed, not without good cause.

I resolved to overcome the spasm of the muscles closing the jaw by throwing into action those whose function it is to open it, and which, in comparison with the former, were feeble and ill-nourished. Also it was determined to arouse the muscular contractility of the bladder, weakened by long abeyance of its activity and by the distension of its walls from long retention of urine. As the patient had been saturated with nervine tonics of every description for many years, she was to take nothing but a little tincture of sumbul in camphor-water occasionally.

The first application of the Faradising instrument to the depressors of the jaw was perfectly successful. The opposing muscles, oddly though it may sound, appeared taken by surprise, and yielded in a very few minutes with a sort of snap. I gave the patient a pretty strong dose of the electric current, and she was informed that it would continue to increase in its force every day until the mouth ceased to shut! Then with a moistened sponge on the conductors, the abdominal muscles were first acted upon. They were in a state of hysteric rigidity, and no doubt thus helped on the seeming paralysis of the bladder. On the right side there was much less contractility of these muscles—and, indeed, generally of the muscles of the body—than on the left, and this was developed in a striking manner by the varying tolerance of the electric current. There was also a most marked anæsthesia of the skin all over the right side of the body. By soldering on a small brass button of the size of a small pea to the end of a piece of brass wire, and then enclosing this in an elastic catheter, I manufactured an excellent instrument for carrying the electric current to the walls of the bladder itself without communicating it to the urethra, which would have been intolerably painful. By the moistened sponge conductor applied over the pubis, and by connecting the wire of the catheter with the other pole of the instrument, we succeeded in arousing the torpid muscular irritability of the bladder. This was the treatment on which I based my hopes of an ultimate victory over the bladder, and it proved in the end quite successful. At the same time, having removed the irritability of the urethra, I determined to overcome temporarily its contractility, by gently dilating it as in the removal of stone from the female bladder, and thus break the habit of retention of urine. This was effected under chloroform by Weiss's dilator, and excellent results ensued.

In a short time an obvious improvement took place in the patient's general state, and in her increased muscular powers. The depressors of the jaw acquired strength and a fuller increase of volume, and there was a very marked increase in the muscular power of the bladder, so that at last on using the catheter it projected a forcible stream, instead of the urine coming away in a mere passive flow. Occasionally a parenthesis of hysteric spasm would occur in the muscles of the face or of the neck. One morning my patient came to me with a mimic torticollis, and another time with her face drawn to one side in the most grotesque fashion. In the manner of a very decided rebuke for such unreasonable conduct, she received on each of these occasions so strong a dose of the electric current as to put an end to the difficulty as if by magic! We were thus gradually dislodging this martyrising disorder, by, at the same time, giving her the muscular power to vanquish it, and calling out the will to that end. Much patience and a most determined resolution to conquer—at first wholly on my part, but afterwards very decidedly on that of the sufferer—brought this strange case to its close. The last thing done for her was on Saturday the 9th of June, 1860, and on Monday, 11th, she came, overflowing with gratitude, to announce herself set free from her disorder.

It is now nearly two years since this lady was discharged cured of her hysteria, and from that time to the present not even the shadow of any of her former annoyances has fallen over her history. Considering the long duration of her disorder—more than thirty years—its extraordinary pertinacity and obstinate recurrence, we may fairly conclude two years' absolute immunity to represent a complete cure. And as the menstrual function is now closed, and a source of irritation thus removed, we may fairly hope that this lady, who was called by some of the eminent Physicians who attended her the "Queen of Hysteria," has vacated her throne to some younger successor.

Sloane-street.

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REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

NEURALGIA CONSEQUENT ON OLD FRACTURE OF THE LOWER JAW—EXTIRPATION OF A PORTION OF THE INFERIOR DENTAL NERVE, FOLLOWED BY SPEEDY AND COMPLETE RECOVERY.

(Case under the care of Mr. WORMALD.)
[Reported by Mr. VERNON.]

J. F., aged 28 years, served in India before Delhi; during an engagement the right side of his lower jaw was broken by a blow from the butt end of a pistol. He was carefully treated in Hospital, but from time to time, at intervals, small pieces of bone became necrosed, and were thrown off by the mouth. Two years after the injury, when the fracture appeared repaired, he began to suffer intense pain around the seat of fracture. The pain was most agonising, fixed in one spot, not radiating up the face, much increased on eating or on any local pressure, and unaccompanied by any twitchings of the muscles. The pain came on for a short time nearly every minute, so that he would stop in the midst of a sentence, and seemed as if suffering most severely. He had not been free from pain for five minutes for the previous twelve months. He took large doses of quinine, of steel, and of various other drugs, with absolutely no relief. Morphia was injected into the gum, with almost no effect, on three several occasions.

On February 2, Mr. Wormald cut out a piece of the inferior dental nerve; he made an incision vertically through the lower lip immediately to the left of the symphysis; another incision, at right angles to the termination of the former one, was continued along the lower margin of the right side of the body of the jaw. This flap being turned up, the bone was exposed. With the exception of the loss of the molar teeth and their alveoli, there was nothing unnatural about the appearance of the bone, no signs of necrosis, no evidence of old fracture. The cancellous portion of the bone was freely opened with the saw and chisel, and the inferior dental nerve was exposed in its canal for about three-quarters of an inch, apparently natural in every way. This portion of nerve, with the neighbouring cancellous tissue, were freely extirpated with the gouge. Only one vessel required a ligature. The wound was stuffed with lint, and the edges accurately closed externally. The incisions healed almost by first intention. There was some little offensive discharge into his mouth, but after the operation an absolute cessation of his former pain.

He left the Hospital in ten days completely cured.

He presented himself at the Surgery on March 17; a small spicula of bone had been cast off into his mouth soon after he left the Hospital, but with that exception the operation had caused him no inconvenience, and had completely relieved his pain.

PARALYSIS OF THE LEFT LEG IN INFANCY—LIMB USELESS AND CUMBERSOME AT ADULT AGE, AND LIABLE, FOR SEVERAL YEARS, TO ULCERATIONS—AMPUTATION—EXAMINATION OF THE LIMB AFTER REMOVAL.

(Case under the care of Mr. PAGET.)
[Communicated by Mr. BAKER.]

A young woman, aged 23, was admitted into St. Bartholomew's Hospital in January, 1863, on account of paralysis of the left leg, from which she had suffered for more than twenty years. Her history is, shortly, that when she was 18 months old, her left leg became suddenly paralysed. No cause for the disease was known, and, so far as her parents knew, no convulsions, or other indications of disturbance of the nervous system preceded the paralysis. She regained only a very imperfect power of motion in the paralysed limb, and never walked out of doors without the assistance of crutches. For the last five or six years successively the lame leg has been ulcerated during the whole of the winter. Three years ago she was admitted into the Hospital, and on this occasion Mr. Paget divided the tendo-Achillis, and placed the foot in a better position; so that with the help of an orthopædic apparatus she was enabled for a time to walk better, though not for any distance out of doors without crutches. But, some sores appearing on the foot, she left off the instrument, and her leg becoming again deformed, and being an incumbrance rather than any assistance to her in walking, etc., she was again admitted, and consented to undergo amputation. At the time of her second admission the leg was atrophied, cold, superficially ulcerated on its front, and almost absolutely powerless and useless. The foot was extended, and turned somewhat inwards. She looked pallid and rather weak, but there was nothing very evidently wrong in her general health beyond this. By her own account, she usually enjoys fair health, except in the winter months, when she is often much troubled, and she thinks weakened, by the ulceration of the leg occurring at this time.

Mr. Paget amputated the leg, through its upper third, on January 31. Excepting slight cellular inflammation about the stump on the first few days after the operation, and the formation of an abscess in the thigh a few weeks afterwards—both complications arising probably from defective nutrition of the limb—the patient has gone on satisfactorily, and is now (March 21) almost convalescent.

Examination of the Leg after its Removal.—The integuments on the front of the leg were superficially ulcerated over a small extent of surface, but in other parts apparently healthy. The subcutaneous cellular tissue was loaded with a large quantity of soft lobulated fat; and a layer of the same, about a quarter to half an inch in thickness, was beneath the integuments covering the inner side of the tibia, where the skin is generally so thin, and so rarely separated by much fat from the bone beneath. The gastrocnemius and soleus muscles were much atrophied, and their structure had undergone such utter degeneration, that they were scarcely, at first sight, to be recognised as muscles at all. A description of their condition will apply to all the muscles of the leg, with one or two partial exceptions to be noticed presently. To the naked eye, their colour, texture, and consistence were, on a superficial examination, hardly distinguishable from those of the common fat beneath the integuments and between the different muscles; but, on a closer examination, one could see, and more especially was this the case in the penniform muscles, that the original shape of each was retained, and that the changes which it had undergone had not destroyed the linear arrangements of the fibres and the characteristic shape at the same time with the colour and other external properties of the muscle. By dissecting carefully, too, the muscles could be separated with tolerable ease from each other, and their origin from the bones and insertion on their respective tendons made out as exactly as in their normal condition. The fat forming almost the whole of their substance was white or yellowish-white, and exceedingly soft, and easily torn. It was arranged, as before mentioned, in regular linear fasciculi, of the same shape and direction with those of the original muscular fibres, and quite separate from the common lobulated adipose tissue adjacent, unlike which it contained scarcely any connective tissue. The appearance was indeed exactly that of the original muscle, with the exception of the fasciculi composing it being rather atrophied, and composed of fatty instead of fleshy fibres. Here and there, in the calf muscles, and to a very small extent in the tibialis posticus and flexor longus pollicis were small patches of pink muscular tissue yet remaining. The flexor longus digitorum was in a much better condition than either of the preceding; very pale and fatty if compared with a healthy muscle, but having throughout a pinkish colour, and muscular fibres yet remaining visible in almost all parts of its substance. The muscles on the front and outside of the leg were in as complete a state of degeneration as the flexors. Those of the sole of the foot, though soft and greasy, were almost all of them less degenerated than those of the leg. A considerable quantity of soft lobulated fat filled the various depressions and interstices of the leg and foot, existing not only between the various muscles and ligaments, but dipping in, as it were, also amongst the fibres of the latter, so that it was impossible to clean them without cutting away a great deal of their substance. The tibula and fibula were very small and shrunken; their surfaces were white and smooth, and the markings of the attachments of muscles very few and indistinct. The appearance presented on examination of the muscles by the microscope were such as might have been anticipated

from the naked eye view previously obtained. In the parts of the muscle which were most degenerated no trace either of muscular striæ, or of the original shape or size of the fibre could be detected. All seemed converted into or replaced by a structure which, with the exception of the more irregular size and less definition of the oil-globules, could not be distinguished from common adipose tissue. In other parts, again, the original shape and size of the fibres could be traced, though in their interior no evidence of striæ remained. Instead, the fibre was filled by molecules and globules of oil of various sizes. In some of these fibres the larger oil-globules were in close apposition, and seemed in process of forming an imperfect kind of adipose tissue, similar to that just described,—a kind made up by the apposition of these, first, to others in the same fibre, and at last to those of neighbouring fibres, until all trace of the original size and shape of the fibre being lost, little but these fat-globules remained.

In some parts of the field the adipose tissue could not be distinguished from common fat, and it may perhaps be doubted how far this was formed out of the fatty elements produced in the degeneration of the muscle, somewhat in the manner of the more imperfect kind last described, and at a further stage of this process, or whether it was produced merely by increased formation of fat, which naturally existed around the muscle, and which, dipping in between its fibres, came at length to occupy their place, as they degenerated and disappeared. The portions of muscle which still retained their pink colour and general appearance of the original structure, contained some fibres, with well-marked striæ, and little if any appearance of fatty degeneration. Side by side, however, with these—and in many parts the change was very abrupt—were fibres beginning to break up; and from this stage it was not difficult to trace a more and more marked deviation from their healthy appearance.

THE ROYAL ORTHOPÆDIC HOSPITAL.

CASE OF INFANTILE PARALYSIS—CLINICAL REMARKS.

(Under the care of Mr. HOLMES COOTE.)

On January 8, a little girl, aged 6, was brought to Mr. Holmes Coote, at the Royal Orthopædic Hospital, suffering from talipes equinus of the right foot. The whole limb was cold, livid, and shrunken, and about one-third of an inch shorter than the opposite. As far as the knee this state of atrophy was strongly marked, and it extended, but in a less degree, to the muscles of the thigh and buttock. In walking, the child dragged the limb, or threw it clumsily forward, and seemed glad to cling to objects, such as the table, by which it gained support. In other respects it was well, but occasionally irritable. The mother stated that the child had had fair health, but had been subject to "terrors" at night. She never knew it have a fit; but once, after some nocturnal excitement, and whilst lying by her side, it fell back in the bed, and remained quiet for a minute or two. She thought this proceeded from exhaustion, and took no further notice. Shortly after this she remarked that the right limb was colder than the opposite, but the paralytic condition came on gradually. Mr. Coote divided the tendo-Achillis, and stated that, after having elongated the connecting material, so as to bring the foot flat on the ground, he should direct the employment of proper apparatus, by which the weakened limb might receive support.

Mr. Coote stated that infantile paralysis was the expression of a very serious lesion of the nervous centres, and that, although it was not so alarming as a paralytic stroke in an adult, this proceeded from the fact that in the former the disease was more limited to the spinal cord, the functions of the brain remaining unimpaired. The opinion so often expressed that in such cases there was no danger to life, was, in his opinion, an error. There were many degrees of these primary affections of the nervous centres, and the danger to life was in proportion to its extent and severity. The term *myogenic* paralysis appeared to him quite out of place. The disease belonged to the group of "convulsive affections of infancy."

Paralytic talipes equinus is never congenital; it appears sooner or later after birth, either after a violent convulsive fit, or one attended by only a momentary unconsciousness. The attack is usually preceded by thirst, restlessness, night-startings, and other indications of cerebral disturbance. In many instances the primary attack is fatal. In others it leads to paraplegia, hemiplegia, etc., the power of movement usually returning to all except one limb, generally a lower extremity, which, in course of time, if the child lives, becomes withered and shorter than the opposite. The attack is usually associated with the first, sometimes with the second, dentition. It seems to affect boys and girls equally; equally also the right or left side. According to the sets of muscles paralysed, so is there produced talipes equinus, or calcaneus, or equino-valgus, talipes equinus being the most common. The arrest of development extends, in some instances, to the trunk, affecting the bones; thus there are cases in which one-half the pelvis is smaller than the opposite,—a serious complication in female children. If the attack be limited to one arm, the deltoid muscle is mostly affected.

The progressive muscular atrophy reduces the limb at last to a mere bag of fat, some few muscles, such as those of the foot, retaining some of their colour and consistence. The coldness of the limb rendered it liable to ulcerations and chilblains. But, again, there are cases in which, after a lapse of months, the muscular power unaccountably returns, and the limb grows more healthily, but still not *pari passu* with the other. As regards treatment, purgatives and small doses of antimony are indicated, but not tonics. The limb should be kept warm, and stimulating embrocations applied to the spine; the gums, when tense, should be lanced; electricity may be tried, but is usually unavailing; nux vomica is useless; sea air and bathing may improve the general health, but have no direct effect on the local malady. Very many cases are to be seen at the Orthopædic, 60 to 70 out of every 1000.

THE LONDON HOSPITAL.

WOUND OF THE INTESTINES BY A STAB—PERITONITIS—DEATH—AUTOPSY.

(Under the care of Mr. COUPER.)

Ng A., aged 23, a Cantonese seaman, was brought to the Hospital on February 13, an hour after having been stabbed in the abdomen by a fellow-countryman to whom he had refused a loan.

When seen by Mr. Couper an hour and a half after the infliction of the injury, there was profound shock. The omentum, the transverse colon, and the greater part of the small intestine protruded through an oblique wound at the umbilicus rather more than a hand's breadth long. The lesser gut was wounded in three places. The edges of the wounds were strongly everted, and the mucous membrane protruded. One wound was a puncture half an inch long, and was plugged by the mucous membrane. The others were more extensive, and were directed across the gut. At one place the intestine was transfixed, so as to leave only two narrow portions of its circumference undivided. Four mesenteric arteries bled a little. Each was tied with fine silk, and the ligature cut short. The continuous suture, with minute intervals between the stitches, was employed in connecting the edges of the intestinal wounds. The ends of a piece of fine silk, each armed with a common sewing needle, were respectively passed from within outward through the edges of the wound and underneath the peritoneum only. They were drawn through until the middle of the thread corresponded with the wound. The needles were then repassed from within outwards in succession through the cut edges of the peritoneum, which was included to the extent of about two lines within each stitch. Preference was given to a double suture, which, acting as it did like a double boot-lace, enabled an assistant to tighten one end, and thus prevent the already inserted stitches from gaping while a fresh stitch was being made with the other. When all were tightened, the last was knotted twice, and both ends of the thread cut short. Each wound was thus treated, and the effect was to push the everted mucous membrane towards the interior of the canal, and to bring two peritoneal surfaces in contact. The line of suture formed a retiring angle, at the bottom of which the thread was hardly visible, and at the seat of the largest wound gave the appearance of annular constriction to the gut. The abdominal wound gaped widely, and there was some tension after its lips had been brought together by a metal pin transfixing the whole thickness of each, and by six silver wire sutures. The dressing of all the wounds occupied nearly two

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hours, and the intestines were protected by warm flannels until they could be returned into the abdomen. The patient was kept under the moderate influence of opium, and was fed at first by the rectum, and after the fourth day by the mouth. Fluid nourishment only, and in small, frequently-repeated quantities was given. There was a natural evacuation of the bowels on the third day, and three or four liquid motions were passed on the fourth, fifth, and eighth days, notwithstanding the administration of full doses of opium. Peritonitis commenced at the end of the second day with some pain and considerable fever. The pain was completely neutralised by increased doses of opium, and the disease terminated in death on the fourteenth day. Inspection thirteen hours after death disclosed non-union of the wound in the abdominal parietes, from which the stitches had been removed thirty hours before death. The abdominal viscera were so agglutinated by abundant recent lymph, that all were matted into one mass, and no part of the peritoneal cavity remained. The edges of the intestinal wounds were thinned and ulcerated, and were not adherent. Their firm and broad adhesion to adjacent coils of intestine was the only barrier to the escape of fæces. Two small spots of lymph near the largest wound had an ochreous stain, which a stream of water failed to erase, but no fæcal matter had escaped either there or elsewhere. No suture was found at two of the intestinal wounds on slowly breaking down the adhesions. The orifices of these wounds had gaped considerably. The suture of the third and largest wound was in the act of separating, and was lightly held at one or two points only. Even this wound had gaped, and was filled up by the peritoneal surface of the adjacent coil, to which its edges adhered, and which must therefore have been in contact with the passing contents of the canal. The sutures fulfilled a twofold purpose:—In the first place, they prevented the escape of fæces during the time that preceded the agglutination of the peritoneal surfaces, while, in addition, they placed those surfaces in a position favourable for adhesion. In the second place, they helped to secure permeability of the intestine by repressing the everted mucous membrane, whose protrusion tended both to diminish the calibre of the gut and to enlarge the gap in the intestinal wall, which, had the patient lived, must ultimately have been closed by a slow process of cicatrisation.

THE ROYAL LONDON OPHTHALMIC HOSPITAL.

AMAUROSIS OCCURRING IN A YOUNG MAN, AN IMMODERATE SMOKER OF TOBACCO.

(Case under the care of Mr. WORDSWORTH.)

G. A., aged 28, a butcher, residing in Essex, applied at the Royal London Ophthalmic Hospital, March 25, 1863, on account of partial loss of sight in both eyes.

He was a strong man, having every appearance of health. He stated that he had always had good health, that he had never indulged in liquor to excess, and that he had never had syphilis. His occupation had not been of such a nature as to fatigue his eyes. About eight or nine years ago, he began to smoke tobacco, and gradually smoked more and more, till he smoked about half an ounce of strong tobacco a-day. He had not apparently suffered in general health from smoking, but about nine months since his sight began to fail, and had gradually become worse to the time of his admission.

He can now scarcely read No. 18 test-type (canon) with his left eye, and No. 16 (2-line great primer) with his right. Distant large objects are also indistinctly seen. Both pupils are considerably dilated, the irides act slowly and imperfectly. Examined with the ophthalmoscope both optic nerve discs are partially atrophied; the apparent inner half of each is white, the outer being red and hyperæmic.

Mr. Wordsworth pointed out the case to the class as one of "tobacco amaurosis," of which he had lately seen several in excessive smokers, all being being more or less attended by atrophy of the optic nerves. So far as he was aware, this form of amaurosis was quite incurable.

GUY'S HOSPITAL.

OVARIAN DISEASE—STRANGULATION OF INTESTINE—DEATH—AUTOPSY.

(Case under the care of Dr. GULL.)

THE following is an example showing rather a rare cause of strangulation, and illustrating the difficulty of diagnosis in such cases. Dr. Wilks, at the autopsy, remarked that it would be seen that a case which was very difficult during life was of a very simple character as viewed after death. An ovarian cyst had long existed, although unknown to the patient; and, at the time of her fatiguing walk, a piece of gut had fallen in front of the tumour. This had caused the symptoms of pain, sickness, etc., the partial strangulation becoming afterwards complete.

The patient, a woman 74 years of age, was admitted on January 22. She said that, having walked a great distance, she was seized with pain in the abdomen and sickness. She then for the first time found that her abdomen was swollen. A few days later she came to the Hospital. There was then apparently a large ovarian cyst in the abdomen, but this, of course, was quite irreconcilable with the history she gave. Although the swelling did not decrease, she improved in health, and left the Hospital, but came again on March 18, having all the symptoms of strangulated intestine. She still persisted in her original story, and this rendered the diagnosis rather obscure. She died March 24. The following account of the *autopsy* is taken from Dr. Wilks' records:—

The abdomen was filled with a very large cyst of the left ovary. The parietes were adherent at one spot, and the omentum above. With these exceptions, the cyst was unattached, and, on lifting it up, a portion of intestine was seen passing round its pedicle, and, falling down in front, had become strangulated. Passing immediately behind the pedicle posteriorly was the commencement of the ileum. At about four inches from the cæcum it curled round the pedicle to its front part, and there lay as a distended coil in the pelvis. Thus posteriorly the first four inches of the ileum were contracted, empty, and of a pale colour, whilst the part immediately below, as seen in front of the tumour and in the pelvis, was distended with fluid matter, and of a dark red colour. By moving the tumour on one side, this piece of intestine could easily be lifted out, and, being brought round and behind the pedicle, was restored to its natural position. On examining the gut further, the constriction was seen to be tolerably tight, although not complete. The serous membrane was uninflamed. On cutting it open, the line between the two portions was well shown, and the mucous membrane was somewhat thin, as if a little more pressure would have destroyed it. The mucous membrane above was of a dark red colour from congestion.

KING'S COLLEGE HOSPITAL.

LITHOTRITY IN A MAN SEVENTY-FIVE YEARS OF AGE—THREE OPERATIONS—RECOVERY.

(Under the care of Mr. FERGUSSON.)

[For this and the following case we are indebted to Mr. Smith, House-Surgeon.]

Ferdinand C., aged 75, and teacher of languages, a very corpulent but healthy-looking old man, was admitted into Albert Ward, under Mr. Fergusson, January 1, 1863, with symptoms of stone in the bladder.

He is an Italian, but has been for some years a resident in London. He had always had good health till about three years ago, when he began to pass small calculi by the urethra; these, however, caused him very little pain; he kept the stones which he passed, and found that at the end of two years they were more than one hundred in number. At the end of that time they began to disappear, and he was not troubled until the last month. He has noticed a great deal of gravel in his water, and felt pain at the neck of the bladder and the end of the glans penis, and after walking much or riding any distance in an omnibus, the urine becomes streaked with blood. His general health is good; he has a very fair appetite, and he sleeps pretty well at night. He was sounded by Mr. Fergusson before admission, and calculi were distinctly felt.

January 24.—The patient having been brought into the theatre, and chloroform given, Mr. Fergusson introduced a small lithotrite, and crushed three or four calculi. The instrument became clogged with *debris*, and it was with some difficulty that the blades were closed sufficiently to enable Mr. Fergusson to withdraw it. When this was at last accomplished, several small fragments were found adherent to the groove. Another lithotrite was then introduced, and the fragments further crushed, after which the patient was re-

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moved. In the evening several small pieces were removed, and were found to be fragments of a lithic acid calculus.

31st.—Since the last date, the patient has passed a great many small fragments, but had very little constitutional disturbance after the operation. For a day or two afterwards the urine was much tinged with blood, but this soon passed off. To-day he was again operated upon under chloroform. A large lithotrite was first passed, and several stones crushed, after which some pieces were removed by a smaller instrument. One large piece slipped from the instrument, and stuck fast in front of the prostate, and was removed by an instrument with expanding blades, somewhat similar to one used by Mr. Brooke, of the Westminster Hospital.

February 3.—He has passed several fragments since last sitting. The urine has been very bloody, but is now clear. He has little constitutional disturbance, but complains, however, of much irritation about the neck of the bladder, and pain in making water.

7th.—The patient having been placed under chloroform, Mr. Fergusson introduced a lithotrite, and succeeded in crushing one large calculus, and removing seven fragments.

9th.—The urine has been quite clear since last sitting. He complains of very little pain, and no difficulty in micturition, and, in fact, feels quite well. During the day has passed six large pieces.

21st.—Was examined to-day by Mr. Fergusson, but no fragments could be detected by the most careful manipulation. Feels quite well, with the exception of some little amount of irritation about the neck of the bladder.

28th.—Discharged cured.

LITHOTRITY—THREE OPERATIONS—REMOVAL OF SMALL CALCULI BY THE LITHOTRITE—RECOVERY.

(Case under the care of Mr. FERGUSSON.)

Samuel C., aged 60, was admitted into Albert Ward, under the care of Mr. Fergusson, December 12, 1862, for stone in the bladder. He lives in Gloucestershire, and is a stonemason by occupation, is married. He had pretty good health up to about six years ago, when he began to complain of pain at the external orifice of the urethra during micturition. For this he applied at the Bristol Infirmary, where a calculus was detected in the bladder, and crushed. Since that time he has frequently passed fragments and small perfect calculi from the bladder.

Upon admission into King's College Hospital, a sound was passed into the bladder, and Mr. Fergusson diagnosed a collection of small calculi.

December 20.—The patient having been brought into the theatre, Mr. Fergusson first introduced the lithotrite and crushed a small stone, and afterwards by the lithotrite scoop extracted some fragments and several small calculi, six in number. In extracting one the orifice of the urethra requiring slitting with a bistoury. The stones were uric acid.

22nd.—He has been kept in bed since the 20th, but has had no bad symptoms. The urine after the sitting was very much tinged with blood, but is now quite clear. Has passed no fragments.

January 3, 1863.—He was again brought into the theatre, and twelve perfect stones were removed by Mr. Fergusson's small lithotrite. They varied in size from a bean to a cherry-stone.

5th.—Has felt very comfortable since last sitting; the urine is clear. Has passed no more fragments.

10th.—Again brought into the theatre, when four more stones were removed, two of which were much larger than those previously extracted.

12th.—Complains of irritability about the neck of the bladder, and a frequent desire to make water. In other respects he is well. Urine clear.

17th.—Mr. Fergusson carefully examined the interior of the bladder with a sound, but could detect no stone. Discharged cured.

GARIBALDI'S WOUND.—By a letter received in Paris a few days ago, it appears that the wound in General Garibaldi's ankle has again put on an unfavourable appearance. There is every reason to fear that some foreign body carried in by the ball still remains at the bottom of the wound, keeping up suppuration and preventing healing.

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Medical Times and Gazette.

SATURDAY, APRIL 4.

MAN'S FRONTAL VERTEBRA.

OUR survey of the nasal segment of man was complicated by our knowledge of the fact that the division of the skull with which we were then dealing was the segment furthest removed from the vertebral centre. As, therefore, a peripheral segment of the vertebral column, we necessarily experienced the greatest possible difficulty in its recognition, under any circumstances, as the serial homologue of a true vertebra. If, instead of confining his researches to one single cranial segment, and that one *par excellence* the most difficult of comprehension, because the most peripheral, the student had extended his sphere of observation to the wider range of living structural forms, he would have been fully and satisfactorily aware of the fact, that there once existed a period when the whole vertebrate life on this planet was composed of those animals in which the polarizing forces tending towards irrelative repetition were strongly manifest. In the reptile which crept under the shade of the carboniferous forest, or trod the muddy sandstones of the Triassic shore, we see structures which exhibit the operation of this vegetative law, which, our readers will bear in mind, is the exact antithesis to the opposing principle which has produced the divergence of animals from the originally created type. The aphorism that "every animal is the resultant of two forces, the one teleological, and the other morphological," has been proved to be strictly and scientifically exact. And applying this principle to the examination of the individual skeleton of any animal, it will be easily seen that the polarizing force which regulates the adherence to type operates most powerfully in the segments of the body furthest from the extremities. The vertebral nature of any given segment is readily recognisable in the dorso-lumbar series; scarcely perceptible in the tip of the tail, or in the nasal vertebra. In these peripheral portions of the organisation, the teleological principle has modified each segment to fit it for the purpose to which it is applied. And without questioning in any way the fitness of such a structure, *e. g.*, as the nasal segment, for the reception of the olfactory ganglia, or the support of the upper teeth, we recognise in the relative degree of that fitness a subservience to the one great morphological law of "adherence to type," which regulates that the nasal segment in man shall be composed of answerable parts, in every one of the variously modified examples of the sub-kingdom *Vertebrata*.

In our examination, however, of the frontal segment of the skull, we have to deal with a far more simple organism, and one of which the vertebral nature has been often, and, we think, unfairly denied. The grounds of such negation are, however, so futile, that we shall not devote much space to their refutation.

If the description which we have already given does not

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convince any one that the nasal segment is literally and entirely a vertebra, we despair of improving their perceptive faculties. We will endeavour to reply to the objection which has been made that there can be no true homology drawn between those segments of the skull which lie in front of the pituitary body and the trunk vertebræ. This is the old objection which has been made by the "practical men." Some accurate observers have, however, said that "in no instance, save Amphioxus, has the notochord, as yet, been traced through the whole of the floor of the cranial cavity. In no other embryo has it ever been yet seen to extend beyond the middle vesicle of the cerebrum, or in other words, beyond the level of the rudiment of the infundibulum and pituitary body. In the second place, the division into somatomes, in all known vertebrate embryos, stops short at the posterior boundary of the skull, and no trace of such segmentation has yet been observed in the head itself." John Müller, however, has virtually annihilated this argument. He has demonstrated that the notochord in the frog extends far in front of the basi-occipital bone; that "in *Mammalia*, including man, three cranial vertebræ are without exception discoverable in the basis cranii, either in the fœtus or in many cases even in young or middle-aged animals, the *occipitale basilare*, *sphenoideum*, *basilare*, *posterius*, and *anterius*; these also occur in fish. How far the chorda primitively extends in *Mammalia* is not yet made out; but even although it should not reach through the whole basis cranii, this, for the reasons which have been stated, would be no good argument." The opponents of the vertebral theory have alleged that a careful attention to embryology tends to overturn our belief in the actual vertebrate nature of the successive segments of the skull. Conscious, however, that a careful attention to the anatomy of the embryonic forms will establish the general truth of our conclusions, we will endeavour fearlessly to proceed in our investigations, with the sole object of attempting to render this obscure subject familiar to the tyro in human osteology.

Like every other cranial vertebra, the frontal segment is composed of two arches, the neural and the hæmal. The centrum, or remains of the primitive notochord, which in *Amphioxus* reached so far towards the periphery of the animal, is the bone termed "presphenoid." The lesser wings of the sphenoid, or orbitosphenoids, are the neurapophyses, through which the neural canal flows. Above these are the two bifid neural spines, or frontal bones. The external angular process, so termed in Human Anatomy, is, serially speaking, the "diapophysis," but actually the "post frontal." Knowledge of the form of the structure in man would never enable the student to perceive that it is veritably a distinct vertebral element; such, however, it appears in the bird, the fish, and the reptile. The pleurapophysis of the frontal vertebra, answering to the "rib" is the tympanic bone. Such, therefore, is the composition of the neural arch of the frontal segment.

We may for a moment call attention to the consideration of the hæmal arch, of the frontal segment, or maxilla, composed of two confluent elements, the *os articulare* (*hæmapophyses*) and the *os dentarium* (*hæmal spine*). Contrast this structure with that of the lower jaw of the crocodile, where the concave articular process is fitted over the tympanic bone (the reverse of the mammalian structure); where beneath the articular process extends a bone, the *angulare*, capped by another plate, the *surangulare*, and with a splint-like bone on the inside to support it, the *splenial*. The coronoid process in the reptile also forms a distinct ossification, while the dentary bone composes the "functional" part of the jaw, supporting the teeth. What do we recognise in this but a beautiful example of the operation of the law of "vegetative" or "irrelative" repetition, which gives to the scattered centres of ossification in the lower forms of Hæmatocryan vertebrata "a local habitation and a name?"

The frontal vertebra is, *ipso facto*, that segment which is most intimately connected with the optic sense. As the capsule defending the sense of smell is always placed in front of the nasal vertebra, as the nerves which regulate taste perforate the neurapophyses of the parietal vertebra, as the auditory capsule is continually lodged in the space, or otocrane situated between the parietal and occipital vertebra, in like manner is the eye associated with the frontal segment, and lodged in the orbital cavity between the frontal and the nasal vertebræ.

We shall not here enter into the vexed question of the development of the suspensory arch of the lower jaw, nor shall we venture, in the present state of knowledge, to identify the small bones of the ear, (*malleus*, *incus*, *stapes*, etc.), with the proximal elements of the mandible. We have perfect confidence that all they who carefully and diligently examine the structure and development of the mandible in the lower vertebrata, will experience no real difficulty in the actual identification of the mandible as the hæmal arch of the frontal segment, serially homologous with the maxillary arch, and, like it, being provided in man and the higher vertebrates with rows of more or less complicated teeth, whereby the food is seized, torn, or comminuted.

Hereafter we shall proceed with the investigation of the signification and homologies of the parietal segment of the skull.

THE WEEK.

CRIMINAL JUSTICE.

An unprejudiced person, who has read the reports of the criminal trials which have taken place during the last few years, will certainly be led to the conclusion that the boasted British system of criminal jurisprudence is at least as imperfect as any, if not more imperfect than most human machineries. The patent absurdity of referring questions of recondite psychical and toxicological science to a panel of twelve persons, of whom nothing is previously known beyond the fact that they pay certain rates and taxes, has lately been insisted on in this journal, and we shall not here recur to it. But there is another imperfection, or, we should rather say, wrong, permitted by the English law, which is equally opposed to the dictates of humanity and to the first principles of justice. We refer to the unequal means of defence at the disposal of the wealthy and pauper prisoner. Let a poverty-stricken wretch be accused of a crime on evidence sufficient to satisfy a magistrate that he may possibly be guilty, and he is sent to gaol, there to lie powerless and unheeded. Meanwhile the most acute intellects in the town or country, men trained to the business of discovery, are employed to bring home the charge to his door. Incarcerated and penniless, he can collect no evidence to disprove the accusation; he cannot fee experts and counsellors; and, guilty or not guilty, he is virtually undefended. It is true that just before, or at the time of trial the judge may appoint an advocate for a prisoner who cannot otherwise obtain one. But however conscientiously the barrister may behave to his pauper client, whatever desire he may have to assist the prisoner, however skilfully he may seize the points of the case as they arise, it is not to be expected that he can rebut evidence which has been skilfully collected and arranged by men of practised sagacity and acuteness during the weeks or months that the man has been in prison. Suppose, for instance, that a penniless servant-girl is accused of putting poison into the family pudding. The case is brought to trial. Professor Taylor or Dr. Letheby, or some other toxicologist, appears for the prosecution. He describes symptoms, post-mortem appearances, analysis—in fact the whole scientific details of the case, as looked at under the assumption of guilt. But what scientific witness will be brought forward to test the validity of the expert's analysis, or to state whether it be not

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possible that the scientific details are compatible with innocence? The pauper prisoner can obtain no such assistance, and it is therefore undeniable that she has neither the means of defence nor the chance of an acquittal which the money of a Palmer could purchase. Had Smethurst been a poor man, had he not been able to provide a defence which, at least, showed the weak points in the theory of the prosecution, what chance of life would he have had? It has been publicly stated that application was made to the judge who tried Burton that some Physician of eminence should examine him, and give evidence at the trial as to his mental condition. The answer said to have been returned was that there were no funds at the judge's disposal for such a purpose. Suppose Burton had been a millionaire who had murdered his valet, or a wealthy tradesman's wife who had killed her children, what would have been the array of skilled evidence in favour of insanity confronting the judge and jury? Lastly, it is a well-known fact that the man who can pay can obtain an advocate of higher standing and repute, and therefore, it is to be presumed, of greater experience and talent than the man who cannot. A great improvement was believed to have been made in the conduct of our criminal courts when the law first permitted a prisoner tried for a capital offence to have his defence stated to the court by his own advocate. Some of the most experienced lawyers nevertheless maintain that on the whole the accused person's interests were better represented under the old system. The judge himself was then the prisoner's counsel, and the jury heard from the bench all that could be fairly stated in his defence. But be this as it may, a glaring inequality in the position of rich and poor defendants in criminal actions is a blot upon the public administration of justice, and demands the interference of our law-makers.

THE NEW ARMY MEDICAL WARRANT.

The following is the shape which the concession so long promised to the just demands of the Army Medical Officers has taken. The document, doubtless, removes some of the grounds of complaint, but it does not restore all that was granted by the original Warrant. Practically, Medical men can well dispense with the empty honour of "turning out the guard," and we can well suppose that our army brethren are not anxious for responsibility on courts-martial. But the reservations made by the House Guards demonstrate that jealousy and ill-feeling towards the department have not abated,—that the authorities have ceded under pressure as little as they possibly could, and that little with the worst possible grace:—

"*Circular No.* 808 (*Relative Rank*).

"(Victoria R.)

"Whereas we have judged it expedient to cancel our Royal Warrant of 28th March, 1861, which assigns the relative rank of junior major to certain staff and regimental Surgeons of our army, and to revise those parts of the several other Royal Warrants now in force, prescribing the privileges attaching to relative rank of officers of the Civil Departments and non-combatant officers of the Military Departments of our army; our will and pleasure is, that such privileges shall, from the date of this our Royal Warrant, be regulated as follows:—

"Relative rank shall carry with it all precedence and advantages attaching to the military rank with which it corresponds, and shall regulate the rates of lodging-money, number of servants, rations of fuel and light or allowances in their stead, detention and prize-money according to the regulations and upon the conditions in force from time to time; but such relative rank shall not entitle the holder to military command of any kind whatsoever, nor to the presidency of courts-martial, courts of inquiry, committees, or boards of survey, but when the president of such courts, committees, or boards shall be junior to the officer of the Civil Department, then such member of the Civil Department shall attend as a witness and not as a member. Choice of quarters shall be regulated by relative rank according to date of commission, except in the case of commanding officers' quarters, and in cases in which special quarters shall be permanently appropriated with the approval of the Secretary of State for War.

"Relative rank shall not entitle the holder to salutes from ships or fortresses, nor to the turning out of guards, but it shall entitle him, if commissioned, to salutes by sentries or by individual soldiers.

"Honorary rank of paymasters shall carry with it all the privileges and advantages attaching to relative rank of corresponding degree.

"All commissioned officers serving with the troops shall be entitled to funeral honours according to relative military rank.

"Given at our Court of St. James's this 7th day of March, 1863, in the twenty-sixth year of our reign.

"By her Majesty's Command,

"(Signed) G. C. Lewis."

THE CASE OF STONE v. STONE AND APPLETON.

We feel some difficulty in alluding to this case, in which a Medical man is alleged to have taken advantage of a patient during a swoon whilst he was in attendance upon her for disease of the womb. The circumstances are so unusual and so disgusting, the character of the unfortunate lady had been previously so good, and the evidence of her guilt so conflicting, for it depended principally upon an admission of guilt which she was alleged by some witnesses to have made—an assertion which was denied by others—also on the question of a few weeks in the age of a new-born child, that we cannot help entertaining a lurking hope that the jury were mistaken in the verdict which they gave for the plaintiff. One thing, however, we feel it our duty to notice. Medical men are liable to false accusations; they may be charged with improprieties committed in the absence of any other witness than the complainant, which it may be impossible to controvert by any direct evidence whatever. Considering how defenceless is the position of any man against whom such a charge has been made, it is especially necessary that the administration of justice should be as cool, temperate, and free from appeals to prejudice as possible. This, we are sorry to say, was not the case in the trial of Stone v. Stone and Appleton. There can be no doubt that the remark made by Sir C. Cresswell, in summing up, "that it was unnecessary for him to say what kind of damages should be awarded against a Medical man who had seduced a patient under his care," amounted, if correctly reported, to a flagrant misdirection of the jury. The Divorce Court is a civil, and not a criminal, tribunal. The object of damages, in civil cases, is simply to compensate the plaintiff for the injury he has sustained by the defendant's wrong or breach of contract, and the amount of them is perfectly independent of all extraneous circumstances connected with the defendant's position or conduct. The expression "exemplary damages" is frequently used by plaintiff's counsel, but the law knows no such term. In this case the petitioner's compensation ought to be estimated by the wrong he has sustained, and he is entitled to the same amount, whether the co-respondent be a Medical man or a footman. The contrary opinion is very prevalent among juries, and it is the duty of the Court to counteract any such notion. A judge who uses his influence in increasing the force of such prejudices incurs no ordinary blame.

PARLIAMENTARY.

The late epizootic of foot and lung disease amongst horned cattle, and of ovine variola, will, it is to be hoped, produce some good by directing the attention of Parliament to the subject of the spread of contagious disease amongst cattle. On the 26th ult.,

"Mr. Holland gave notice that on an early day after Easter he would submit a Bill to amend the law for the prevention of contagion among sheep, cattle, and oth r animals."

The same evening, in Committee of Supply, the House voted—

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"£1098, to complete the sum of £2098, for Quarantine Expenses."

And the following sums for Medical Charities in Dublin:—

"£1600 for the Lock Hospital; £700 for the Rotunda Lying-in Hospital; £200 for the Coombe Lying-in Hospital; £4500 for the House of Industry; £1500 for the Cork-street Fever Hospital; £600 for the Meath Hospital; £100 for St. Mark's Ophthalmic Hospital; £1300 for Dr. Steeven's Hospital; and £245 for the Board of Superintendence and Dublin Hospitals."

In the House of Lords on the 27th ult., on the motion for the third reading of the Irish Births and Deaths Registration Bill,

"The Earl of Bandon proposed an amendment, the effect of which was to assimilate the machinery of registration in Ireland to that of England.

"The Earl Derby thought that there might be an objection to limiting the choice of the guardians to Dispensary Surgeons, because in some cases, especially in large towns, those gentlemen might be too much occupied to be able efficiently to discharge the duties of the office of registrar. He would, however, suggest to his noble friend behind him that it would be as well he should not press his amendment, but that he should allow the Bill to pass as it had been agreed to in the House of Commons.

"The amendment was then withdrawn, and the Bill passed."

In the House of Commons,

"Mr. Blake asked the Secretary of State for the Home Department whether, in the case of the convict Burton, now under sentence of death at Maidstone Gaol for the murder of a child at Chatham Lines, an application was not made at the trial for the examination of the prisoner by Dr. Forbes Winslow, or some other Physician of experience in insanity, and refused by the judge; and whether taking into consideration the fact then stated of Burton's mother being confined in a lunatic asylum, and his brother not being of sound mind, it was his intention to order such an examination to be now made? He was informed that the prisoner's council applied to the judge to order that the evidence of eminent Medical men should be procured to show whether, when the prisoner committed the act, he was labouring under insanity or not. Mr. Justice Wightman, however, stated that he had no funds at his disposal for such a purpose. He trusted that the right hon. gentleman would satisfy himself whether this unhappy man was insane or not.

"Sir G. Grey was not aware that any application had been made to the judge of the nature described by the hon. member. The defence of the prisoner was his alleged insanity. Evidence was adduced on the subject, and the judge laid down the law in accordance with the highest legal authorities. The jury, after full and patient consideration, were of opinion that the prisoner was morally responsible for his actions. In answer to the second question, he had to state that no facts had come under his notice which would justify such an examination."

With all deference to Sir G. Grey, we should think that the fact of the hereditary nature of insanity would alone justify a Medical examination under such circumstances.

REVIEWS.

Points of Contact between Science and Art. A Lecture delivered at the Royal Institution, January 30, 1863, by H. E. Cardinal Wiseman. London: Hurst and Blackett. 1863. Pp. 93.

We gave so full an abstract of the Cardinal's Lecture immediately after its delivery, that we now need only announce its publication, and recommend our readers to peruse it for themselves.

Experimental Essays. I. On the Motion of Camphor on Water. II. On the Motion of Camphor towards the Light. III. History of the Modern Theory of Dew. By Charles Tomlinson, Lecturer on Physical Science, King's College School, London. Illustrated with Engravings on Wood. London: Virtue and Co. Pp. 123.

These Essays are published in a shilling volume of "Weales' Series," which now appears to be in the hands of the Messrs. Virtue. They are intended as *studies; i.e.*, investigations of single facts; first, with the view of ascertaining all that is known, and then of finding out something new. These Essays are well worth the shilling, and more; they completely explain the subjects treated on by simple laws; and the "Essay on Dew" shows that Wells was not so much the inventor as the popular expositor of that theory of dew which goes by his name.

Waste. A Lecture delivered at the Bristol Institution for the Advancement of Science, Literature, and the Arts, on February 10, 1863, by John Addington Symonds, M.D., F.R.S. Ed., etc. London: Bell and Daldy. 1863. Pp. 51.

An eloquent and suggestive lecture, as all Dr. Symonds' lectures are. He treats of waste, destruction, decay, and death; the wearing of the earth's surface; the destruction of animal and vegetable life; the extermination of species; the waste of man by war and pestilence, and the intrusion of stronger races; and the waste of his *potentiality*, of his intellect and powers. But out of death come new forms of life; the old passes away, and newer and better things take their place. "Order, growth, and development prevail in the midst of disruption, disintegration, and decay." Such is Dr. Symonds' creed, and such is our own.

Heat Considered as a Mode of Motion. Being a Course of Twelve Lectures delivered at the Royal Institution of Great Britain in the Season of 1862. By John Tyndall, F.R.S., etc., Professor of Natural Philosophy in the Royal Institution. With Illustrations. London: Longmans. 1863. 8vo. Pp. 466.

Beginning with the most homely facts relating to the production of heat by friction, and ending with the most sublime speculations on the constitution of the sun, the source of its heat, its rate of expenditure, and its effects, these admirable Lectures not only will introduce the student to the elements of one of the most important subjects of physical science, but will put the mature philosopher in possession of those more advanced doctrines of the unity and conservation of force which throw the charm of a romance over the dry matters of fact discovered by observation and experiment. The first seven lectures, as the Preface tells us, deal with thermometric heat, its generation and consumption in mechanical processes, such as friction, concussion, compression; how motion resisted becomes heat; and how heat disappears if *work—i. e.*, movement—be effected. It shows how the old theory that heat was a kind of fluid superadded to bodies, which they had various *capacities* for absorbing and holding, must be superseded by the newer theory that it is an accident or condition of matter, viz., a motion of its ultimate particles. Not that this latter view is altogether new, for it had been presaged by Bacon and Locke, and held by Rumford and Davy; but scientific notions are like early asparagus and other "delicacies of the season," and as these at their first appearance are confined to the tables of the wealthy gourmand, but later are found in the barrows of the costermonger, so are these at first confined to the *élite* of the scientific world, till at last they find their way to the hawkers of popular lectures and compilers of popular manuals. That great idea, the "mechanical equivalent of heat," is fully developed, showing that "the quantity of heat which would raise one pound of water one degree F. in temperature is exactly equal to what would be generated if a pound weight after having fallen through a height of 772 feet had its moving force destroyed by collision with the earth. Conversely the amount of heat necessary to raise a pound of water one degree in temperature, would, if all applied mechanically, be competent to raise a pound weight 772 feet high, or it would raise 772 lbs. one foot high. The term 'foot pound' has been introduced to express in a convenient way the lifting of one pound to the height of a foot. Thus the quantity of heat necessary to raise the temperature of a pound of water one degree being taken as a standard, 772 foot pounds constitute what has been called the *mechanical equivalent of heat.*"

The lectures proceed to develope the molecular theory of heat as explanatory of the solid, liquid, and gaseous states. Combustion is treated of as heat developed by the extinction of the motion of the particles of oxygen which rush towards the burning body, just as aerolites rush to the sun and feed his flames. As we go on we find described the vibrations

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and tones produced by the contact of unequally heated metals; the ebullition of water, "specific," and "latent," heating the aerial currents generated by heat; the nature of glaciers; the refutation of the idea that the earth must have been chilled during the glacial period, and the demonstration of the contrary and the conduction of heat; and in the last five lectures, the history of radiant heat. It is not only the matter—the fact that so much is taught about heat, and about the processes in which it is concerned, and the grandeur of the views which show the unity of force, but the *manner* which we especially commend; the felicity of argumentation, and the exuberant ingenuity of experimental illustration, not to mention the bibliographical appendices, in which justice is done to Romford, Davy, Mayer, Holmholz, and other workers. Mayer is warmly eulogised, but not more than he deserves.

FOREIGN CORRESPONDENCE.

FLORENCE.

SIR,—In a comparatively primitive state of society, general belief or credulity attributed the discovery of mineral springs, or medicinal herbs possessing special virtues, to the well-disposed interposition of some celestial visitor, generally the patron saint of the district, who officiated as a modern cicerone, or referred it to some astonishing display of brute sagacity or instinct. The reported discovery of a cure for cancer, which has created some attention and interest in Northern and Central Italy, belongs to the latter category. The story is this:—Count Mattei, a wealthy nobleman of Bologna, possessed a favourite dog affected with cancer (I do not, of course, vouch for the accuracy of the diagnosis); this dog was observed to pay frequent visits to a particular locality, and there to partake of an herb of which there was an abundant supply. The evident improvement in the dog's condition, and its gradual recovery, is said to have provoked an examination and subsequent administration of the herb in cancer of the human subject, with, it is asserted, equally marvellous effects. Numerous are now the reported cases of cure. Without attaching any value to this statement, I must candidly admit that a case has come under my own observation which has somewhat surprised me. When an observer like Velpeau testifies to the great difficulty of establishing an accurate diagnosis in cancer, and admits the frequent errors of his own decisions, one must pause before admitting the positive existence or non-existence of cancer, even when supported by acknowledged authority. Scanzoni and Locock, on different occasions, unhesitatingly pronounced the disease to which I allude to be cancer, considerably advanced in one breast, less developed in the other. The two leading Surgeons of Florence endorsed these opinions. On one side it was open; the patient was unable to take any exercise, prostrated by pain, sleeplessness, and inability to take nourishment. Two months' use of a preparation from the herb was followed by comparative absence of pain, restored appetite, nights of refreshing sleep, and the power of taking a moderate amount of active exercise. The area of the cancerous sore has diminished two-thirds, and presents a healthy appearance. The patient had previously been attended by an homœopathic practitioner, who (*mirabile dictu*) admitted the helplessness of his art. This fact, to a sceptic like myself, might furnish some clue to the elucidation of the mystery. One may easily conceive a remedy possessing in a marked degree the properties of a sedative and tonic, producing such an improvement in the general health as to effect a corresponding amelioration in the urgent local symptoms, more especially in an individual not previously subjected to the influence of medicines usually employed by the rational'st or empiric under similar circumstances. After all, mitigation of symptoms or general improvement does not represent a cure. Even accepting this explanation, a remedy possessing such powers would prove a valuable addition to the Pharmacopœia, and increase the debt of gratitude which we already owe to our old friend the dog. The exploits of Dr. Fell in London, Dr. Noir in Paris, and a host of other pretenders, would, were other reasons wanting, excite in the educated mind of the experienced Surgeon, not only a doubt, but an indisposition to believe in the possible existence of such a remedy, and the loose, illogical reasoning not only of lay, but of Professional advocates does not tend to allay a well-grounded suspicion of insincerity if not of wilful misrepresentation. Many, though perfectly honest, from defective mental training, or enthusiastic temperament, accept as fact that which a well-balanced mind would reject as founded on imperfect or unreliable evidence. Cases are adduced, but, as Velpeau remarked, there always remains the doubt as to the accuracy of the diagnosis. The public habitually attributes the salutary incredulity of the Profession to jealousy or obstinate reluctance to admit truth because at variance with ordinary reasoning and experience.

I may mention that Count Mattei refuses to divulge what he declares to be a remedy capable of effecting such marvellous results. One cannot purchase it; begging is as effectual as praying for the reform of Medical abuses before the British Legislature; and a man who would resent the epithet of unchristian or inhuman withholds that which he firmly believes would not only alleviate, but remove the cause of suffering to thousands of his fellow-beings. Another subject which has excited considerable interest in the Profession is the new operation for stone, recently introduced and practised by Dr. Aymini, of Turin, through the agency of electricity, which he calls "Lithomalakia Electrica." It appears that Dr. Aymini, who was for many years a Surgeon in the Piedmontese army, has for some time conceived the possibility of applying electricity to the destruction of urinary calculi; but from defective knowledge of its mode of application was unsuccessful, till he associated himself with a well-known electrician, Prof. Erchman, President of the Mediterranean Submarine Telegraph Company. I cannot give you the precise details, as Dr. Aymini has only supplied me with a general description. The operation is effected by the medium of the galvanic battery, from which the electric fluid is transmitted through a canula containing three platinum wires tipped with ivory, similar in construction to the lithotrite of Heurtleloup. These wires are so arranged that by a mechanical contrivance the extremities may embrace the stone; when this has been seized, the wires are connected with the battery, and the transmission of the electrical current is followed by gradual disintegration of the stone, which is subsequently voided in the form of a fine powder. The operation necessarily requires repetition, the stone being divided into several fragments, which must be separately brought in contact with the wires. In three cases operated on successfully, each underwent three sittings of twenty minutes. Dr. Aymini, by experiments on himself, has been able to graduate the power of the agent. The point on which most stress is laid, which he has not communicated, is the nature of the solution with which the bladder is first injected; this, he asserts, must be modified according to the composition of the calculus, but how this knowledge is to be arrived at by a simple exploration is difficult to understand. The operation has already been performed in the presence of several Medical men, who testify to its complete success.

A friend of mine has seen the operation experimentally performed in a glass jar, and describes it as though the stone underwent a gradual process of fusion.

Dr. Aymini intends proceeding to Paris and from thence to London, when you will have an opportunity of witnessing the operation, of which I have only been able to furnish confused details.

M. C. P. L.

GENERAL CORRESPONDENCE.

RUSSELL v. ADAMS.

LETTER FROM MR. EDWARD COTTEM.

[To the Editor of the Medical Times and Gazette.]

SIR,—I feel that a just indignation at a system of persecution, and sympathy with a Medical brother, are sufficient motives for any man who has had a knowledge of the Russells to come forward and bear his testimony to their manner of life, previous to their making their atrocious attack on Mr. Adams. Thus actuated, I give mine as follows:—

I first knew Mrs. and Miss Russell by seeing them whilst I was attending the late Mrs. Crump at the house of her son, with whom, after her decease, they resided. I attended at an after period—viz., from January to July, 1860, both Mrs. and Miss Russell. During this period they were continually boasting of their noble connexions, claiming intimacy with the Earl of Shaftesbury, Lord Raynham, the Hon. B. Noel,

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etc. I was often surprised at the greatness of their correspondence, and the number of letters I have seen ready stamped for the post, and was struck with the fact that all the persons of influence with whom they professed acquaintanceship were the promoters or upholders of philanthropic institutions. This impressed me with the idea of the nature of this large correspondence, and of their acquaintance with these noblemen, which both before the trial and during it, from the evidence of Mr. Toynbee, was fully confirmed.

During their stay with Mr. Crump they had the utmost kindness and consideration shown them by him, such as very few men would have shown; and it was only when he felt that he would be utterly ruined by the reckless manner in which they got into debt, he, after repeated expostulations, determined upon getting rid of them at any cost.

During the trial, Mrs. Russell swore her daughter had never before been engaged. I distinctly remember her telling me on one occasion, when her daughter complained of illness, that there was a circumstance I ought to be acquainted with, viz., that a short time before they came to the Hornsey-road, she (her daughter) had been cruelly betrayed by a gentleman on the very eve of marriage, after the wedding-dress was prepared, and every preparation made; and that, moreover, the betrayer was a minister of the Lord Jesus Christ.

I think the evidence which came out during the trial was enough to carry conviction to the minds of ninety-nine men out of a hundred. At all events, having been present, I feel confident the delay in the jury in finding their verdict filled with surprise a majority as large as this of those who were in court; yet the rejection of evidence then before the court on some points of law, prevented the base atrocity of the charge being fully recognised. I am, &c.

EDWD. COTTEM, L.R.C.P. Ed.

Hornsey-road, Holloway, March 31.

THE APOTHECARIES' COMPANY OF IRELAND.

LETTER FROM DR. C. H. LEET.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the last Number of your Journal there is an article under the foregoing head, which professes to have emanated from the Living and Queen's College of Physicians of Ireland, relative to the Licence of the Irish Apothecaries' Company, in which the College, after quoting certain sections of the Act, 31 Geo. III., cap. xxxiv., goes on to state "that there is neither in these clauses, nor in any part of the Act, any authority given to grant any licence or certificate in Medicine; and on this point it seems requisite to observe that, in the case submitted to Sir R. Bethell, there is a mis-statement calculated to mislead counsel, where it is stated that, 'Such then, was the legal and recognised position of the Irish Apothecary, analogous in every respect to that of the Apothecary in England, when the Medical Registration Act (21 and 22 Vic., ch. 90) was passed,'" etc., etc.

Now, as regards the right construction of the Act referred to, Mr. Napier, Q.C. (ex-Chancellor of Ireland) states his opinion in the following words:—

"It is obvious that at the time of the passing of this Act, the Irish Apothecary was actually, according to usage and practice, and lawful under the common law, a Medical Practitioner, and such was he recognised to be by the legislature in previous statutes. That the statute recognised and did not originate the duties properly incident to the art and mystery of an Apothecary, is further evidenced by the constitution of the court of examiners under the 9th section.—This court is composed exclusively of Apothecaries, and they are to examine the candidates as to their acquaintance with the science and practice of Medicine, and ascertain their general fitness to act as Apothecaries. The qualification of the examiner for his duty flows from his skill and knowledge as an experienced Apothecary, and therefore the science of Medicine formed a part of that qualification."

Sir Richard Bethell (the present Lord Chancellor of England), also gives his opinion upon the same point, as follows:—

"By the Act, 31 Geo. 3rd, ch. 34, certificates are to be granted to persons who have been duly examined, entitling them 'to follow the art and mystery of an Apothecary in the kingdom of Ireland.' What was meant or denoted by these words, 'art or mystery of an Apothecary,' must be ascertained from the usage existing at and before the time of passing the statute, and thenceforth uninterruptedly to the present time. If we refer to that usage, it is clear that from time immemorial before the Act, and at the time of its passing, the Apothecary in Ireland was a Medical Practitioner, attending the sick, and prescribing as well as supplying medicines for their relief. This status of the Apothecary is recognised by many statutes anterior to the Act of 31 Geo. 3rd, ch. 34; and it is therefore proved beyond a doubt that the Irish Apothecary was, at the passing of the Act, *de facto et de jure* a Medical practitioner. This well-known and universal habit and course of practice of the Apothecary is what the statutes denotes by the words, 'art or mystery of an Apothecary;' and ever since the passing of the Act such has been the admitted recognised interpretation of these words. The title of the Licentiate of the Apothecaries' Hall in Dublin to practise Physic has been uniformly treated as a clearly existing right. It has been acknowledged by the Legislature in several subsequent Acts, and recognised as a legal right in the courts of law."

As to the assertion of "a mis-statement" in the case submitted to counsel respecting the position of the Irish Apothecary, it is sufficient again to quote Mr. Napier's words:—

"The Apothecaries in both countries are exempted from serving on juries, a duty which would interfere with their calls to attend on the sick. On full consideration, therefore, of these statutes and authorities, I am of opinion that the legal rights and privileges of the Irish Apothecary are not inferior to those of the English."

It seems to be very remarkable, however, that the College should have omitted any allusion to that part of Lord Westbury's opinion which more especially bears upon the question at issue. He sums up his opinion in the following words:—

"These considerations would, in my opinion, be sufficient for the maintenance of the right of Licentiates of Apothecaries' Hall, Dublin, as duly qualified Medical Practitioners, independently of the Medical Act (21 and 22 Vic. ch. 90), but after the enactment of that statute there can be no doubt of the right of existing and future Licentiates of Apothecaries' Hall, Dublin, to be registered under that Act, and when registered as such Licentiates, to practise Medicine; this is plainly enacted by the 15 Sec. and 31 Sec. of that Act. These provisions entirely supersede the necessity of any inquiry into the constitution or rights of the Company of Apothecaries in Dublin, or its Licentiates; for they (the Licentiates) are by the 15th Sec. expressly entitled to be registered on producing their certificates from Apothecaries' Hall, Dublin, which are, by force of the Act, a statutory qualification for registration as Medical Practitioners.

"Should the Registrar refuse to register any Licentiate, a mandamus would lie to compel him to do so, and probably the applicant would be entitled to an action for damages.

"It is only necessary to observe, in addition, that the fact of being registered under the Medical Act as a Medical Practitioner, is 'such a certificate as qualifies a civilian to practise Medicine,' and that 'every person so registered has a good title to present himself at the competitive examination.'"

But the College article has this further statement:—

"The constitution of the Board of Governors of Apothecaries' Hall of Ireland, from whom the examiners must be selected, under the Apothecaries' Act, is not such as to insure a satisfactory guarantee that the examiners are competent examiners in the science and practice of Medicine."

The fact of the Board of Examiners being necessarily constituted of fifteen practising Apothecaries, who have undergone a course of Medical education, and whose successors must conform to the curriculum recommended by the General Medical Council, furnishes the answer to this statement of the College. I am, &c.

CHARLES HENRY LEET, M.D.,
Secretary to the Court of Examiners of the Apothecaries' Hall of Ireland.

Dublin, March 30.

IDIOTIC HUMAN BRAIN.—We learn that it is the intention of Mr. R. T. Gore, of Bath, to lay before the Anthropological Society of London, on Tuesday, the 7th inst., evidence of the brain of a female microcephale, aged 42, of which the brain weighed only 10 oz. 5 dr., a smaller weight than hitherto recorded.

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REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 24, 1863.

RICHARD PARTRIDGE, Esq., F.R.S., *President*.

MR. PARTRIDGE, in taking the chair at the first meeting of the Society, thanked the Fellows for the honour they had conferred on him by electing him their President. He would attempt to show how highly he appreciated this honour by devoting his time and his utmost abilities to the duties of his post, and would endeavour to follow the example of the distinguished Physicians and Surgeons who had previously been Presidents of the Society. As the reputation of the Society rested mainly on its *Transactions*, he urged the Fellows to contribute papers.

A paper, by Dr. EDWARD HEADLAM GREENHOW, was read on

DIPHTHERIAL NERVE AFFECTIONS.

The author began by stating that the epidemic sore-throat which, under the name of diphtheria, had latterly engaged so much attention, was well known to be followed by nervous phenomena of a peculiar kind. These consisted chiefly of impaired, excessive, or perverted sensibility, together with more or less complete paralysis of the muscles of the fauces, pharynx, tongue and lips, extremities, trunk, and neck; the frequency of the occurrence of these symptoms in the several sets of muscles being nearly in accordance with the order in which he had placed them, the first-named being the most frequently and the last the least frequently affected. The author had had the opportunity of watching the course of several cases of these diphtherial nerve affections in patients under treatment at the Middlesex Hospital, and the present paper was in a great degree based on those observations. He did not mean to infer that every attack of diphtheria was followed by some of these secondary nerve affections, for he had seen patients recover perfectly without experiencing any of them; nor to assert that their intensity was always proportioned to the severity of the primary disease, for he had sometimes seen them follow comparatively mild attacks of diphtheria. Nevertheless, as a general rule, he had certainly observed these nerve affections to be more frequent after the worst cases of diphtheria, and to bear some proportion even to the local severity of the attack; he had noticed, for instance, that the paralysis and anæsthesia were sometimes more complete on that side of the fauces which had been most severely affected by the primary disease. The author had found that a brief period of convalescence—generally not exceeding a few days, but in rare cases extending to weeks—almost always intervened between the disappearance of the sore-throat and the accession of the nerve symptoms; and cases had fallen under his notice in private practice in which patients who had recovered sufficiently from diphtheria to be sent from home for change of air, had subsequently fallen into a helpless condition from diphtherial paralysis. The fact of this interval seemed to him important, inasmuch as it went far to show that the paralysis could not be entirely attributable either to the albuminuria which so often accompanies the acute stage of diphtheria, or to the anæmia which closely follows it, as patients had often got rid of the former symptom, and had even begun in some cases to regain flesh and strength, before the accession of the paralytic symptoms. The author had observed that these nerve affections do not at once attain their maximum of intensity, but are progressive even in the same sets of muscles; and also that if several of the sets of muscles which he had enumerated should be attacked in the same individual, they do not become affected all at once, but in succession—the faucial or pharyngeal muscles being the first to suffer, and so on in the order in which he had placed them at the beginning of the paper—though it by no means followed that all of them should be affected in any one case. He had found the muscles of the fauces by far the most frequent, as well as the earliest, seat of nerve affections after diphtheria, and had seen them attacked in many cases in which the rest of the muscular system either entirely escaped or was very slightly affected. When the fauces were paralysed, the soft palate lost its natural action, the speech often became imperfect, and liquids regurgitated through the nostrils. These symptoms should be discriminated from the hoarseness of voice and return of fluids through the nostrils which often occur during the acute stage of diphtheria, and arise, as in ordinary quinsy, from the swollen and painful state of the fauces impeding the natural action of the parts. Anæsthesia had co-existed with the paralytic affection of the fauces in all the cases that had come under the author's notice, so that these naturally very sensitive organs became altogether callous and insensible to touch. Next to the affection of the fauces, impairment of vision, probably due to paralysis of the ciliary muscle, appeared to be the most frequent of the nervous disorders consequent on diphtheria. The author had observed that the pupil of the eye became dilated, and acted sluggishly under the influence of light a day or two before the sight became sensibly impaired, and often remained so for a time after the sight had been regained; also that patients unable to read with unassisted sight could do so with the help of convex spectacles; and hence he attributed the impairment of sight to a temporary loss of adjusting power. The nerve symptoms which he had noted in the tongue and lips were, formication, or a sense of scalding, numbness, and impaired taste and power of movement. They began, for the most part, in the lips and the tip of the tongue, and gradually extended upwards towards the dorsum and root of the latter organ. The limbs had suffered more or less, in all the five cases which formed the basis of the paper, from paralysis and anæsthesia, besides tenderness and abnormal sensations, such as coldness, formication, and a feeling of constriction in the fleshy parts, as if they were tightly bandaged. These affections began either first in the upper, or at the same time in both the upper and lower extremities, and were at their commencement peripheral, extending gradually upwards from the tips of the fingers and toes towards the trunk, and in some cases affecting the lower part of the back and of the abdomen. He had found that pressure over the sciatic and median nerves was sometimes attended by acute pain, and that pressure of the instep between the finger and thumb sometimes caused convulsive starting of the leg and foot, as well as pain. He had observed that the paralysis in some cases assumed a more or less hemiplegic character, but had seen no instance in which, one side being paralysed, the other remained entirely unaffected. The author had seen nerve-affections after diphtheria of a graver character than any of those exemplified in the present group of cases, and several even fatal cases had fallen under his notice in private practice. In three of these latter, death was caused by failure of the action of the heart, and in one by exhaustion from vomiting. He believed, however, that such cases were fortunately exceptional, and that the great majority of sufferers from diphtherial nerve-affections, under good management, sooner or later recovered their usual health and strength. The author had satisfied himself that these cases were best managed on sound general principles. Generous diet, and a liberal allowance of stimulants, together with rest in bed, he believed to be always necessary. Tonics, especially steel and quinine, or the mineral acids, he had found useful from the first appearance of the nerve affections; and after the complete development of the paralytic symptoms, nux vomica and strychnia had proved in his hands most valuable remedies. Subjoined were the five cases on which most of the remarks in the paper were founded.

MR. ACTON said that as three of his children had suffered from diphtheria, he had thought a good deal on the disease. He was sorry that the author had not given any opinion as to its cause. He (Mr. Acton) considered that it arose from deficient drainage, and mentioned several facts in connexion with the disease occurring in his own family in support of this view. One of his children had been attacked without any evident premonitory symptoms. The first thing to notice was an offensive odour from the nose. Mr. Acton then went on to speak of other symptoms, as the want of power to write properly, especially to write on lines, and sudden falling in running. It seemed, he said, as if the power suddenly failed. All his children got well, and he considered that if, after a certain stage of the disease, the patients are sent into the country they will generally get well. He considered the change of locality a very important point, and believed that removal saved the life of one of his children. Mr. Acton referred to the peculiarity of pronunciation after recovery from the diphtheria. One of his children for nearly a year after could not say "ah," or pronounced the letter w.

DR. WEBER related several cases of paralysis after diph-

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theria, in which there had been much the same symptoms as in Dr. Greenhow's cases. He could not, however, agree with Dr. Greenhow as to the order in which the symptoms followed. He (Dr. Weber) had found that the first symptom was a great slowness of the pulse. This began during the persistence of the diphtheritic membrane, or just after its removal. It might be as low as 36. It was possible that this symptom might not be due to paralysis, as it had been shown that *irritation* of the pneumogastric caused retardation of the pulse. Still, the depression was so great, that he (Dr. Weber) thought it was a result, probably, of paralysis rather than irritation. He considered that the prognosis was generally favourable, but in two cases in his practice there had been a fatal result. In these, however, there were complications—viz., in one fatty degeneration of the heart, and in the other valvular disease. Dr. Weber then asked the question, whether the paralysis of diphtheria was to be looked on as a necessary part of diphtheria—as a "secondary" symptom of the disease? He did not give any opinion. He referred to other diseases, as scarlet fever, in which similar affections followed.

Dr. Sanderson had seen a great many cases of diphtheritic paralysis, and believed that it depended not so much on a loss of muscular power as on a want of co-ordination. The different power of movement at different times showed this. Again, patients who could walk or use their arms for rough purposes could not do anything fine, as button a shirt. The defect of sight might be explained on the same principle. In all cases the defect of sensibility preceded that of motility.

Dr. Wood related a case of paralysis which came on after diphtheria. It affected the fauces, the limbs and trunk, but not the sight. The paralysis was so great that the patient could not turn in bed, and could not feed himself. In another case there was no paralysis, but melancholia. The patient was an inmate of St. Luke's Asylum.

Dr. Sibson suggested that the faucial paralysis might be the result of the local disease in the throat, the muscles being inflamed during the acute attack, and consequently their action would be afterwards impaired.

Dr. Greenhow, in reply, said that his paper being exclusively on the secondary nerve-affections of diphtheria, he had necessarily abstained from all reference to the etiology of the primary disease. He might say, however, as the question had been raised, that in the course of his experience, which had been very extensive, he had altogether failed to discover any direct relation between diphtheria and the local impurities referred to by Mr. Acton. He must also dissent from that gentleman's remarks on treatment, for, on the one hand, he (Dr. Greenhow) had found rest a very important element in the treatment of the secondary nerve-affections; and, on the other, he had repeatedly found, as stated in his paper, that change of air had not the effect of warding off their accession. At a later period, however, when patients had begun to recover from these nerve-affections, their convalescence was undoubtedly accelerated by removal into a pure country air. Several questions had been proposed to him as to the pathological nature of diphtherial nerve-affections. He (Dr. Greenhow) could have wished that the gentlemen who put them had at the same time stated their own views on the subject, if they had formed any; for himself, he was unwilling to express any positive opinion on so obscure a question until further observation should have enabled him to verify what he could now only put forward as conjecture. He could not quite agree with Dr. Weber in regarding the slowness of pulse which he had so well described as one of the most frequent secondary symptoms of diphtheria; in his experience it had rarely occurred, and not oftener in the secondary than in the primary stage of the disease. Whenever it did occur, it was a serious and too often a fatal symptom, and he was disposed to think with Dr. Weber that it depended on some affection of the pneumogastric nerve. It was no doubt true, as Dr. Sanderson had suggested, that many of the phenomena of these curious nerve-affections were due to a want of co-ordinating power; but he (Dr. Greenhow) could not, like that gentleman, regard them as consisting entirely of paralysis of sensation; for although the loss of motor power only reached its climax *pari passu* with the muscular emaciation, there generally existed some degree of it from the beginning. The intense inflammation which had recently affected the superjacent mucous membrane might perhaps, as Dr. Sibson had suggested, partly account for the paralysis of the muscles of the fauces, but could scarcely explain the paralysis of the tongue and cheeks which had been sometimes observed, and still less that of the muscles of the trunk and extremities.

THE PATHOLOGICAL SOCIETY.

Tuesday, March 3.

Mr. Prescott Hewett, President, in the Chair.

Dr. Ogle showed

A LARGE EPITHELIAL WARTY GROWTH FROM THE VOCAL CORD —SUDDEN DEATH BY ASPHYXIA.

For the opportunity of exhibiting this specimen, Dr. Ogle was indebted to Dr. Stone, of the Brompton Hospital. It was removed from the body of a woman, aged 23, married. She applied for admission to the Brompton Hospital on July 15, 1862. She stated that her husband was a gravel-digger, that she worked in the fields, and had been subject to cough all her life, but dated her illness from twelve months previously. Her family were phthisical; her father and twelve brothers having died of this complaint. On first application she was examined by Dr. Sanderson, who ascertained the presence of tubercle on the apex of the right lung, but attributed the most urgent symptoms to some laryngeal affection. This latter had appeared four months before; since then there had been complete aphonia, great dyspnœa, especially at night, and uneasiness referred to the larynx. When seen, the act of inspiration was slow and difficult, there was croupy cough of a particularly shrill and vibratory character. A month later she was admitted into the wards, with no alteration in symptoms. She was very restless, and the act of swallowing caused dyspnœa. Respiration was deficient under the right clavicle, of a tubular character. Singularly enough, the resonance on percussion was good and equal on the two sides. Two days after admission she died suddenly, with symptoms of asphyxia. These began while she was standing in the ward, by gasping, struggling, and irregular movements of the arms. In a few seconds the face became livid; within a minute she was insensible; motion ceased, and the pupils gradually dilated; pulsation could be distinguished in the heart and carotids for some seconds longer. On post-mortem examination, a solid mass of tubercle, very defined, about the size of an orange, was found at the apex of the right lung: in the centre of it was a small cavity the size of a nut. The rest of the lungs were remarkably free from tubercular deposit; they were emphysematous at the edges, and contained much thin, frothy, serous fluid. The larynx contained the tumour shown, which consisted of a lobulated, warty, or cauliflower-looking growth springing from the whole length of the left vocal cord. About two-thirds of its bulk was above the level of the glottis; about one-third below, and in the trachea. Its size was such as completely to block the passage: a probe the size of a crowquill could, however, be passed along the posterior wall. In its largest diameter it measured four-fifths of an inch, and half an inch in breadth. Before the larynx was opened it reached nearly up to the base of the aryteno-epiglottidean folds. The other organs of the body were healthy. On microscopical examination of the growth, Dr. Ogle had found it to be one coming under the designation of epithelioma. It consisted of a vast number of epithelial cells of various sizes and shapes, some being of the character of so-called mother or parent cells, with a considerable quantity of fibrous tissue, mostly of a very firm consistence. The minute description of the various cells found would not differ from that of other similar growths found not occasionally in the same situation. Dr. Ogle observed that he had lately examined a somewhat similar specimen, which had been for some time in St. George's Hospital. The growth was much less in size, but its histological characteristics were almost identical with this specimen. It was removed from the body of a boy, aged 4 years, whose chief complaint during life was dyspnœa, with croupy inspiration, especially during sleep, which then was quite stridulous. Dr. Ogle was informed by Dr. Stone that in his case laryngoscopy had not been resorted to, as it was feared the efforts necessary for such a procedure might bring on a fatal, or, at least, dangerous dyspnœa.

The President regretted that the patient had not been able to tolerate a laryngoscopic examination. There was present,

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he remarked, a gentleman,—Dr. Gibb,—who had removed tumours of a similar kind, though not so large. He had no doubt but that Dr. Gibb would have been glad to have dealt with such a case.

Dr. Gibb thought that if the patient had been seen early the growth might have been removed. From inspecting many tumours of the larynx, he should judge that the specimen should be called "fibro-cellular," rather than malignant.

Dr. Ogle explained that he did not call the tumour malignant, but epithelial. It contained epithelial cells.

Dr. Bristowe said that he had several times brought before the Society specimens of epithelial tumours which were not malignant. He considered that the tumour in the specimen exhibited was too extensive to have been removed during life.

Dr. Gibb said that he had then under his care a patient who had a warty growth in the larynx; it was the size of a pea. A few days ago he made an effort to remove it, but only got away a slice. He had since applied caustic to the cut surface, and under this treatment the mass was gradually getting smaller.

Mr. Gay showed to the Society an infant in whom there was

MALFORMATION OF THE GENITAL ORGANS.

The child was four months old. The scrotum was divided, and in each half was a testis. The penis was rudimentary, and the urethra opened at the lower part of the fissure. The corpus spongiosum was deficient on both sides. At the lower part there were two bodies, one vascular, which Mr. Gay thought was composed of the tissue of the undeveloped corpus spongiosum, and the other a rounded, polypus-like body. The child was brought to him in order that he might give his opinion as to the propriety of removing these bodies.

The President proposed that a drawing of the parts should be made for the *Transactions* at the expense of the Society.

Mr. Partridge asked if the case were not of a class not very uncommon, a split scrotum, rudimentary penis, and imperfect urethra, the two tumours being merely accidental. He referred to the case of a German who went about exhibiting himself, pretending to be of both sexes. He was really a man, though he had certificates from several distinguished foreign Medical men that he was a woman. His urethra was large, and this was taken for a vagina. It was said that the os tincæ could be felt in this so-called vagina; what was reached by the finger, however, was the prostate, and his urine could be drawn off through this channel.

The President said that he considered that the complications rendered it the more necessary that a drawing should be made. He agreed with Mr. Partridge that they were accidental.

In reply to Dr. Schulhof, Mr. Gay said that there was no instance of malformation in any other member of the patient's family.

Mr. Thompson suggested that the vascular growth might be removed by the ligature.

Dr. Dickinson exhibited two specimens of

GRANULAR DEGENERATION OF THE KIDNEY.

They had both been taken from elderly people; dropsy had not been a prominent symptom in either case, and in other particulars each had been accompanied by a very characteristic history. The object in bringing forward these specimens, however, was not clinical, but had relation to morbid anatomy. The mechanism by which a granulated surface is developed upon the kidney was explained, and preparations and drawings were adduced in support of the views advanced. It was maintained that since the tubes of the kidney were of microscopic size, no mere dilatation of these structures could occasion any roughness of surface perceptible to the unaided senses. Granulations were made not so much by projection of the tubes of which they are composed, as by contraction of the intermediate spaces. This contraction was explained to be occasioned by a minute deposition of fibroid material upon the intertubular tissues, which subsequently contracted and drew in the surface. Granular degeneration of the kidney thus was made out to be exactly analogous to cirrhosis of the liver. In the earlier stages of the disease, fibrous processes could be seen passing into the kidney from the capsule at regular intervals. These worked their way into the kidney, travelling quite independently of the direction of the tubes. The tubes and their epithelium became subsequently affected. Dr. Dickinson expressed his dissent from the views of those pathologists who attribute all the diseases of the kidney to more or less desquamation of the epithelium.

Dr. Wilks said that the statement of Dr. Dickinson that the granular kidney was the consequence of an intertubular deposition of fibrous tissue was highly important if true, but it was so easy to confound the matrix of the organ, and even the wasted tubules themselves, with simple fibrous tissue, that much care was required in coming to a decision on the question. That the apparent adventitious material was nothing more than the wasted tubular structure was the opinion of many high authorities. As regards the similarity of the disease to that of cirrhosis of the liver, this held good under the more recently received opinion. In Bright's Disease the analogy was at once made, but disputed on account of the belief that the *hepatic* cirrhosis was due to the contraction of a plastic lymph, whereas there was thought to be an absence of such inflammatory product in the *nephritic* cirrhosis. On the supposition, however, that the granular kidney is caused by an intertubular nephritis, the two diseases have again been compared, and now they may with more justice than ever be considered as analogous conditions, on the theory that in neither case is there a deposition of lymph in the structure, but that the contraction and granulation are due to atrophy alone; in both cases the nodules or granulations being formed by little masses of the tissue itself.

Mr. Spencer Watson exhibited a specimen showing

CONGENITAL DEFICIENCY OF THE RECTUM, AND IMPERFORATE URETHRA.

The child from which the preparation was removed was born probably at the full time, or nearly so, but was smaller than the average size. The mother, a tolerably healthy woman, had several other well-formed children. There was nothing on the surface to indicate the position of the anus or the course of the rectum. An umbilical hernia, covered only by the transparent integument of the cord, and talipes calcaneo-varus of the left foot, co-existed with the other deformities. An attempt was made to relieve the child by an incision from the perineum without success. No urine passed by the urethra. The belly became much distended, and the child died on the fourth day from its birth. On dissection a portion of colon, corresponding to the umbilical hernia, was found much inflamed, and recent lymph was effused on its surface. The whole large intestines much distended. The cæcum lying below the stomach, and the remaining portion of the colon took a very irregular course, a small portion of it only being attached to the left loin by mesocolon. The bowel terminated a little to the right of the inferior fundus of the bladder, and communicated with it by a narrow canal, a quarter of an inch long. The urethra was imperforate in the middle part of its course, and the bladder and ureters very much dilated. The dissection of the perineal region gave no indication of a sphincter muscle. The distance between the terminal portion of the bowel and the perineum was at least five inches. A cast of the left foot of the same subject, from King's College Museum, showed a variety of talipes having the characters of talipes varus and talipes calcaneus, the heel being depressed and the inner border of the foot raised.

Dr. Gibb exhibited a

PIECE OF NECROSED CRICOID CARTILAGE EXPELLED IN THE ACT OF COUGHING.

The patient was a man of 47, who had been very ill with fever and rheumatism in India and China. He had been subject to sore-throat, was hoarse for months, and had had loss of voice some weeks. He could utter only the feebleat whisper. The breathing was stridulous and noisy. Expectoration was very profuse. Laryngoscopy showed a large tumour formed by the right false vocal cord, which nearly obliterated the glottic opening. The inner surface of the tumour was excavated like a crater. Under treatment the swelling and urgent symptoms subsided, and he was on the eve of discharge from the Hospital when he expectorated a portion of the ring of the cricoid cartilage. A few days after he had œdema of the right side of the glottis, with almost closure of the latter. Dr. Gibb scarified the swelling freely with an instrument he had devised, and introduced a large bougie (three-quarter inch diameter) into the larynx, to dilate the passage, by the aid of the laryngoscope. All the dyspnœa subsided, and he rapidly improved.

Dr. Gibb also showed illustrations of

TUBERCULOUS AND FOLLICULAR ULCERATION OF THE LARYNX AND TRACHEA.

1. A female, aged 38, mother of four children. Tuberculous

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ulceration of the larynx, especially involving the right vocal cord; hoarseness, partial aphonia and dysphonia for seven months; inflammation of the left thyro-hyoid ligament; in the third stage of pulmonary phthisis. 2. Pale, delicate, strumous lad of 17, in first stage of pulmonary phthisis. Loss of voice for sixteen months, and now a laryngeal whisper; larynx and trachea much congested, with ulceration of the follicles on true and false vocal cords, in the trachea, on the epiglottis, and aryteno-epiglottic folds. These were all healed up by two applications of a solution of nitrate of silver, and the voice improved. 3. A female, aged 24; has spoken in a whisper for fifteen months; in second stage of phthisis; great irritability of larynx, which was found to be finely ulcerated throughout, as in No. 2, conjoined with acute inflammation of the epiglottis. The aphonia was chiefly due to thickening of the true vocal cords and ulceration of their mucous covering, which had almost wholly stopped their action.

The President supposed that Dr. Gibb would agree that necrosis of the laryngeal cartilages was not rare, and that pieces of bone were not unfrequently coughed up. He had seen several cases in which this had occurred as regards the arytenoid. In one, the fragment got into the windpipe and nearly suffocated the patient.

Dr. Gibb said that he exhibited the specimen as it was rare to be able to see the exact point from which the bone came. This could only be done by the aid of the laryngoscope, and was represented in one of the drawings he brought forward.

Mr. Obré then showed

PART OF THE TONGUE REMOVED FOR EPITHELIAL CANCER.

A gentleman, 42 years of age, had slight ulceration of the tongue from a false tooth. Induration followed, and the ulceration extended. There were no enlarged glands. Mr. Obré removed it by the knife. There was a good deal of hæmorrhage, which was soon stopped; but afterwards secondary hæmorrhage ensued. There was evidence of tendency to cancerous disease on both sides of the patient's family.

Mr. Henry Thompson referred to two specimens he had exhibited for Mr. Fiddes, of Jamaica. (See this Journal for May 18, p. 535, and June 1, p. 389, 1861.) In both the whole of the tongue was removed, and both patients recovered from the operation; but one of them died twelve months afterwards from recurrence of the disease, and the other, when he last heard from Mr. Fiddes, was suffering from recurrence. As to the removal of cancer of the tongue, he considered that if they were well isolated there was a good chance, and especially in some of a doubtful nature. There was no difficulty in applying the chain of the écraseur well behind the disease if the tongue were perforated. He doubted, however, whether it was desirable to remove parts of the tongue by this instrument, as, although there was little hæmorrhage at the time, many of them bled afterwards.

Mr. Barwell referred to Mr. Nunneley's case of removal of the whole tongue. (See this Journal for December 21, 1861.) He (Mr. Barwell) believed that when cancer was seated near the tip of the tongue it was less likely to return when removed than when it was far back. This, he considered, depended on the nature of the tissue affected.

Mr. Partridge said that in all the cases in which he had operated the disease had invariably returned.

Mr. Gay said that he had seen a case of cancer of the tongue commencing in a position precisely corresponding to a decayed and roughened tooth, and he had no doubt but that such irritation was a frequent cause of the disease.

Dr. Montgomery then showed a specimen of

PYÆMIC DEPOSIT IN THE LIVER.

He considered that it illustrated the mode of secondary deposits. There were clots blocking up branches of the portal veins, and these led to the part of the tissues of the liver which was diseased. These clots were exactly of the colour and appearance of the fibrine in the liver itself. On opening one of the deposits he found only *débris* of fibrine, and he believed that the so-called abscesses were not deposits at all, but congulations in the capillaries, which afterwards softened and decomposed. Some of these were quite hard, and under the microscope showed the structure of ordinary clots. It occurred after an amputation, so that he could not understand that any material had been bodily carried and arrested in the capillaries.

Dr. Dickinson said that the specimen looked like one of fibrinous clot.

Dr. Montgomery replied that he thought so, but that the fibrine was being decomposed.

Dr. Bristowe considered that Dr. Montgomery meant that the so-called secondary deposits were not really secondary, but local deposits, which afterwards underwent softening. In the lungs blood was sometimes effused in pyæmia.

Dr. Wilks said it was true that such primary deposits would take place, but no one would deny that inflammatory changes would follow.

Dr. Montgomery considered that very often there was no inflammation, at least none visible. He considered that the great bulk of the so-called deposits were decomposed fibrine.

Dr. Wilks and Dr. Bristowe explained that they were speaking of the first stage of the process.

Mr. Barwell thought there was no evidence of actual carrying of pus. The condition of the blood was the important part of the diseased process.

The President thought that the theory broached as to the softening of fibrine would scarcely hold good as regards extensive deposits in the cellular tissue, in the joints, etc.

Dr. Montgomery thought that if the substance from the localities mentioned were examined by the microscope it would be found to be softened fibrine, and would contain only a few pus corpuscles.

The President replied that he had found pus in the deposits in joints.

Mr. Brooke exhibited a specimen of

CUTANEOUS TUMOUR

removed a week ago from the middle of the dorsal region of the spine. It had been growing for twenty years, but rapidly for the last three or four. It was soft, painless, and sessile. He could not decide whether it was a degenerated nævus or not, and he was not certain as to its malignancy. It contained large nucleated cells.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, February 4, 1863.

Dr. Oldham, President, in the Chair.

The following gentlemen were elected Fellows of the Society:—W. Bannister, Esq.; A. P. Owen, Esq.; and Dr. G. Simpson.

After a short address from the President upon his assumption of office,

Dr. Tyler Smith read a communication from W. W. Wiseman, Esq., and exhibited a part of the

FUNIS OF A STILL-BORN CHILD IN WHICH A DOUBLE KNOT WAS FOUND.

The knot was apparently the cause of death. It was the second child in a twin case, the first being born alive.

A paper, by I. Baker Brown, F.R.C.S., was read on

VESICO-VAGINAL FISTULA, THE MODE OF OPERATING, AND THE RESULTS OBTAINED IN FIFTY-FIVE CASES AT THE LONDON SURGICAL HOME.

In the first part of the paper the author gave an account of the method at present followed by him in operating. The various steps of the same were illustrated by drawings. No bars or clamps are used. The knives employed are two—one for the right hand, and one for the left. The needles, of various curves, forming a series fourteen in number, are on the same principle as Startin's, but of rigid material. They are armed with wire, and thrust through the pared edges, great care being taken to avoid the mucous coat of the bladder. The two ends of the wire are simply twisted round and round, and so fastened. The patient is afterwards laid on the side, and a male elastic catheter, with bag attached, kept in the bladder. She is kept quiet ten or fourteen days, and the wires removed. The operation is often completed in ten minutes. The total number of cases of vesico-vaginal fistula admitted into the London Surgical Home since its foundation, four years and a-half ago, is 58. Of that number, 55 were submitted to operation, with the results as shown in an accompanying table. The remaining 3 were not operated upon in consequence of the bad condition of bodily health, the result of syphilis. Of the 55 cases treated, 53 were operated upon by the author, 1 by Mr. Nunn, and 1 by Mr. Harper. Of the total number of operations, 43 were followed by perfect cure, 1 was much relieved, 2 died, 5 were not cured, and 4 are still under treatment, with every prospect of cure. Of the 43 cures, in 24 this

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result followed the first operation, including the cases of Mr. Nunn and Mr. Harper; in 8 the cure occurred after the second operation; in 5 after three operations; and in 6 after more than three operations. Of the other cases which were not cures details were given in tables exhibited. Of the 2 fatal cases, 1 died eighteen days after the operation, apparently from exhaustion, the age of the patient being 56; the other died seven days after from pyæmia. With regard to the causes of vesico-vaginal fistula. Of the 58 cases admitted into the London Surgical Home, 47 were over twenty-four hours in labour, and 39 were as much as thirty-six hours or more; 7 were two days, 16 were three days, 3 were four days, 2 were five days, 2 six days, and 1 seven days. In the whole number of cases, instruments were used in 29, exactly one-half; and in 4 only of these was the labour less than twenty-four hours, and with 7 exceptions the patients had been thirty-six hours, or more in labour before instruments were used. Of the 58 cases, in 24 only the injury happened at the first labour, in 7 at the second, in 5 at the third, in 4 at the fourth, in 6 at the fifth, in 2 at the sixth, in 5 at the eighth, in 1 at the ninth, in 1 at the thirteenth, in 1 at the fifteenth, and 2 not mentioned. In many of these cases, notwithstanding the existence of the fistula, the patient bore several children, apparently without inconvenience, before coming under treatment; and in a few of them, subsequent to cure by operation, other children have been born without recurrence of mischief. In a large proportion of the cases there is a history of the birth of a very large child; in some it weighed 15 lbs.; and in one, that of the woman in whom the lesion happened at the fifteenth labour, the child weighed 17 lbs. From the foregoing statistics it is evident that the cause of the lesion is protracted labour, and not the use of instruments or deformity of the pelvis; and, as a necessary conclusion to what has been stated, it follows that vesico-vaginal fistula would scarcely or never occur if a labour were not allowed to become protracted: this is a point for the careful consideration of the Society and of Practitioners at large. A printed tabulated statement as to the 55 cases operated on was handed round. Mr. Brown further stated that he had 11 other cases under his care in St. Mary's Hospital, and 6 in private practice, making a total in his own experience of 58 cured; 34 by one operation, 11 by two operations, 5 by three, and 8 by more.

Mr. Bryant remarked that the essential steps of the operation might be divided into two. First, to make a clean and even dissection of the margin of the fistula; and, secondly, to bring the edges together, and to keep them there. Both points were of equal importance; for if either was imperfectly executed, failure would necessarily follow. He differed from the author respecting the use of the forceps and scalpel in carrying out the first steps of the operation. He had been led to the formation of his pronged guide, a description of which would be found in the *Transactions of the Medical Society of London*. By this instrument a clean section of the margin of the fistula, however large it may be, is absolutely guaranteed. Every operation which he had undertaken since its introduction had been followed by immediate success. Respecting the second step of the operation, he generally preferred metallic sutures. He believed that it was unnecessary, as also injurious, to leave the sutures in after union had taken place. Failure had followed such a practice. Respecting the use of opium in the after-treatment, on which Mr. Brown had been silent, he was disposed to recommend that enough be given to keep the bowels at rest, but nothing more. He would inquire of Mr. Brown also how long the catheter was retained in the bladder after the operation? His experience had told him that a periodical introduction only was necessary.

Mr. Nunn believed that further observation would show, as it had shown in a case he referred to, that in some cases the retention of the catheter in the bladder was not always safe; that ulceration was liable to ensue. This was a point requiring careful consideration.

Dr. Braxton Hicks thought that, from what he had seen, more injury was done by long-continued pressure than by a more forcible one of short duration. It was impossible to lay down any rule as to the time the head could remain with impunity; for in a case of vesico-vaginal fistula he had seen the labour was of average duration, and never severe. Although he considered, in good hands, the forceps could be safely used, yet before we could assent to the inference drawn by Mr. Baker Brown, we must be certain that no other injuries would be produced by the forceps worse than vesico-vaginal fistulæ, injuries which might possibly prove early fatal, and thus not give time for the development of fistulæ.

Dr Oldham saw nothing in the communication made to the Society, valuable as it was, to induce him to vary a hair's breadth from the precautionary precepts for the employment of instruments in protracted labour which were recognised and advocated by the best British obstetric authors. He felt persuaded, from his experience of cases which had come before him, that the more frequent employment of instruments would result in the laceration of the structures at the floor of the pelvis, particularly the laceration through the sphincter of the rectum, an accident only second to that of vesico-vaginal fistula in its distressing results, and which involved a most painful and formidable operation.

Dr. Tyler Smith observed that in laying down a rule of practice it was especially necessary to employ precise language. If Mr. Brown had employed the term labour with impaction, instead of protracted labour, he should have agreed with him. We might have protracted labour from many causes, some of them not necessarily injurious to the mother, but we could not have continued impaction of the head without the risk of injury to the soft parts of the mother, and impaction should therefore never be allowed to go on unrelieved. In performing the valuable operations which had been devised for these distressing conditions, he (Dr. Tyler Smith) thought it should be laid down as a principle, that in repairing one organ the integrity of the neighbouring organs should be respected. This applied, in the operations for vesico-vaginal fistula, to the rectum, ureters, and the os uteri. In some of the cases related the os uteri had been closed, and the menstrual fluid left to escape *viâ* the bladder, or the urine to pass per rectum. These evils were scarcely less than those they were intended to remedy. Fatal results had followed from closure of the os uteri. Very recently he had seen a remarkable case where the os uteri had been closed in a plastic operation, which seemed perfectly justifiable, for the relief of utero-vesical fistula. A perfect cure was the result as regards the urine for the time. Menstruation occurred through the bladder, but the patient in a few months became pregnant. The urethra was of moderate size, and there seemed no other explanation than that the spermatozoa must have passed from the vagina through the urethra and bladder to the uterus. The result of this and other cases satisfied him that it was not a safe practice to close the os uteri, or to invade other organs, but that the plastic operations should be limited as far as possible to the closure of the original fistulæ.

Dr. Rogers agreed entirely in the remarks made by the President and Dr. Tyler Smith. With reference to the mode of operation recommended by Mr. Brown, he thought it was undoubtedly the best. He considered Mr. Brown and other gentlemen were entitled to great praise for their untiring labours in rendering these formerly hopeless cases amenable to treatment.

Mr. Baker Brown, in reply, said that he supposed the prong mentioned by Mr. Bryant to be similar to that invented by Mr. Hilliard, of Glasgow. He had tried it, and found his old plan easier and quicker. In America, Drs. Sims and Bozeman did nearly all the denuding of the edges with scissors. This made the operation very long. But if the knife were first used to mark around the fistula how much was to be taken off, and then, by means of a fine pair of forceps, the edges were made tense, Mr. Brown said that the whole fistula might be denuded, taking out a complete ring—a matter of great importance. In regard to the sutures, Mr. Brown stated that he greatly preferred wire, although Dr. Hayward of Boston, U.S., used silk in preference. Mr. Brown had by this gentleman's advice used silk in one case with a good result. But they were more liable to slough, and the wires, from their stiffness, had the advantage of keeping the edges more in apposition, and so ensuring a greater depth of union. But the sutures to be used should, Mr. Brown thought, be silver, not iron, as recommended by Dr. Simpson, of Edinburgh. Mr. Brown expressed a very strong opinion in favour of keeping the sutures in long enough; never less than nine days. He believed no harm ever resulted from retaining them in longer; but in one case he had had, he removed them on the sixth day, at the patient's request. The fistula appeared quite healed. She got up next day, contrary to advice, and the whole burst open again. She was re-operated on; the sutures were left in a sufficient time, and a cure resulted. Mr. Brown had made experiments, and kept silver sutures in for six and nine months, and no trace

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of ulceration appeared. Mr. Brown considered that opium should be given only in sufficient quantities to keep the bowels quiet. One grain immediately after the operation, and repeated night and morning, according to the circumstances of the case. Many patients cannot bear the catheter, especially the leaden one, but Mr. Brown had seldom found the male elastic catheter to cause irritation. Perhaps in time we might gain sufficient confidence in the operation to allow the patient to pass her urine as required, but at present it was better to retain a catheter, or, when that was not tolerated, to pass one when needful. He had purposely used the term protracted without reference to the cause of protraction, for it was very rarely that a Medical statement could be obtained. It was necessary therefore to take only the statement of the patient as to the duration of labour. When the head was impacted, Mr. Brown would deliver as soon as possible by forceps. He quite agreed with Dr. Tyler Smith as to the necessity of maintaining the integrity of the other parts in these operations. Of the two cases on which he (Mr. Brown) had operated, and where the patients subsequently menstruated per urethram, in one, the patient having been under many operations in other hands for some years, the os had already been interfered with either by sloughing or by the operation, and only one small opening, as described, remained to be closed. There was therefore nothing left to do but to close the opening, regardless of the menstrual flow. The patient had done well. No inconvenience had arisen, and she was grateful for the benefit received. In the other, that lately brought before the Society by Mr. Chapman, the os uteri was already closed by cicatrization, after extensive sloughing, and therefore Mr. Brown had nothing to do with its occlusion. He considered that the two terms, vesico-vaginal and vesico-uterine fistula, were not used with sufficient caution. Although the os uteri might often be involved in vesico-vaginal fistula, the true vesico-uterine fistula was when the hole was high up in the cervix, urine dribbling through the os uteri, although no aperture from the bladder was visible. This was the kind of which Jobert had related seven cases, Dr. Fleetwood Churchill one, and which had lately been so well described by Mr. James Lane, who had had one case. In all these the treatment had been to close the os, so that the patient menstruated per urethram. He (Mr. Brown) had never had such a case, but he thought that the treatment adopted was decidedly the lesser evil, and if the patient, on having the case laid before her, was of the same opinion, he considered it perfectly justifiable. The case Mr. Nunn had mentioned showed that, by leaving a vesico-vaginal fistula alone, other evil results, besides the inconvenience, would arise.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a General Meeting of the Fellows, held on Monday, March 30, Thomas Watson, M.D. Cantab., was elected President of the College for the ensuing year. At the same meeting, the following gentlemen, having undergone the necessary Examination were duly admitted Members of the College:—

Henry Heenes Crucknell, M.B., King's College Hospital; Octavius Sturges, M.B., 36, Connaught-square; Henry Llewellyn Williams, M.D., 9, Leonard-place, Kensington.

The following gentlemen passed the Preliminary Examination in the subjects of General Education on March 28:—

Robert Mark Bradford, Exeter; Walter Branson, Worthing; Henry Cheesman, 2, Finsbury-square; Frederick Churchill, Barkham-terrace, Lambeth; Arthur Bowes Elliott, Richmond, Yorkshire; Richard Hay, Bridport, Dorset; Walter Smith, Ringwood, Hants; Lyttleton Stewart Winslow, Caius College, Cambridge.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, March 26, 1863:—

John Page Julian, Durham; Henry Seekamp Ward, Horncastle; Thos. Lawson Craister, Leeds; Francis Blake Hutchinson, London; Frederick Page Atkinson, St. Thomas's Hospital; George Ireland Russell, Gravesend; Henry Charles Wine, Bristol; Thomas Baker, Birmingham; Samuel Lloyd, Smethwick; Robert Sidney Stone, Bath; James Alien, Hale, near Liverpool.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BATT, EDGAR D., M.R.C.S. Eng., has been elected Coroner for County of Monmouth.

BENNETT, C. V. S., M.R.C.S. Eng., has been appointed Honorary Medical Officer to the Pembroke and Tenby Dispensary and Infirmary.

GOODCHILD, FREDERICK, M.D. St. And., has been elected Physician to the Warwick Dispensary.

HEAD, EDWARD, M.B. Lond., has been appointed Physician to the St. Pancras and Northern Dispensary, Euston-road.

HOLMSTED, T., M.R.C.S. Eng., has been appointed Resident Medical Officer to the Dispensary, Newport, Monmouthshire.

JONES, HENRY P., M.R.C.S. Eng., has been appointed Honorary Medical Officer to the Pembroke and Tenby Dispensary and Infirmary.

KEMPTER, F. H., M.B., has been appointed a Resident Surgeon to the Melbourne Hospital, Australia.

KIRKMAN, WILLIAM P., M.D. St. And., has been appointed Medical Officer and Superintendent of the Kent County Lunatic Asylum, Barming Heath, Maidstone.

LITTLE, F., M.R.C.S. Eng., has been appointed House-Surgeon to the Loughborough Dispensary.

PAYNTER, JOSHUA W., M.R.C.S. Eng., has been appointed Consulting Surgeon to the Pembroke and Tenby Dispensary and Infirmary.

REID, DOUGLAS A., M.D., has been appointed Honorary Medical Officer to the Pembroke and Tenby Dispensary and Infirmary.

ROSS, D., M.D., has been elected Resident Medical Officer to the South Shields and Westoe Dispensary.

SUTTON, J. MAULE, M.D., M.R.C.P., has been appointed Consulting Physician to the Pembroke and Tenby Dispensary and Infirmary.

THOMAS, DR. LYNCH, has been appointed Assistant Resident Surgeon to the Public Hospital of Demerara and Essequibo.

UTTERSON, E. V., M.R.C.S. Eng., has been appointed Consulting Surgeon to the Pembroke and Tenby Dispensary and Infirmary.

DEATHS.

ALDIS, SIR CHARLES, M.R.C.S. Eng., at 13, Old Burlington-street, W., on March 28, aged 87, formerly one of the Surgeons at Norman Cross Barracks.

CASWALL CHARLES, M.R.C.S. Eng., at Tunbridge, Kent, on March 27, aged 59.

EDGAR, THEODORE, L.F.P.S. Glasg., at Dalawinton, near Dumfries, on March 17, late of Birkenhead.

MAYOU, JOHN, M.R.C.S. Eng., at Monmouth, on March 17, aged 67.

ROWLEY, THOMAS, J.P. and M.D. Edin., at Lichfield, Staffordshire, on March 21, aged 73.

TREFFRY, RICHARD BARON, M.D. St. And., at Union-street, Kennington, on March 23, aged 31.

KAY, DAVID, M.D. Edin., at Bradford, Yorkshire, on March 20, aged 46.

HILSON, P. BROWN, Surgeon at Christchurch, Canterbury, New Zealand, on December 19.

BROWN, BENJAMIN WEBSTER, M.R.C.S. Eng., of Wymeswold, Leicestershire, on December 23.

CORRESPONDING MEMBER OF THE PARIS ACADEMY OF SCIENCES.—M. Bouisson, of Montpellier, has been elected in the room of M. Maunoir, of Geneva by the suffrages of forty-five out of fifty-three voters present. The other candidates were MM. Ehrmann, of Strasburg; Landouzy, of Rheims; Gintroc, of Bordeaux, and Serre, of Alais.

WE are requested to state that it is Dr. Robert Meadows and not Dr. Alfred Meadows, of Cavendish-place, who is appointed on the Medical Staff of the Anglo-Chinese Expedition.

THE CRIMINALS FOOKS AND PREEDY.—These men were executed at Dorchester on the 27th ult. The *Times* states that Fooks, on hearing that the law was to take its course, was at first sullen, but afterwards expressed great sorrow for his crime. Preedy is said also to have been penitent, and to have signed a paper drawn up by the clergyman who attended him, in which he stated that during the whole time of his trial he was conscious of what was going on, and simulated madness in the hope of escaping punishment.

THE GODARD PRIZE.—M. Ernest Godard, one of the most active amongst the French scientific workers, has, by his will, left to the Paris Society of Biology 5000 francs. He directs that the interest accruing from this shall, every second year, form a prize for the best memoir on a subject relating to biology—the author being at liberty to choose his subject. If the memoirs sent in do not call for an adjudgment of the prize, the sum will be carried on to the next two years. The first prize will be awarded in January, 1865, and memoirs offered, which may be either printed or manuscript, must be forwarded to "M. le President de la Société de Biologie," 14, Rue de Londres, before November 1, 1864.

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ALKALI WORKS.—The Government have laid before the House of Lords a Bill to carry into effect a recommendation made by the select committee of last Session on noxious vapours. The Bill proposes heavy pecuniary penalties for every alkali work (meaning every work in which muriatic acid is evolved) which shall not be carried on in such a manner as to secure, to the satisfaction of an inspector, to be appointed by the Board of Trade, the condensation of not less than 95 per cent. of the muriatic gas evolved in such work.

THE LATE SIR BENJAMIN BRODIE.—The will of Sir Benjamin Collins Brodie, Bart., D.C.L., F.R.S., F.R.G.S., of Broome-park, Betchworth, near Reigate, Surrey, was proved in the London court on the 11th inst., by his sons and executors, Sir Benjamin Collins Brodie, Bart., and the Rev. William Brodie, M.A. The personalty was sworn under £18,000. The testator executed his will in October, 1861, and two codicils in August and September last. To his son, now Sir Benjamin Collins Brodie, Bart., F.R.S., and to his issue, he has devised his freehold estates; but, on failure thereof, should the same descend to any of the testator's family, except his daughter, Maria Eliza Hoare, the name of "Brodie" is to be used, by Royal licence, with his family arms. To his eldest son he also leaves his estate at New Sarum. His estate in Surrey—subject to the payment of an annuity of £100, bequeathed by the testator to his niece Blanche, the daughter of his brother, Mr. William Bird Brodie—is to be divided into three equal parts; one-third to his eldest son, one-third to his son William, and the remaining third to his daughter, Maria Eliza Hoare. The testator further bequeaths to his son, William, a legacy of £2500, and to his daughter, Mrs. Hoare, £500; appointing his son, Sir Benjamin, residuary legatee.—*Illustrated News.*

PRIZE QUESTIONS OF THE PARIS ACADEMY OF SCIENCES FOR 1864.—The Medical Prize of 5000 francs, "The History of Pellagra." A monograph, which, by elucidating the etiology and geographical distribution of pellagra, exhibiting the forms under which it is now known to exist, and imparting to the diagnosis and treatment more precision, will constitute a decided advance in pathology, and render a service to practice and public hygiene. The essays, written in French, to be forwarded by April 1, 1864. For 1866, the Medical and Surgical Prize of 5000 francs, "The Therapeutical Applications of Electricity. Indicate the apparatus employed, their mode of application and their physiological effects. Collect and examine critically the facts that have been published on the applications of electricity in the treatment of diseases, and especially affections of the nervous, muscular, vascular, and lymphatic systems. Verify and complete by new investigations the results of these observations, and determine the cases which are suitable for the application of intermittent or continuous currents." Essays, written in French, to be sent by April 1, 1866. *The Great Prize in Surgery*—"The Preservation of the Limbs by the Preservation of the Periosteum." The Academy, wishing to denote the importance it attaches to this question, fixed the prize at 10,000 francs; and the Emperor, appreciating the benefits which may result from so great a progress in Surgery has added a like sum,—so that the prize is now 20,000 francs. The essays are to be sent by April 1, 1866, and the candidates must make their names known. The Committee of Adjudicators consists of MM. Velpeau, C. Bernard, Jobert, Serres, Andral, J. Cloquet, Rayer, Milne Edwards, and Flourens, Reporter.

RECENT POISONING CASES.—Two cases of alleged administration of poison have been tried at the Lewes Assizes before the Lord Chief Justice. The first was a case of arsenical poisoning. William Sturt was tried for the murder of Mary Ann Day, by administering arsenious acid in a mince-pie. The evidence of Professor Taylor and Mr. Gear was conclusive as to death having been caused by arsenic. Three grains of white arsenic had been scraped off the mucous membrane of the stomach and were exhibited in court. The evidence, however, connecting the prisoner with the administration of the poison was not deemed by the jury, nor, it may be added, by the judge, sufficient, and the prisoner was acquitted. In the other case, a servant-girl was indicted for mixing corrosive sublimate in her master's beer. The taste and appearance of the beer were peculiar, and he did not drink it. Dr. Letheby proved that the remainder of the beer contained a large quantity of corrosive sublimate. A bottle was also discovered in a privy marked "lotion," "poison," which contained a small quantity of a saturated solution of the same salt. Here again the evidence was not found sufficient to connect the prisoner with the alleged crime, and a verdict of "Not guilty" was returned.

THE RETIREMENT OF AGED MEDICAL MEN.—The question of the age at which a Medical man should retire from the active duties of his Profession, attracts as much attention in the United States as with us. A recent writer in the *American Medical Times*, in answer to the question at what age do successful Medical men in fact retire, replies, that, unless compelled by accident or disease, they do not do this until death overtakes them. They pursue their active and laborious duties long past the period at which men engaged in other pursuits seek the repose which is usually grateful to old age. The veteran is found clashing with the aspirant, and spares no effort to retain his families or even enlarge his sphere. If it be asked at what age should a man retire, it may be replied that he should do so when he ceases to improve his knowledge of Medicine by study and personal investigation and observation. When he neglects the teachings of contemporary science his period of utility has passed away, and he does not do full justice to his patients. This, however, is the age at which Physicians believe themselves most competent, relying upon their experience and grey hairs, the latter being often the more valuable of the two. The conclusions the writer comes to are:—1. Medical men do not retire at a sufficiently early age, struggling to maintain a practice after they have ceased to be competent Practitioners. In general a Physician at 65 is never as correct a Practitioner as at 40, and thereafter he rapidly degenerates with advancing age. 2. Old Medical men should not retain public positions. In France every Physician and Surgeon is compelled to withdraw from Hospital practice at 60. This is a most righteous regulation, and should be enforced in every Hospital. Aside from their incompetence, the old men do great injustice to the young who have time and talents to improve the advantage of Hospital practice. Age and decrepitude should not be tolerated in these responsible situations, which demand youthful vigour and strength.

ROYAL SOCIETY.—On Saturday evening last, General Sabine, the President, held his first *conversazione* at Burlington House, the meeting being very numerously attended. Amongst the various objects connected with the history and progress of the biological sciences we especially noted the following:—A collection of relics and memorials of Linnæus, arranged with great taste by Messrs. Bentham and Kippist. A portion of the Mediterranean cable, from a depth of 70 fathoms, between Sardinia and Africa, incrusted with coralines and other zoological specimens, exhibited by Mr. Jenkin; also some ova of the cuttle-fish, from 1000 fathoms depth, by the same gentleman. A case containing numerous tubes of the caddis-worm (larva of *Phryganea grandis*), which had been formed out of a variety of materials artificially supplied to the worms, exhibited by Mr. Smee. An apparatus, in full operation, for the artificial breeding of salmon, trout, charr, and other fish, fitted up by Mr. Frank Buckland. A series of war implements, dresses, and other articles employed by the natives of Nubia, from Dr. Gladstone's collection. Lastly, by Dr. Cobbold, an extensive collection of human and other *Entozoa*, which attracted considerable attention. The specimens were for the most part mounted in a solution of carbolic acid; this highly preservative fluid being the only medium in which preparations steeped in magenta will be found to retain their colour. So far as we are aware, this is an entirely novel, and, at the same time, a practically-important discovery. It is well known to many pathologists that for histological purposes there is nothing equal to this fluid for the preservation of tumours, soft deposits, and morbid growths generally. For weeks and months the most delicate cell-elements will retain their form and other natural characters. Dr. Cobbold's collection further illustrated the employment of carmine, ferrocyanide of potassium, and chloride of iron, tannin, glycerine, ultramarine, and other substances, in the preparation of moist anatomical specimens. Some of the parasites had their digestive and water-vascular systems injected, and several of the tape-worms had been reared artificially by the administration of cysticercus larvæ along with food. This unique series of *Entozoa* now forms part of the Pathological collection in the Museum of the Middlesex Hospital. There was a large attendance of the Medical Profession, amongst whom we noticed—Sir Henry Holland, Sir Ranald Martin, Dr. Garrod, Dr. Powell, Dr.

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Bence Jones, Dr. Carpenter, Dr. Sharpey (Secretary Royal Society), Dr. Billing, Dr. Reynolds, Dr. Webster, Dr. Watson, Dr. Owen Rees, Dr. E. Smith, Dr. Francis, Dr. Gilbert, Dr. James Pettigrew, Dr. Spurgin, Dr. Phipson, Dr. Erichsen, Dr. Roget, Dr. Gull, Dr. Stewart, Dr. Babington, Dr. Lankester, Dr. Balfour, Dr. Bryson, Dr. Francis Hawkins, Dr. Miller, Dr. Odling, Dr. J. B. Hicks, Dr. R. D. Thomson, Dr. Eatwell, Dr. Cobbold, Dr. Jeaffreson, Dr. R. Bennett, Dr. Williams, Dr. Wilson Fox, Dr. Munro, Dr. Baird, Dr. Longstaff, Dr. Grant, Dr. Lloyd Birkett, Dr. Budd, Dr. Pavy, Dr. Handfield Jones, Dr. G. Johnson, Dr. Stenhouse, Dr. Granville, Professor Owen, Professor Fergusson, Professor Busk, Professor Partridge, Professor Miller, Mr. S. Solly, Mr. Shaw, Mr. De Morgan, Mr. Smee, Mr. T. Tatum, Mr. Curling, Mr. Paget, Mr. Arnott, Mr. Frank Buckland, Mr. Toynbee, Mr. Flower, Mr. Savory, Mr. Luke, Mr. Gulliver, Mr. Solly, Mr. F. Skey, Mr. Erasmus Wilson, etc.

ANTHROPOLOGICAL SOCIETY OF LONDON.—Tuesday, March 24.—Sir Charles Nicholson, Bart., Vice-President, in the Chair.—Twenty-one new members were elected. A paper, by Captain R. F. Burton, Vice-President, was read on "A Day Amongst the Fans." His account contained chiefly those first impressions which he was enabled to make, and it was distinctly stated that the Fans whom he visited were a comparatively civilised race, who have probably learned to conceal the customs which they have found distasteful to the civilised races. In the remoter districts they may still be determined cannibals. Captain Burton's paper leaves no doubt of the fact that cannibalism is habitually practised by them. After the fall of two or three warriors in battle, they are dragged off to be devoured, and their friends disperse. If the whole body cannot be removed, the victors content themselves with a "gigot" or two, to make soup. The cannibalism of the Fans is by no means remarkable, limited as it is to the consumption of slain enemies; the practice extends sporadically from the Nun to the Kongo, and how much further south Captain Burton cannot at present say. In the Niger and the Brosa, the people do not conceal it; in Bonny he had seen all but the act of eating; it is execrated by the old Kalabarese, whilst practised by their Ibo neighbours to the north-west. The Duallas, of Camaroons, number it amongst their country fashions, and though the Mpongwe eschew the chimpanzee, the Fans invariably eat their foes. No joint of man is ever seen in the settlements; the sick are not devoured; the dead are decently interred, except slaves, who, as usual, are thrown into the forest. Prisoners are tortured with horrible ferocity. Children may be seen licking the blood from the ground. Cruelty seems to be with the African a necessary of life. All his highest enjoyments are connected with causing pain and inflicting death. His religious rites, different from those of the Hindoos, are ever causelessly bloody. Captain Burton cannot believe this abnormal cruelty to be the mere result of uncivilisation. It appeared to him rather the work of an arrested development which leaves to the man all the bloodthirstiness of the carnivore. A paper, by Professor Raimondi (translated by W. Bollaert), was read on "The Indian Tribes of the Great District of Loreto, in Northern Peru." Evidences of the cannibalism of these tribes were adduced, and the plans of the missionaries to Christianise the Indians commented on in detail. A discussion ensued, joined in by Messrs. Fraser, C. C. Blake, Burke, Tylo, Bollaert, Tagore, Dr Hunt, Sir Charles Nicholson, C. Blake, Drachaichis, Prideaux, and others. The next meeting will take place on April 7.

JUNIOR MEDICAL SOCIETY OF LONDON.—At a meeting of this Society, held at University College Hospital on the 19th ult., Mr. S. G. Freeman in the chair, the following pathological specimens were exhibited:—1. Head of a tapeworm found in dead body of a child. 2. Atrophy of a kidney and thickening and enlargement of the ureter, due to a calculus, by G. Howard Marsh, Esq., of the Hospital for Sick Children. 3. Large biliary concretion passed by the bowels, by Mr. Yeo, King's College. 4. Enlargement of the ends of the ribs in rickets. 5. Tuberculous enlargement of intestine from the same child. 6. Typical example of gouty deposit. 7. Polypoid growth in larynx, producing sudden death from suffocation, by Mr. Talfourd Jones, University College Hospital. Mr. Talfourd Jones, V.P., Medical Registrar to the Hospital for Sick Children, then read a paper on "Tuberculous Meningitis." The author, after having traced the history of the disease from the middle of the last century to the year 1830, showed how the more minute study of morbid anatomy and clinical Medicine during the last thirty years had unravelled the true pathology of the disease. Following the arrangement adopted by Dr. Whytt, the author divided the disease into three stages, not based however merely on the variations in the pulse, but chiefly on a combination of certain special symptoms. He stated that although in many cases the first and second stages so merged into each other that it was almost impossible to attempt any accurate subdivision of them, yet in his experience he found the characteristic symptoms of the third stage almost always present. He laid great stress on the simultaneous occurrence of headache and delirium, and showed how, in the majority of cases in which these two symptoms were conjoined, they betokened intracranial inflammation. The author differed from the opinion commonly entertained that isolated masses of tubercle in the brain substance in cases of tuberculous meningitis were rare. He believed they were in numbers of cases overlooked, and not discovered simply because they were not carefully searched for; and he contended that convulsions, slight dragging of a limb, paralysis of one of the cerebral nerves, as the third, fifth, or seventh, described in books as irregular precursory symptoms, would commonly be found only in those cases in which such masses or nodules of tubercle existed. The author, after having described the intracranial pathological lesions he had met with, discussed the question of the cause of fluid in the ventricles of the brain, and of the central softening, and showed how in the majority of cases a mechanical explanation would account for both the fluid and softening, and he adduced instances showing how frequently measles, and next to that whooping-cough, proved to be the exciting cause of the acute tuberculization. The only necessary complication met with was a tubercular condition of the thoracic and abdominal organs, and this was so marked in all the cases he had seen, that he felt disinclined to speak of the acute hydrocephalus as a special disease, and considered the disease a general tuberculization, in which the brain was involved in company with other organs, and death ensued in consequence of a superadded intracranial inflammation. The author concluded by stating that a leech or two at the onset of certain cases, conjoined to the regular and repeated exhibition of purges, and continued application of cold to the head, were the only remedies which he had ever seen give even temporary relief. After an interesting discussion, the meeting was adjourned.

THE ETIOLOGY OF PURULENT INFECTION.—M. Flourens, in a note presented to the Academy of Sciences, gives an account of some experiments he has recently performed. He took some drops of pus from the dura mater of a dog and applied them to the perfectly healthy pleura of another dog. The dog died at the end of thirty-six hours, and a double purulent pleurisy was found to exist, the pleura being filled with pus, while no other viscus contained it. Pus was also applied to the abdominal muscles of a perfectly healthy dog. It died in four days, an enormous infiltration of pus having taken place amongst the different muscles of the abdomen. Moreover, pus transported from the dura mater to the pleura of the same animal, caused death on the fifth day, the left pleural cavity being filled with pus.

HOMŒOPATHIC ANECDOTE.—The late Baron Seutin, of Brussels, took it into his head to experiment with homœopathic remedies, and having procured a complete collection gave them into the charge of one of his *internes* at the Hospital. The *interne* assembled his assistants in solemn conclave in the evening, having provided himself with a large tumbler. Every phial of homœopathic remedies was emptied into the tumbler, and then filled up with distilled water. The operation completed, the *interne*, drinking a toast to the god Hahnemann and his prophets, drank off the whole collection just as if it had been so much sugar and water. Scutin next day commenced his treatment with the substituted distilled water, and all the affections capable of getting well progressed under its administration very satisfactorily. As to the *interne*, at first he felt no ill consequence from his bold adventure. Still homœopathy was doing its offices, and the longer he lived the more did the dilutions increase, and the greater was their energy. The case thus becoming serious, and not wishing to attain the laurels of Methusaleh, he resorted to energetic procedures, against which, strange to say, the globules were powerless. Joking apart, this lesson was of use to more than one, and Baron Seutin, informed afterwards of what had occurred, evinced hereafter considerably less enthusiasm with respect to mystical remedies.

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SUICIDES IN THE AUSTRIAN EMPIRE.—Dr. Majer, who has already published a similar essay on "Suicide in Bavaria," enters in the present paper into a most elaborate statistical examination of the suicides which occurred in the Austrian Empire during the years 1852-57. They amounted during these six years to 9025, being 1504 per annum, in an average population of 30,093,918. The deaths from all causes amounted in the six years to 6,486,479, giving an average of 1 suicide to 704 deaths from all causes. Among the general conclusions which Dr. Majer arrives at are the following :—1. Suicide is least frequent in the non-German provinces of the empire, increasing in exact proportion with the density of population and to the activity with which industrial occupations are engaged in. On the contrary, deaths from murder or accident are more common in the non-German provinces. 2. With respect to *sex,* suicide takes place less frequently among women than men—the proportions being for the entire monarchy 1 to 4½. 3. *Age.*—Suicide occurs with more proportionate frequency in men than in women after the age of 40, in women oftener under 40. 4. Most suicides take place in the reformed and Protestant persuasions, and fewest among the Jews. 5. The greater number of suicides occur between the months of May and July, the fewest between December and February. 6. In the German provinces, suicide is most frequently accomplished by hanging and poisoning; in the non-German provinces, by drowning and shooting. In comparison with other countries, hanging is a very frequent form of suicide in Austria, drowning a rare one. The men, as a general rule, choose hanging and shooting, the women drowning and poisoning.—*Deutsche Zeitung für Staatsarz,* vol. ix., p. 96.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Milton.—1. Communicate with the Registrar, Dr. Francis Hawkins. 2. We believe not.

G. B.—There is no fear that any fair comments on Mr. Propert's unexplained conduct to Mr. Adams will injure the Epsom College. Quite the reverse. We understand that an Influential Committee is now in process of formation, in order thoroughly to sift the Russell and Adams case, and to adopt such further proceedings as may seem expedient.

Blackwood's Magazine and Union Surgeons.—The following malignant paragraph appears in *Blackwood* for March, in a review of a work by a Frenchman, in village life in England :—

"The 'Village Surgeon' is no longer an oracle. Railways have brought 'the first advice' (at any rate in the county town) within the reach of almost all his patients, and he has either disappeared altogether, or if he still exists, is the 'Union Doctor,' badly paid and little respected. He is seldom now a gentleman."

Pay and consideration always go together. The underpaid man is always treated as a drudge. Here is a solid reason for supporting Mr. Griffin, and for aiding in any reasonable attempt to do away with the system of unpaid or ill-paid Medical services. Yet, alas! the root of the evil lies with ourselves. So long as we are weak enough to scramble for these offices so long they will exist.

Hotels at Nice.—The following extract is from a letter which appeared in the *Times* of Wednesday, the 1st inst. :—

"There are several hotels in Nice, and large ones too. One may be a shade better than another, and one which I need not name, for it has sufficient notoriety, is so much worse than any other that I must be understood as excepting it altogether from the general remarks I may think justly applicable to the rest. In all these hotels the system is the same. When a traveller arrives, an attempt is made to induce him to engage his room or rooms for 'the season.' If he does not consent to do so, he is required to pay an extra rate,—as much as 5f. or even 6f. a day for a very indifferent room, and is, moreover, liable to be turned out of that as soon as any one can be caught for the season. If you consent to hire for 'the season,' you are, from the moment you sign the agreement, at their mercy. This agreement may be made to include the prices of the most obvious things, such as the '*table d'hôte,*' breakfast, etc ; but there will always necessarily be many extras not contemplated at the time, and for all such you are made to pay in the most merciless and unconscionable manner. Your wood baskets are reduced to one-third the proper size, and charged three times the proper price. Eggs, which are sold at 1½d. a piece, figure in a bill at 7½d. If, tired of the thin and watered '*vin ordinaire,*' you call for other, you get something with a fine name at a fine price, but in reality little better, and so on with everything. If you complain ever so mildly, the answer is ready,—'Oh, if you don't like the hotel you may leave it.' But if you go you forfeit the remainder of your lease, in the first place; and in the next, if you succeed in getting into another of these crowded hotels, you will find yourself no better off. At one hotel, a gentleman complaining to the mistress of the dinners, she replied, 'Oh! do not complain to my husband, or he will turn you out.' A French gentleman and his son who were in the same hotel with me had taken apartments for the season at 25f. a day. The son was in delicate health, and the father, finding that the soup was hot water and the dinners anything but nourishing, took his son to some place where he could get better. But in two days he received notice that this could not be permitted. He was bound by his agreement to live in the hotel, and that if he absented himself from the *table d'hôte,* his rooms would be taken from him. In vain he offered to pay any profit (*bénéfice*) there might be on his dinners. He was told he could not be allowed to absent himself from the *table d'hôte,* and, in short, he was obliged to return. Another instance. A gentleman died in a hotel, not of an infectious disease, but from the results of an operation. In the bill was a charge of 800f. for damage to furniture—perhaps just enough; but there was a further charge of 300f. 'for dying in the hotel,' and another of 600f. for non-fulfilment of contract—that is, for not continuing to live to eat and drink in the hotel. In another hotel, a friend of mine, neglecting to make a bargain, was charged 10f. a night for his bed; and a young couple, on their wedding tour from Paris, although they had only two very small and inconvenient rooms, found their bill for a week 700f.! I asked them why they paid it—why they submitted to such open robbery, and was told that the formalities and expenses of law were great, and the redress it afforded small. At Cannes, at Mentone, etc., the system of pillage is the same, and prevails equally in the shops. A stranger, a traveller, is a fair subject of plunder.

"These are a few—a very few—of the facts I could state; but they would occupy too much of your space. These few will suffice, if you are so obliging as to publish them, to show the opening there is at Nice for an extensive proprietary hotel, like those of Paris or London, established by a company, with a printed tariff for everything. If some company, either in London or Paris, would undertake the thing, there is no doubt they would carry all before them, to the great comfort of strangers and benefit of the place. "Your obedient servant, "VIATOR.

"P.S.—A lady at an hotel with her maid is charged the immoderate sum of £25 a week. Hoping to make a better bargain by the year, she is told that, as a favour, they will charge her only £1000!"

It is with the greatest grief and shame that we notice, in the obscurest corner of our Journal, that distressing case of Mr. Evan Thomas, of Manchester, a Medical man of middle age, in large practice, a Fellow of the Royal Medico-Chirurgical Society, and Associate of King's College, who falls into a discreditable intimacy with a widow lady, who is pregnant by him. She comes to Manchester under conditions which raise the suspicion of a plan to procure abortion; but this idea was distinctly repudiated by the judge. The unhappy woman died suddenly, whilst Mr. Thomas was in her apartment, on the morning after her arrival at Manchester. A *post-mortem* examination was instituted, and an inquest held, at which Mr. Thomas swore to the existence of a tumour in the womb, and to congestion of the brain, and likewise that he had not known the deceased previously. The real facts were that the uterus contained a fœtus of six months, and the brain was not examined. The defendant was found guilty, and the sentence was as follows :—

"His Lordship, in passing sentence, said: Prisoner, you have been found guilty, and in my judgment with the greatest propriety, of the offence of wilful and corrupt perjury, but the jury have accompanied their verdict with a very strong recommendation to mercy, and I shall act upon that recommendation so far as I am concerned in the sentence I am about to pass upon you, for I always feel inclined to favour a recommendation accompanying the verdict of a jury. I cannot but feel that the punishment I am about to inflict will be very small compared with the punishment which you will sustain for this crime, for no one can read that last letter which you sent to Mrs. Bell without feeling that you have been on intimate terms with this woman, and probably you were the father of the illicit offspring of which she was then pregnant. I will not say that there is any evidence to show that you used any instruments or other means to procure abortion; it is due to you to say that I have arrived at a different conclusion; but that you wilfully, and with the intention of deceiving the jury, made these statements as to the cause of the woman's death, is beyond all doubt. I am sorry that a member of one of the learned professions should now be before the court convicted of so serious an offence. It is not only a disgraceful thing, but I may truly say that it is a national misfortune, that a man in your position should have been guilty of this offence, *for it is calculated to raise a serious doubt upon the value of Medical evidence given in our various courts of law upon assaults committed on railways, and in other places, for juries might justly remark, 'What reliance can we place on Medical testimony after the evidence of Mr. Thomas?'* I repeat that I look upon the conduct of the prisoner as a national misfortune, *because it will bring disgrace and discredit upon the Medical Profession.* Giving effect, however, to the recommendation of the jury, I shall order you to be imprisoned for three months."

DR. GIBB'S DEMONSTRATIONS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Your correspondent, Gobemouch, would do well to make his meaning somewhat plainer, so that the spectators of Dr. Gibb's demonstrations with the laryngoscope may know what kind of curiosity he wishes to collect. I would also recommend him to buy a copy of Murray's grammar, and read the chapter on composition. I am, &c.

March 30, 1863. SPECTATOR.

WHAT IS THE USE OF THE BRITISH MEDICAL ASSOCIATION?

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have known a good many mean things in my life, but nothing, I think, that could beat the cold shabbiness of an article in that ghastly periodical—the *British Medical,* of the 28th inst. The Editor (or some one to whom he has delegated the task of writing what probably he would not, as a gentleman, like to acknowledge) says that he has received communications from Mrs. Russell and Mr. Adams, but declines publishing them, on the plea that they would only foster the love of scandal; and sneeringly advises Mr. Adams to prosecute Mrs. Russell for perjury. Now, it is pretty evident that Mr. Adams is not the only person who has been victimised, though he has suffered more severely than any other; and an action of the kind proposed is clearly the function of an *association,* not of an individual. Of what use is the British Medical Association if it cannot investigate a matter so deeply affecting the honour and character of one of its members? Is the Editor enchained by this Irish Delilah? Does he believe her artless tale? If so, let him come forward like a man, and demand the investigation that shall clear up the character of the "lonely" ones, and blast Adams. On the other hand, if Adams comes out scatheless, let this pretentious set of talkers guarantee the law expenses of the action, which their journal sneeringly dares Adams to bring. I am, &c. ANTI-HUMBUG.

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Questionable Practice.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you please call the attention of your readers to the enclosed? The experienced Physician, I may remark, is Provincial Secretary to the British Medical Association. I am, &c.

A Registered Member, who should like to know what he has paid £2 2s. for.

Kent, March 26.

"J. H. Morton, Medical Hall, Upper High-street, New Brompton, respectfully invites attention to the superior quality of the medicines sold at his establishment, and solicits a trial of the following preparations, the large and increasing sale of which is a sufficient proof of their efficacy:—Morton's Tasteless Antibilious Pills are the safest, most effectual, and decidedly the most agreeable ever introduced. Sample boxes, containing 8 pills, 1d., or in larger quantities 1s. and 2s. 9d. per box.—Morton's Celebrated Powders for Children. To place these well-known powders within the reach of every mother, they may now be obtained in packets of six powders. Price 6d.—Morton's Tasteless Castor Oil is entirely free from the rancid flavour of that usually sold, and will not produce nausea. In bottles at 6d. and 1s. each, or at 3d. per ounce. Trusses, Elastic Stockings, and all Mechanical Appliances in aid of Medicine at London prices.—An experienced Physician attends every evening. Advice gratis.—Urgent cases, Accidents or Midwifery attended at any hour."

Visibleness of the Trapezius Muscle in Advanced Phthisis.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I am desirous of placing upon record a curious physical sign which is now presented by one of my patients in the Hospital for Consumption and Diseases of the Chest, Brompton. It is of little practical value, yet it is worthy of being made known to your readers. The sign to which I refer is the visibleness of the trapezius muscle in form and outline, by its colour, through the integuments of the back, shoulders, and neck. The figure of the muscle is perfectly symmetrical. The colour is faint blue, and much the same as that of the veins of the back of the hand.

The patient is a girl of fourteen years of age, suffering under far advanced tubercular disease of both lungs, much emaciated, and having a remarkably pale condition of face, with here and there a faint tint of blue.

On examining her for the first time a few days ago, I was struck with a symmetrical blue figure, extending from the lower dorsal vertebra to the neck, and spreading on either side to the scapula. I immediately perceived the correspondence between the figure and the trapezius muscle. When the muscle was put into contraction, a fulness or slight degree of swelling could be observed, exactly corresponding with the coloured figure.

In an experience of many years I have met with no other instance of a muscle rendered visible by its colour through the integuments. This phenomenon appears to depend upon four conditions: 1. Extreme tenuity of the integuments; 2. The absence of fat; 3. The dark colour of the muscle from the presence of ill-oxygenated, or almost venous, blood; 4. The superficial position of the muscle. The blue figure gradually terminates at the middle of the neck, where, it is to be remembered, the superficial fascia acquires additional thickness. The acoustic signs are highly interesting, and include well-marked metallic tinkle over a large area. I am, &c.

March 25. S. Scott Alison, M.D., Physician to the Hospital.

Report in Reference to the Charge of Plagiarism advanced by Dr. Mayne in the Preface to his "Medical Vocabulary" against Dr. Fowler.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Having been appointed referees in the questions in dispute between Dr. Mayne and Dr. Fowler, as to their works published under the title "Medical Vocabulary," we beg to forward a copy of our decision, and would feel obliged if you would insert it in an early number of the *Medical Times and Gazette*. We are, &c.

Thos. B. Peacock.
A. Meadows.

[*** We think it unnecessary to print the whole Report, but we call attention to the following conclusions:—]

"In conclusion we are of opinion:—

"1st. That the title of Dr. Fowler's work was derived from the original 'Medical Vocabulary' of Dr. Mayne, and we do not consider that the anonymous publication of the original work, the long period which had elapsed since its first appearance, or the circumstance that no second edition had been announced prior to the publication of Dr. Fowler's 'Vocabulary,' justify the appropriation, so long as the copyright of the original work existed.

"2ndly. On the other hand, we do not find anything in Dr. Fowler's work which leads us to suppose that he has copied in his 'Medical Vocabulary' the plan of the work first published by Dr. Mayne, nor have we found such similarity in Dr. Fowler's 'Medical Vocabulary' to Dr. Mayne's 'Expository Lexicon' as would indicate that Dr. Fowler had availed himself of the use of that work in the preparation of his own. We are therefore of opinion that the charge of plagiarism against Dr. Fowler, implied, if not directly expressed, by Dr. Mayne in the preface to the second edition of his 'Medical Vocabulary,' has not in any degree been substantiated. (Signed)

"Thos. B. Peacock.
"London, March 26." "A. Meadows.

Electricity in Chloroform Accidents.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your Journal of last week, in a letter from Dr. Kidd on "Recovery from Chloroform Accidents," he states that "pulling a pin out of his necktie, he stuck it into the region of the phrenic nerve, as it lies in the sterno mastoid, another pin into the diaphragm, and quickly applying the wetted sponges of the 'Faradisation' current, the effect astonished himself and every one present."

My reason for addressing you is merely to state that the pins are entirely unnecessary; that the moist sponges are all that are required. The following are the rules I have laid down in these cases:—

In drowning, chloroform accidents, suffocation, etc., if there is still warmth in the body, electricity should most certainly be given a fair trial, as it is really the only agent which has the power of re-awaking the vital energies, departing in the stagnation of the circulation and respiration. After placing the individual in the most favourable circumstances as regards temperature, ventilation, etc., for the return to life, place one moist conductor upon the left side of the neck, pressing it in behind the middle of the sterno-mastoid, so as to get as near as possible to the phrenic nerve, then thrust the other moist conductor into the pit of the stomach, so as to cause the diaphragm to contract. Use the highest power of the apparatus, but only for two or three revolutions, or rather keep up the action, but remove the conductor, so as to pass a current for ten seconds at a time to the diaphragm. If there is any vitality remaining in the system, the diaphragm will soon contract, causing a sobbing inspiration. Each of these prepares the way for life; they must be continued until natural respiration is established; then the lower conductor may be removed, and gently passed over the chest generally. A conductor better adapted for this purpose may be obtained, having two terminals, to press on either side of the neck, upon the roots of the phrenics.

I am, &c.

70, Brook-street, March 30. Harry Lobb.

COMMUNICATIONS have been received from—

Dr. Harrington Tuke; Dr. Lingen; Mr. R. Griffin; "Milton;" A Registered Member; The Secretary of the Junior Medical Society; Dr. Needham; Mr. W. Rivington; Dr. W. Marcet; Dr. Sigmund; Dr. Child; Dr. T. Spencer Cobbold; Dr. Robert Walker; Dr. T. King Chambers; Dr. Fraser; Mr. Wordsworth; Mr. Spencer Watson; Mr. Frederick Long (Guy's); Mr. Vernon; Dr. Greenhow; Mr. Little; Mr. Baker; Mr. Couper; Mr. Harry Lobb; A Student; Spectator; Dr. Peacock; Dr. Meadows; Dr. C. H. Leet; Mr. F. Jordan.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 28, 1863.

BIRTHS.

Births of Boys, 1085; Girls, 1073; Total, 2158.
Average of 10 corresponding weeks, 1853-62, 1940 0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	807	787	1594
Average of the ten years 1853-62	730·2	691·5	1421·7
Average corrected to increased population..	..	..	1564
Deaths of people above 90	..	..	6

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhoea.
West	463,388	5	24	5	1	7	7	2
North ..	618,210	15	5	17	7	18	11	2
Central ..	378,058	2	9	9	1	10	8	..
East	571,158	9	4	20	1	14	18	1
South ..	773,175	4	15	14	2	25	11	3
Total.. ..	2,803,989	34	57	65	12	74	55	8

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30 172 in.
Mean temperature	48
Highest point of thermometer	63 7
Lowest point of thermometer	30·5
Mean dew-point temperature	41·3
General direction of wind	S.W.&N.W.
Whole amount of rain in the week	0 00 in.

APPOINTMENTS FOR THE WEEK.

April 4. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

6. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

Epidemiological Society, 8 p.m. Dr. Swarbreck Hall, of Hobart Town, "On the Epidemic Diseases of Tasmania."

Medical Society of London, 8½ p.m. Clinical Discussion.

Odontological Society of London, 8 p.m. Meeting.

Royal Institution, 2 p.m. General Monthly Meeting.

7. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Anthropological Society of London, 7½ p.m. R. T. Gore, Esq., "On the Brain of a Microcephalic Female Idiot." Dr. Julius Schwarez, "On Permanence of Type."

8. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

Hunterian Society, 8 p.m. Dr. Fowler, "On a Case of Laceration of the Vagina during Labour—a Medico-legal Question."

9. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopaedic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

10. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

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TRADE MARK

CHLORODYNE

WAS DISCOVERED AND INVENTED IN THE YEAR 1848 BY
DR. J. COLLIS BROWNE, M.R.C.S.L., EX-ARMY-MED. STAFF,
AND IN 1856 HE CONFIDED
THE ORIGINAL AND ONLY FORMULA
FOR ITS MANUFACTURE
SOLELY TO J. T. DAVENPORT, PHARMACEUTIST,
33, GREAT RUSSELL ST. BLOOMSBURY SQUARE, LONDON.
REGISTERED, 1856.

NOTIFICATION.

The attention of Medical Men is directed to the Practical application, by some parties in the Trade, of the term "Chlorodyne" to various mixtures compounded of Chloric Æther Opium, Indian Hemp, and Peppermint, in Imitation of the ONLY Genuine preparation of this name.

The dangerous expedient of encouraging or advocating the assumption of a name specifically indicating a particular property or remedy—such as *Chlorodyne* is to spurious imitations and substitutions—ON THE GROUND OF CHEAPNESS, is a subject of surprise and grave reproach, supremely so, when the adulteration, sophistication, and tampering with Drugs, becomes so serious and important a consideration in the successful practice of Medicine.

The fact of these Piracies must fully convince the Profession of the extraordinary efficacy of the Genuine Chlorodyne; whereas the sad results and disappointment arising from the use of spurious compounds cannot be expressed.

Each Genuine Bottle bears a Red Stamp, with the words, "Dr. J. COLLIS BROWNE'S CHLORODYNE," in White Letters.

To be obtained from all Wholesale Druggists in 1oz., 2oz., 4oz., and 8oz. Bottles.

NOTICE. — REDUCTION OF PRICE TO THE PROFESSION.

In Bottles, 1oz., 3s.; 2oz., 5s.; 4oz., 8s.; 10oz., 15s. To Hospitals and Charities in large quantity, a Liberal Discount.

Pulvis Jacobi ver, Newbery

is the ORIGINAL & GENUINE, was ESTABLISHED A.D. 1746,
And is Prescribed, with the greatest success, "by the highest authorities," for Fevers, Ague, Cerebral Congestion, Rheumatism, Chills, Influenza, &c. &c.

FRAS. NEWBERY & SONS, 45, ST. PAUL'S CHURCHYARD.

Prices for Dispensing—1 oz., 9s.; ¼ oz., 3s. 4d.

TOWLE'S CHLORODYNE.

Medicinal Properties :— Anodyne, Diaphoretic, Sedative, Astringent, and Anti-Spasmodic.

CAUTION.—For the convenience and safety of prescribing Chlorodyne, in combination with other ingredients, so as to avoid decomposition (a result known to have taken place) through the use of SECRET COMPOUNDS, Mr. TOWLE begs to call the attention of the Profession to the following component parts in his Preparation :—

CHLOROFORMYL. ÆTHER. OL. MENTHI. PIP. ACID. PERCHLOR. TINCT. CANNABIS INDICÆ. ACID. HYDROCYAN. TINCT. CAPSICI. MORPHIA & THERIACA.

The proportion of Morphia—¼ gr. inf. ℥j. Dose—Five to Twenty Drops.

Letter from ALFRED ASPLAND, Esq., F.R.C.S. Eng., J.P. Chester and Lancaster, Surgeon 4th Cheshire Batt. V.R., Surgeon to the Ashton Infirmary.—"After an extensive trial of your Chlorodyne in Hospital, Infirmary, and Private Practice, I am able to state that it is a valuable medicine. I have found its action peculiarly serviceable in Bronchial, Spasmodic, and Neuralgic Affections. I have never found it produce headache or feverish disturbance, results which not unfrequently occur from other forms of Chlorodyne. As a sedative to allay excitement arising from the abuse of intoxicating drinks, so commonly witnessed in our Barrack Hospital, I have been perfectly satisfied with it. Its known composition will doubtless prove an additional recommendation to the Profession."

Sold by Wholesale Houses in bottles, 1 oz., 1s. 6d.; 2 oz., 2s. 6d.; and 4 oz. to 20 oz., 1s. per fluid oz.

Sole Manufacturer—A. P. TOWLE, CHEMIST, &c., 99, STOCKPORT-ROAD, MANCHESTER.

CHLORODYNE.

"INVENTED AND DISCOVERED, IN 1844, BY RICHARD FREEMAN."

(*Extract from* Affidavit made before S. C. WARD, Esq., Chancery Record Office, Chancery-lane, London, June 16th, 1862.)

The Inventor begs to thank the Medical Profession for the liberal support he receives from them, and to assure those who have not yet tried his Chlorodyne that it is superior to any other maker's, being more certain and more lasting in its effects; and the low price which he charges for it allows the poorest sufferer to enjoy its extraordinary beneficial influence. The immense demand for it by the Profession is a convincing proof that they find it a most valuable therapeutical agent. The following are a few out of many voluntary Medical Testimonials:—

From W. VESALIUS PETTIGREW, M.D., Hon. F.R.C.S. Eng., formerly Lecturer upon Anatomy and Physiology at the St. George's School of Medicine.

"I have had the opportunity of trying the effects of Mr. Freeman's Chlorodyne, and find it an excellent Anodyne and Antispasmodic medicine."

From H. J. O'DONNELL, M.R.C.S.E. and L.M., &c., &c., Albert-terrace, London-road, S.

"I can with much confidence bear testimony to the efficacy of Mr. Freeman's Chlorodyne as a Sedative and Antispasmodic, having used it for some years in Colic, Neuralgia, Phthisis, and Asthma. *I daily administer it in after-pains*, and it all cases find it infallible. It is the most valuable medicine we have in Labour cases. I find, since I have used it, the pains seldom or ever exceed the third day, while with the former remedies my patients suffered eight or nine days. In fact, I cannot speak too highly of it."

From F. W. HOOPER, M.D., M.R.C.S. Eng., &c., &c., Medical Officer, Christ Church District, Camberwell.

"I have much pleasure in stating that, after a sufficient trial of Mr. Freeman's Chlorodyne, I am fully persuaded that it is superior to any preparation of the kind, and, from its moderate price, is a great boon to the suffering poor, who daily acknowledge its salutary benefit."

From W. G. KING, M.D., M.R.C.S. Eng., Hackney.

"I have used your Chlorodyne for some time, and can bear testimony to its efficacy and value in *all cases* in which a Sedative has been indicated."

Manufactured by RICHARD FREEMAN, Pharmaceutist, Kennington-road, London, S.;
And Sold by all Wholesale Houses, in bottles, 1 oz., 1s. 6d.; 4 oz., 5s.; and 8 oz., 10s. each.

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ORIGINAL LECTURES.

PROFESSOR HUXLEY'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

Lecture IV.

(Being the Third of Six Lectures on Classification.)

Mr. President and Gentlemen,—Hitherto, it has not been a matter of very great difficulty to discover the characters in which the members of the various classes, which have passed under our notice, agree with one another and differ from the members of all other classes. But to-day we shall be met, at the outset of our studies, by a large series of organisms which present us with much greater obstacles,—the result, in a great measure, of imperfect knowledge.

The first group on the list—the *Echinodermata*—comprises the star-fishes, sea-urchins, sea-cucumbers, trepangs, and feather stars—known technically as *Asteridea*, *Echinidea*, *Holothuridea*, *Ophiuridea*, *Crinoidea*, etc.,—marine animals which differ vastly in external appearance, though they all, in the adult state, present a more or less definitely radiate arrangement of some parts of their organisation.

That which most remarkably distinguishes the *Echinodermata* is the nature of the embryo, and the strange character of the process by which the adult form is originated by a secondary development within that embryo.

In the great majority (a) of the *Echinodermata*, the development of which has been examined, the impregnated egg gives rise to a free-swimming, ovoid, ciliated embryo, the cilia of which soon becomes restricted to, and, at the same time, largely developed upon, one, two, or more bands, which are disposed either transversely, or more or less obliquely to the longitudinal axis of the body, but are, in any case, bilaterally symmetrical (Fig. 1).

Fig. 1.

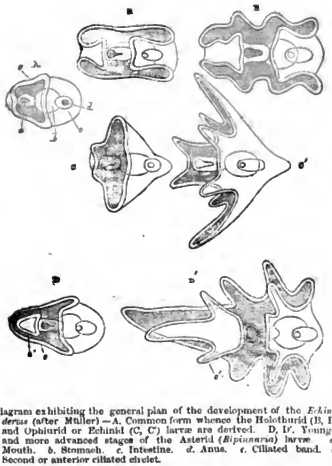


Diagram exhibiting the general plan of the development of the *Echinoderms* (after Müller)—A. Common form whence the Holothurid (B, B') and Ophiurid or Echinid (C, C') larvæ are derived. D, D'. Younger and more advanced stages of the Asterid (*Bipinnaria*) larvæ. *a'*. Mouth. *b*. Stomach. *c*. Intestine. *d*. Anus. *e*. Ciliated band. *e'*. Second or anterior ciliated circlet.

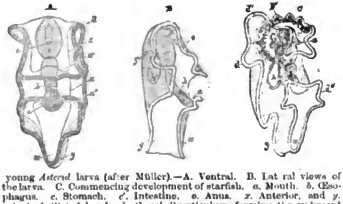
(a) In *Ophiolepis squamata* and *Echinaster sporitus*, the larva appears to attain only a very imperfect state of development before the appearance of the echinoderm body; and careful re-examination is required to decide how far the larvæ of these animals are truly bilaterally symmetrical.

The parts of the body which carry the ciliated band or bands often become developed into processes, which correspond upon each side of the body, and thus render its bilateral symmetry more marked. And in the larvæ of some *Echinidea* and *Ophiuridea*, other bilaterally symmetrical processes are developed from parts of the body which do not lie in the course of the ciliated bands.

The larvæ of *Asteridea* and *Holothuridea* are devoid of any continuous skeleton, but those of *Ophiuridea* and *Echinidea* possess a very remarkable bilaterally symmetrical, continuous, calcareous skeleton, which extends into, and supports the processes of the body (Fig. 2).

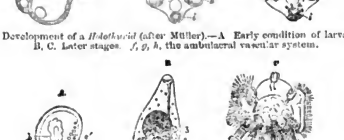
A distinctly defined alimentary canal early makes its appearance in these Echinoderm larvæ. It is divided into a well-marked oral and œsophageal portion, a globular stomach, and a short intestine terminating in an anal aperture (Figs. 1 and 2). All the parts of the alimentary canal are disposed in a longitudinal and vertical plane, dividing the larval body into two symmetrical halves; but the œsophageal and intestinal portions are so disposed as to make an angle open towards the ventral side with one another. No nervous, or other, organs besides those indicated have as yet been discovered in these larvæ.

Fig. 2.



A young *Asteroid* larva (after Müller).—A. Ventral. B. Lateral views of the larva. C. Commencing development of starfish. *a*. Mouth. *b*. Œsophagus. *c*. Stomach. *c'*. Intestine. *e*. Anus. *x*. Anterior, and *y*. principal ciliated band. *h*. Cœcal diverticulum, forming the rudiment of the ambulacral vascular system, and opening externally by the pore *g*. *k*. Perisoma of starfish.

Development of a *Holothuroid* (after Müller).—A. Early condition of larva. B, C. Later stages. *f, g, h*. the ambulacral vascular system.



Development of an *Echinid* larva (after Müller).—A. Earliest, and B. later condition of larva. C. The Echinus Imago developed within and nearly obliterating the larva.

After swimming about in this condition for awhile, the larval Echinoderm begins to show the first signs of those changes by which it is converted into the adult form. An involution of the integument takes place upon one side of the dorsal region of the body, so as to give rise to a cœcal tube, which gradually elongates inwards, and eventually reaches a mass of formative matter or blastema aggregated upon one side of the stomach. Within this the end of the tube becomes converted into a circular vessel, from which trunks pass off radially through the enlarging blastema. The latter, gradually expanding, gives rise in the *Echinidea*, the *Asteridea*, the

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Ophiuridea and the *Crinoidea*, to the body of the adult, the larval body and skeleton (when the latter exists), with more or less of the primitive intestine, being either cast off as a whole, or disappearing, or becoming incorporated with the secondary development, while a new mouth is developed in the centre of the ring formed by the circular vessel. The vessels which radiate from the latter give off diverticula which communicate with the cavities of numerous processes of the body—the so-called feet—which are the chief locomotive organs of the adult. The radiating and circular vessels, with all their appendages, constitute what is known as the "ambulacral system," and, in Asterids and Echinids, this remarkable system of vessels remains connected with the exterior of the body by canals, connected with perforated portions of the external skeleton—the so-called "madreporic canals" and "tubercles." In Ophiurids the persistence of any such communication of the ambulacral system with the exterior is doubtful, and still more so in Crinoids. In Holothurids no such communication obtains, the madreporic canals and their tubercles depending freely from the circular canal into the perivisceral cavity.

Whether the larva possessed a skeleton or not, the adult Echinoderm presents one which is developed quite independently of that of the larva. This skeleton may be composed of mere detached spicula or plates, as in the Holothurids, or of more or less definitely disposed ossicula, or plates, as in other Echinoderms. In the latter case its parts are always disposed with a certain reference to the disposition of the ambulacral system, and hence have a more or less definitely radiate arrangement. It might be expected, in fact, that the arrangement of the organs of support should follow more or less closely that of the chief organs of movement of the adult Echinoderm, and it is not surprising to find the nervous system similarly related. It is, in all adult Echinoderms, a ring-like or polygonal ganglionated cord, situated superficially to that part of the ambulacral system which surrounds the mouth, and sending prolongations parallel with and superficial to the radiating ambulacral trunks.

The reproductive organs of the Echinoderms, which usually open upon, or between, parts of the radially disposed skeleton, commonly partake of the radial symmetry of that skeleton; but they have no such radial symmetry in the *Holothuridea*.

The alimentary canal of the adult Echinoderm is still less connected with the skeleton, and exhibits anything approaching a radiate disposition only in one group, the *Asteridea*.

The vascular system which exists in many, if not all, adult Echinoderms, but the true nature of which is by no means understood at present, is closely related both to the alimentary and to the ambulacral systems, and partakes of the disposition of both.

No Echinoderm whatsoever has its organs, internal or external, disposed with that absolute and perfect radial symmetry which is exhibited by a Medusa, the tendency towards that kind of symmetry being always disturbed, either by the disposition of the alimentary canal, or by that of some part of the ambulacral apparatus. Very often, as in the Spatangoid sea-urchins, and in many *Holothuridea*, the ambulacral and nervous systems alone exhibit traces of a radial arrangement; and in the larval state, as we have seen, radial symmetry is totally absent, the young Echinoderm having as complete a bilateral symmetry as have Annelids, or Insects.

Nothing can be more definite, it appears to me, than the class *Echinodermata*, the leading characteristics of which have just been enumerated; but it is a very difficult matter to say whether the seven groups, some of considerable extent, which are massed under the next head, that of *Scoleeida*, are rightly associated into one class, or should be divided into several. The seven groups to which I refer are the *Rotifera*, the *Turbellaria*, the *Trematoda*, the *Tæniada*, the *Nematoidea*, the *Acanthocephala*, and the *Gordiacea*; and of these, five are composed of animals parasitic upon others, and exhibiting the anomalies of structure and of development which might be expected from creatures living under such exceptional conditions.

There is one peculiarity of organic structure which the first four of these groups certainly have in common; they all present what is termed the "water-vascular system,"—a remarkable set of vessels which communicate with the exterior by means of one or more apertures situated upon the surface of the body, and branch out more or less extensively into its substance.

In the *Rotifera* the external aperture is single, and situated at the hinder end of the body; it communicates with a large rhythmically contractile sac, whence two trunks proceed, which usually give off short lateral branches, and terminate in the ciliated "trochal disk" of the Rotifer. Both the lateral offshoots and the terminal branches contain vibratile cilia. The Trematode and Tænioid worms have a similar, but usually much more ramified apparatus; and it is interesting to observe that in these animals, as in the *Aspidogaster conchicola* (Fig. 3), the water vessels of which I described and figured in 1856, the water-vascular system becomes divided into two

Fig. 3.

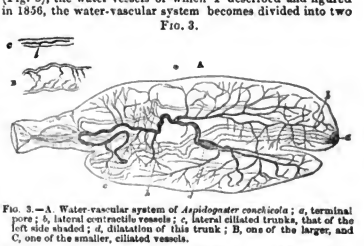


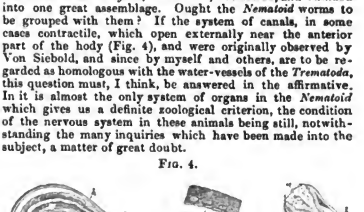
Fig. 3.—A. Water-vascular system of *Aspidogaster conchicola*; *a*, terminal pore; *b*, lateral contractile vessels; *c*, lateral ciliated trunks, that of the left side shaded; *d*, dilatation of this trunk; B, one of the larger, and C, one of the smaller, ciliated vessels.

distinct portions, one with contractile and non-ciliated walls, the other with con-contractile and ciliated walls. In some *Turbellaria* the apertures of the water-vascular apparatus are multiple, while it would seem that in others, as the *Nemertidæ*, the apparatus becomes shut externally in the adult state, and consists mainly, if not exclusively, of contractile vessels. The difficulties of observation are here, however, very great, and I would be understood to express this opinion with all due caution.

In none of these animals has any other set of vessels than those which appertain to the water-vascular system (if I am right in my view of the vessels of the *Nemertidæ*) been observed, nor has any trace of a true heart been noticed. The nervous system consists of one or two closely approximated ganglia.

This sum of common characters appears to me to demand the union of the *Rotifera*, *Turbellaria*, *Trematoda*, and *Tæniada* into one great assemblage. Ought the *Nematoid* worms to be grouped with them? If the system of canals, in some cases contractile, which open externally near the anterior part of the body (Fig. 4), and were originally observed by Von Siebold, and since by myself and others, are to be regarded as homologous with the water-vessels of the *Trematoda*, this question must, I think, be answered in the affirmative. In it is almost the only system of organs in the *Nematoid* which gives us a definite zoological criterion, the condition of the nervous system in these animals being still, notwithstanding the many inquiries which have been made into the subject, a matter of great doubt.

Fig. 4.



Oxyuris.—*a*. Mouth. *b*. Pharynx. *c*. Commencement of intestine, and *d*. its termination. The intermediate portion is not figured. *e* Genital aperture. *f*. Opening of vessels. *g*. Their receptacle. *h*. One of the vessels. *i*. Cellular matter enveloping them. A portion of one of the contractile vessels is represented above, more highly magnified.

In habit and feature, the *Gordiacea*, filiform parasites which inhabit the bodies of insects, and leave their hosts only to breed, resemble the *Nematoidea* so much that I can hardly

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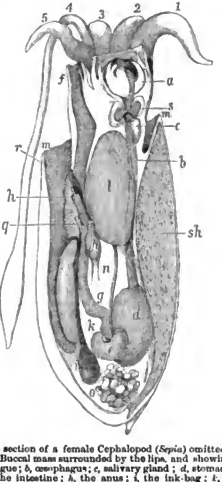
doubt that their systematic place must be close to that of the latter; but positive evidence is almost wanting on this head, the extant accounts of the minute anatomy of these animals not having received that kind of confirmation which is desirable.



Diagrammatic section of a female Cephalopod (*Sepia*) omitted in the last lecture. *a*, Buccal mass surrounded by the lips, and showing the horny jaws and tongue; *b*, œsophagus; *c*, salivary gland; *d*, stomach; *e*, pyloric cæcum; *g*, the intestine; *h*, the anus; *i*, the ink-bag; *k*, the place of the systemic heart; *l*, the liver; *n*, the hepatic duct of the left side; *o*, the ovary; *p*, the oviduct; *q*, one of the apertures by which the atrial system, or water-chambers, are placed in communication with the exterior; *r*, one of the branchiæ; *s*, the principal ganglia aggregated round the œsophagus; *f*, the funnel; *m*, the mantle; *sh*, the internal shell, or cuttle-bone. 1, 2, 3, 4, 5, the produced and modified margins of the foot, constituting the so-called "arms" of the *Sepia*.

ON OBSERVING AND JUDGING AS TO THE EFFECTS OF REMEDIES.

BEING REMARKS INTRODUCTORY TO THE SPRING TRIMESTRE OF CLINICAL TEACHING AT THE

ROYAL INFIRMARY, EDINBURGH,

By THOMAS LAYCOCK, M.D.

Professor of the Practice of Medicine and Clinical Medicine; and Lecturer on Medical Psychology and Mental Diseases in the University of Edinburgh.

Fashions in Physic—Difficulties in the Way of Observing—No Other Guide than Experience—Rules to be drawn therefrom—Nature and Mental Influences as Curative Means—Relation of Science to Medical Practice—Importance of Prognosis to Treatment, founded on a Knowledge of the Natural Order of Phenomena—Neglect of the Dies Indicantes, or Critical Days; and the Causes—Bad Influence of Theories on Medical Art—Humoral Theories—Zymosis—Uræmia—Gouty Deposits—Exudations in Inflammation—Theory of Elimination—Theories as to Drugs—Dangers of Carbonate of Soda as a Dietetic Drug, and in Routine Practice—Chloroform—Magnesia.

GENTLEMEN,—We shall shortly have an imperial Pharmacopœia with new drugs and new formulæ, commended to us by experience of their value on the part of eminent Practitioners. And we have almost a new non-official Pharmacopœia already, in the lists of new remedies, sent to us from time to time, in which various drugs and compounds, chiefly of American growth or French manufacture, are strongly commended to our notice. There is a fashion in physic as in everything else, and arising like others from a love of change. Remedies and modes of treatment rise into popularity, and sink into oblivion in succession, and carry with them their appropriate theories and fallacies. But fashion in physic is not to be admired, for it is too apt, like all fashions, to trifle with weighty interests. You will have to judge for yourselves as to the real value of vaunted remedies and drugs in the treatment of disease; and I therefore think that the half-hour I devote to this introductory lecture cannot be better occupied than with the difficulties of observing and judging as to remedies.

At the close of the last summer's clinic, I remarked on some of these. In particular, I said that, although practical therapeutics have, in fact, kept pace with other departments of Medicine, the first aphorism of Hippocrates, so often quoted, is as true now as ever, and we can still say, "Life is short, and the art widely extended; the opportunity fleeting, experiments dangerous, conclusions difficult. For the Physician must be not only prepared to do what is best himself, but also to make the patient and nurses and all around co-operate." Supposing the *modus operandi* of a given drug in the cure of any disease or relief of a symptom were exactly known, what difficulties in the way of exact and successful treatment arise on the side of the drug merchant, the dispenser, the nurse, the patient, and from a multitude of unnameable collateral things, which influence the administration and effect of remedies! Every time we direct curative means we aim at what scientifically is the performance of a physiological experiment; if, then, we conceive an experimental physiologist making researches or experiments with a well-known drug, on a living being under circumstances like those which meet us when prescribing, we shall attain to something like a conception of the difficulties which surround exact therapeutics, and learn, at least, the practical truth, that such exactness is unattainable. But let us carry the comparison further, and suppose there is no exact knowledge of the *modus operandi* of the remedial agent, and that this knowledge has to be obtained by observation and research under the circumstances mentioned (which are, in fact, those of ordinary practice), and we have at once an explanation of the uncertainties and contradictions of therapeutical science. It is seen that scientific research, in the proper sense of the term, is, in truth, simply impossible in ordinary therapeutics. The *modus operandi* of drugs has, however, been investigated in a scientific manner by experimental researches, either on the person of the experimenter, or on lower animals; and in this way some positive knowledge is acquired. But when, by isolation from all disturbing causes, by a strict exactitude as to the purity of the drug, the doses, the times and mode of administration and the like, such knowledge is attained, it is by no means readily applicable to practice. And this for the obvious reason, that the conditions are not the same. The patient is not a lower animal, if the knowledge was acquired by researches on the lower animals, nor is he in health, if the experiments were made on persons in health. Then, again, persons both in health and disease differ much from each other as to the vital changes induced by disturbing agents; nay, the same person differs as much from himself, from time to time, as he differs from others. These differences are so great, even as to articles of diet, that it is embodied in proverbial philosophy; —"What is one man's meat is another man's poison." Perhaps, of all drugs, opium is the most uniform in its operations. Yet, there was a man admitted into ward X. last summer, who assured us he could chew one ounce of opium in a day, and smoke a pipeful, without any other effects (as he said) than those of a moderate dose of liquor. On the other hand, doses of laudanum as small as a minim or two, given to infants, cause serious symptoms; and even in adults, opium in small quantities is sometimes wonderfully mischievous. I had a young lady under my care, in whom erysipelatous inflammation was invariably induced by the external application of an opiate. These are called peculiar constitutions, or idiosyncracies, as if the term explained the phenomena; but the practice of Medicine is full of such idiosyncracies and peculiarities.

What then, you will ask, is to be relied upon in therapeutics? Is there no guide to the administration of remedies? Most assuredly there is, and a sure guide, too—namely, that *experience* of remedies which is founded on long and careful observation, and enlightened and corrected by physiological

knowledge. I say, long and careful observation; for I am satisfied, after more than thirty years' experience of drugs like calomel, colchicum, and opium, that the therapeutical uses of things can only be learnt in that way, because only in that way can we attain to a knowledge of those varied and numerous conditions which modify their action in individuals. And, when I reflect upon this, I am astonished at the positive manner in which opinions are expressed as to the value and uses of leading remedies by those who, in the same breath, declare they seldom or never prescribe them. It is sufficient for these therapeutists to criticise the contradictory statements of observers, or to advance ingenious *à priori* objections founded on purely hypothetical data. Such criticism on the recorded results of experience is easy enough, but is just as worthless as it is easy. Physic, in general, we all know, is uncertain and contradictory; but in therapeutics, more especially, not a single theory (of which it is full) is really tenable—is, at the best, only plausible.

Our safety is, in truth, in the multitude of our observations; by these, all the variously modifying conditions are disarmed, as it were, of their modifying power over our conclusions. Just as in constructing life-tables, with the greatest uncertainty as to the duration of life of each of 1,000,000 persons born, we can determine, with fair accuracy, the number that will die at successive ages until not one survives; so it is with our conclusions as to the operation of drugs and remedial means. Although there may be, and is, great uncertainty as to each individual case, the general conclusions from a multitude of cases have an element of certainty; and these form a guide and standard of comparison as to the effects of treatment in individual cases. Thus, while experience shows that opium in two-grain doses may, in the majority of persons, be expected to produce torpor, insensibility, and other changes indicating its influence on the nervous system, we know by experience also, that in a certain class of diseases of the nervous system, as tetanus, or some forms of mania and delirium tremens, those results will probably not follow, but even the contrary.

What rules may be drawn from experience as to the observing the effects of remedies? Clearly, it is necessary to know, primarily, that the remedy has actually been used or applied in the prescribed mode. This first rule, so obvious, is, however, too often neglected. Secondly, as to any particular mode of treatment of a special group of symptoms: if we find that like general conclusions have been drawn as to the success of other modes of treatment; or, in other words, if various and very differently-acting remedies have been found equally available in the cure of a disease, we may infer that there is an element common to all, but not recognised, upon which the curative result depends. Close a wound carefully, and rest the wounded part, and to that you might add a hundred remedial things, besides salving the weapon that inflicted it, with equal success. The natural result would follow, namely, healing of the wound under any circumstances which did not interfere with the natural processes. It is, therefore, of primary importance in therapeutical investigations to determine the natural history of morbid states, or the order in which they rise and terminate. The two chief things to this end are etiological diagnosis and prognosis. It is for this reason that the older Physicians cultivated prognosis so strenuously; for, to use the very words of Hippocrates, "Our aims are the Physicians of our diseases." So that what *these* Physicians are doing, and are likely to do, is a question of very vital importance to both the Physician and his patient. Skill in prognosis is, therefore, the first qualification of the true Physician; by this he is enabled to attain to the highest knowledge of all in Medicine—the knowledge when to do nothing, but watchfully wait on nature, and firmly resist all temptations to perturbative treatment. The therapeutics of two very common diseases may illustrate these views: Acute pneumonia is one of those diseases in which our natures are often our physicians. Hence, the success of so many and such different modes of treatment; hence, the real value of the rational and expectant method of treating pneumonia you have seen me adopt in the wards, founded on this principle of experience. Epilepsy, on the other hand, is not, like pneumonia, a self-limited disease; but it is essentially an affection of the encephalon, and is, therefore, more or less amenable to all those influences which alter the vital activity of the encephalon. Now, nothing is so certain in this respect as mental or moral influences. So that of the hundreds of remedies and remedial means which have been found useful in epilepsy, and the mere list of which would fill a quarto volume, in a certain class of cases there are few which operate independently of these mental changes. Hopeful anticipation may be said to be the best remedy for these kinds of epilepsy, as for emotional hysteria, and other encephalic affections of the same class. It is probable therefore for this reason, that mesmeric passes, prayers for recovery, novel and striking remedies, and even a simple change in treatment, are all so often followed by beneficial results in hysterical paraplegia and epileptiform diseases.

In observing and concluding as to the results of treatment, we must carefully distinguish between the science and the art of healing. It is admitted generally that the science can only have a solid foundation in Medical etiology, or the science of causes of disease. But, then, such science involves an anterior science of very wide extent, which may be fitly termed Biology, or the science of life, because, to know scientifically how disease begins, it is necessary to know how life arises and continues. At present this is impossible. The art is more attainable, because it is limited to a comparatively narrow field of research into causes and effects, and uses science chiefly as a means of enlightening experience than giving principles to art. So that there may be a highly advanced therapeutical art if founded and directed thus. And even with little science, much art of a kind is attainable. The ancient Physicians, although greatly in the dark as to the causes of disease and as to biological science, were better informed than we are as to the order of morbid changes, and that simply by the force of empirical observation. It is plain they watched this order very closely in fevers and acute diseases, and came to conclusions of great importance to practice. These constituted the foundation of the theoretical doctrines of crises and critical days. But they also constituted the basis of a method of prognosis which was distinct from the mere theories, and which, because of the theories, has undeservedly become almost obsolete. To understand it rightly, it is necessary, therefore, to distinguish between the generalisation from the facts of experience, and the theories which were invented to explain them and apply them to pathology and therapeutics. The facts are amongst the most certain in medicine; no one doubts, for example, that intermittent and remittent fevers run a regular course, and, that certain data being known, the course of such a fever can be anticipated. It is, in truth, this knowledge of the order of events in agues which enables us to anticipate and prevent a fit.

The exact punctuality of recurrence and alternation of the paroxysm sometimes observed in cases of ague and intermittent nervous affections is very striking. I have known a fit of neuralgia recur daily at the same hour within a minute or two. This curious exactness is not, I think, due to the disease, but to the same kind of mental state which interferes so much with an accurate estimate of the effects of remedies; nevertheless, it is very certain that vital events do occur and recur in health at measurable periods. All those of incubation, menstruation, and utero-gestation are of this kind; and so, also, the successive stages of fevers and other acute diseases. Several years ago I endeavoured to bring the laws of periodic recurrence of vital changes, in general, into relation with the laws of recurrence of periodic morbid changes.(a) The entire class of phenomena can be traced, I think, into one or two simple laws of chronometric nutrition; and I am very sure one of the next large advances in the science of life and the practice of medicine will consist in the development and practical application of these chronometric laws. Without a knowledge of them, indeed, we are much in the same condition as to diseases in general as the cattle-breeder or obstetric Physician would be if he were ignorant of the chronometric laws of conception, utero-gestation, and parturition; and which are, in truth, illustrations of the fundamental laws, because they can be resolved into periodic laws of nutrition and development. The mode in which simple experience of these laws in disease was formerly made available to practice is very well shown in two chapters of Ætius on the "Method of Prognosticating the Day and Hour of a Patient's Death." The day, he says, is to be ascertained by observing on what critical days the attacks are most severe; the hour by noting at what time of the day the exacerbation comes on, and at what period of it the patient is most

(a) The *Lancet*, 1842-43.

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depressed; "for at that hour at which the pulse is most depressed, death will take place." Such a prognosis might have been farther helped by a knowledge of the hours of the day at which the heart's action and the vital powers generally are most depressed. Experience shows that death takes place at the early morning hours more frequently than at any other. I had the hour of 3000 or 4000 deaths tabulated some years ago, and found this the fact. It is clear that this method consisted in nothing more than the formation of an opinion as to the probable future course of a disease from the data of experience in like cases, and was therefore identical in principle with that which enables us to anticipate the probable effects of drugs. From this simple method arose also the technical terms which have long indicated the periodic changes in disease, for the primary and proper meaning of the Greek word "crisis" is "opinion," or "judgment;" so that a "critical" day was at first simply a day on which a Medical opinion or judgment as to the course of the disease could be made or would be confirmed. Hence critical days were termed in Latin, "*dies indicantes, dies judicatorii*," and the like. In the words "critic," "critical," and "criticism," as applied to literature and art, this primary meaning is still expressed. It is only by an abusive and restricted use of the terms that critical is used in the sense of dangerous, and "*crisis*" and "judgment" in the sense of condemnation. So fundamental a branch of art can never go out of use, and we still practice this old method of prognosis, but in a limited and imperfect way; as, for example, when we anticipate what will happen at a menstrual period in certain feminine diseases, or when we form a judgment as to the course of an exanthematous fever from the date of the eruption and other symptoms. But the want of definite knowledge and training in exact observation renders even this simple application of the method very imperfect. Thus, a Practitioner, relating the result of his experience in the treatment of small-pox by the saracenia purpurea—an alleged specific—informs the professional public that, although it had failed to cure the patient (for the disease was rapidly fatal), it had caused an abortive eruption, or, in other words, had prevented the development of the cutaneous inflammation. Now, in a case of variola, the delay or "abortion" of the eruption usually coincides with a dangerous kind of fever, and is a *malum signum* in prognosis for this reason; and is not, unfortunately, to be modified by very potent drugs. If the saracenia had any influence on the eruption, as alleged, we must conclude that it was rather injurious than beneficial. Other Practitioners relate its effects in cutting short or modifying varioloid, not aware, apparently, that that which they attribute to the drug is the ordinary course and termination of the fever. Without a regard, then, to this natural order of events, no therapeutical observations can be made of any practical value.

One chief reason why the periodic changes in disease are not better observed, and rendered more available to prognosis and the correct observation of the action of remedies on the course and termination of a case, is to be found in the fact that few, if any, of our modern writers discriminate between the facts and the theories. The older Physicians, like us moderns, were not content with observing the facts and founding their judgment thereupon, but they invented a theory to explain them. Thus, there was an elaborate humoral theory generally accepted, which affirmed that the sweats, diarrhœas, and other discharges which are observed to take place on certain days, are critical in the sense of curative. The "*materies morbi*," or "acrid," or "peccant humours" it was thought were thereby eliminated, and thus health restored, so that it became part of the business of the Physician to watch for and encourage these "efforts of nature," as they were termed, to throw off the morbid "humours." Then, again, a theory was grafted on this as to the mode of elimination. It was maintained there was a zymosis, or fermentation going on in the blood; and thus terms, such as coction, despumation, and the like, derived from the brewhouse, became technical. So completely have these theories usurped the place of the facts of experience, which they were invented to explain, that I believe very few modern Physicians recognise the facts at all. So that a very eminent and able writer on fever only represents current opinions when he discusses the doctrine in his recently published work in no other sense. He observes, "It has been a very common opinion from early times, that in fevers the decline and disappearance of the symptoms are accompanied or preceded by a crisis (a term implying *separation from the body*)," etc. Some of the old Greek writers, as Galen for example, had a theory of the facts founded on a semi-mystical doctrine of numbers, and I remember when a Physician of great intelligence and acuteness gave a lecture on the doctrine of critical days in Edinburgh, he specially undertook to show that this and the other theories were incompatible with the facts, but he did not inquire into the facts, because confounding them with the theories, nor attempt any explanation of those periodic changes which confessedly do occur in both healthy and morbid conditions.

And yet, for all this, we have still our humoral hypotheses and theories, exercising the same injurious influence on medical art. Thus, for example, authors write of uræmia and uræmic poisoning, as if the theories these terms imply are well-established pathological truths; so that when a patient who has a structural disease of the kidneys which interferes with their proper function, dies, and has also certain symptoms indicating a cerebral disorder, it is said he dies of that because his blood is poisoned with urea. But, in fact, this explanation of the order of events is hypothetical, and in some cases is certainly wholly inapplicable. So, again, salts of uric acid are found in the tissues in certain cases termed gouty; urates are also found in the blood, and it is thence concluded that the urates found in the tissues are deposited from the blood. Now, as to some tissues, at least, it is much more likely that they are formed where they are found, and have never been in the blood at all. We have a like theory in the current doctrine of certain diseased states termed inflammations. Abundant fibrine is found in the blood: it is also found at the same time in or on the tissues of an inflamed part. Hence the conclusion that it exudes from the vessels into the inflamed tissues. This may be true as to some tissues, but as to others it is at least equally probable that the plasma is formed where it is found, and not exuded. A like fallacy is at the root of the current, albeit modified, humoral doctrine of critical days: a patient is observed to be better after a copious sweat or diuresis or diarrhœa, and it is concluded that the evacuation is the cause of the improvement in the health, while, in truth, it is more probable it is only the effect, and therefore a sign of a general change for the better. I do not mean to say that a return to any healthy function in any organ is not beneficial generally; what I affirm is, that that return to healthy function—as, for example, the return of appetite and digestion of food—must itself have been preceded by some other change for the better, and is therefore a *result* of an improvement, as it, in its turn, may be the cause of further advances in health. So that any therapeutical theory founded upon the supposed curative power of these so-called critical or judicatory discharges, must of necessity have an element of error, and thereby confuse observation as to the effects of remedies and of the natural processes.

I am well aware how satisfactory it is to us all, whether student or Practitioner, to have some simple, easily intelligible, and at the same time apparently safe theory, to rest upon, when studying and treating the intricate phenomena of disease. But be assured all such theories will prove but broken reeds if relied upon exclusively; a well-formed habit of careful, accurate observation is a far surer source of satisfaction, for you thereby gain that knowledge of things as they are which constitutes solid experience, and which an adoption of theories, except for merely temporary purposes, inevitably vitiates. And if you bring to the bedside those habits of close observation which have already done so much for physical diagnosis, you will, in fact, do all that is needed for improved clinical research into the natural order of morbid changes, with a view to an estimate of the effects of remedies. Date—weigh—measure—number; this is the rule for true clinical inquiry—not easily to be followed, I readily admit, but still the rule.

There are equally mischievous theories as to the properties of drugs. We are told that drugs are diuretics and diaphoretics, and narcotics, and astringents, and antacids, until we get to believe that they have some peculiar property or quality, and we lose sight altogether of the fact that they must exercise very various influences on vital changes. Thus the sesquicarbonate of soda is found very useful in relieving those various uncomfortable sensations which the action of an acid stuff on the mucous membrane of the stomach causes, and, in consequence, has passed into such popular use that our very food is drugged with it. We are offered soda bread, soda cakes, "scones" made light with soda; beer, if hard, is made more injurious by soda; nay, I think some one has

invented a "baking powder" which has a soda salt as its basis. Yet carbonate of soda has on some persons, as I know, a pernicious influence, and perhaps, in many, it causes bad effects not recognised, because not looked for. A few years ago, I saw a curious example of the influence of these theories in practice. A lady, the wife of an eminent Practitioner, had a morbid condition of the nervous system, such that she could not sleep, for just as she was falling asleep she was attacked with peculiar convulsive movements. The only theory of causation I could make out was that some poisonous agent was at work, but nothing further, until a close inquiry into the dietetic habits of the patient elicited the fact that she held the conviction that she had an hereditary tendency to ossification of the arteries of the brain, and that acids would carry off the bone-earth. She therefore drank freely of sour French wines, and, to remedy the gastric disorders they induced, took equally freely the sesquicarbonate of soda. Having observed somewhat similar effects once before, I advised that the treatment should consist simply in drinking diluent fluids, and discontinuing the sour wines and the soda. The result was the entire relief of the morbid state. Again, a gentleman to whom I had recommended this drug told me that he always had peculiar sounds in his ears after taking it, and that they sometimes ended in what appeared to be a loud explosion in his head. Another patient can rarely take thirty or forty grains without feeling a pain in the back, exactly in the region of the kidney, and which organ is doubtless the seat of the pain. So that if he chanced to take large doses of the alkaline carbonates the result would probably be a serious renal affection. Other apparently simple drugs have also their action upon distant organs, and their morbid sequelæ. We hear of the *deaths* from chloroform, but rarely, if ever, of the diseases. Men will carry cakes of magnesia in their pockets as if it were a harmless antacid like chalk; but it acts upon the genito-urinary system of some persons in a way which shows that it is something more—possibly because it forms a soluble salt with some of the acids.

Thus, then, whether we look at practical therapeutics from the side of pathology or Materia Medica, we find the strongest grounds for close and careful observation and cautious conclusion.

ORIGINAL COMMUNICATIONS.

CLINICAL MIDWIFERY.

By FRANCIS H. RAMSBOTHAM, M.D.
Physician-Accoucheur to the London Hospital, etc.

(Continued from page 289.)

The following four cases of lingering labour under head presentation, in which instruments were not employed, occurred in my practice during the five years between January 1, 1840, and December 31, 1844:—

Lingering Labour.

Case 188.—On June 7, 1841, at 6 p.m., I was sent for by a Medical friend, to Mrs. S., Effra-road, Brixton, aged 30, in labour of her first child. The membranes broke on the night of the 5th; the first part of the labour had been very painful, and she had been very restless and unmanageable, screaming loudly through the whole night of the 6th and the whole day of the 6th. The child's head was just expelled when I arrived,—very putrid. The vagina and external parts were very rigid and dry, and there was a sensation of crepitation imparted by them to the finger, which made me apprehensive they would slough. I extracted the body of the fœtus with some difficulty, and in thirty minutes removed the placenta by introducing the hand into the uterus. It was partially adherent, and the adherent portion was covered on the maternal face with a thick layer of coagulable lymph. There was no hæmorrhage either before the placenta was taken away or after; as the bladder was distended, I emptied it by the catheter. In the evening she was free from pain, but the bladder had not acted. The catheter was again used, as also next morning. After that she passed water naturally for a few days, and then it began to run away involuntarily. She suffered no pain at all, but lost flesh rapidly, and without any very prominent symptoms, except those two just mentioned, she sank, and died on July 8.

N.B.—This is a case where chloroform might probably have been of service, both because for many hours the advantage gained was not at all equivalent to the suffering endured, and because chloroform would most likely have lessened the rigidity existing in the vagina and perineum by paralysing the muscular tissues which enter into the composition of those organs, as it does most of the other muscles of the body. It is probable also that this patient's life might have been saved if instruments had been had recourse to some hours before my arrival.

Lingering Labour.

Case 189.—On July 5, 1842, at 11 a.m., a Professional friend called me to Mrs. H., High-street, Shadwell, a stout young woman, in labour of her first child. The membranes broke about thirty hours before. She had been most unmanageable throughout her labour, screaming violently, and throwing herself about the bed. I found the head on the perineum, and it passed in half an hour; the child was alive; the placenta was soon expelled, and she recovered well.

Lingering Labour—Prolapsed Bladder.

Case 190.—On August 8, 1842, at 7 a.m., I was requested by a Professional friend to see Mrs. B., in the Borough, in labour of her fourth child. I had delivered her in her first labour by the forceps, there being a slightly contracted pelvis. The membranes broke about twenty-four hours before I saw her; the pains had been strong and active; my friend had attempted to deliver her by the forceps, but had not succeeded. I found the cavity of the pelvis almost entirely filled by a fluctuating tumour, and I had no difficulty in determining that it was the bladder prolapsed. The head could be felt distinctly above it, partly engaged in the brim. I removed the urine at once by the catheter, the tumour disappeared, and the head speedily took possession of the pelvic cavity. The child was born in half an hour—living; and she did well. It appeared quite evident to me that the prolapsed bladder was the cause of the head not descending, for, although it had remained stationary for some hours before my visit, it came down directly the urine was withdrawn.

Lingering Labour attended with powerful Uterine Action.

Case 191.—On November 7, 1842, at 8 a.m., I was sent for by a Medical friend to Mrs. A., New-road, Whitechapel, in labour of her first child. The first stage of labour went on very slowly; the membranes broke six hours before. I found the os uteri almost entirely dilated, the head passing through the brim, neither impacted nor arrested; and, although the uterus had been acting very powerfully ever since the membranes broke, there was not the least distress in the system. I recommended that no means should be taken to deliver then; and the child was expelled at 11 a.m. The patient made a good recovery. The anxious state of the friends was the sole cause of my being sent for.

Sudden Arrest of Labour Pains from Fright.

Case 192.—On October 18, 1841, at 9 p.m., a Medical friend called me to Mrs. C., Commercial-road, in labour of her second child. She was progressing exceedingly well through the first stage of labour, when, at 11 a.m., the membranes broke with a report as loud as to alarm every one in the patient's chamber at the time, and to be heard distinctly by my friend in the adjoining room. The patient was so frightened by it that the pains, which were strong and frequent before, ceased entirely; and when I arrived there had not been a single one since the occurrence. The os uteri was almost entirely dilated, and the head was partly occupying the pelvic cavity. I gave a dose of ergot immediately; this caused the uterus to resume its action in about ten minutes, and the woman was delivered of a live child in an hour; the placenta soon passed, and she did well.

N.B.—I never myself heard any noise when the membranes broke, as far as I can recollect, and I should not have credited this story had it not been for the effect upon the patient herself as well as for the unanimous testimony of three or four women who were in her room at the time, and of my friend who declared he heard it quite plainly, and that it sounded like a distant pistol-shot.

Dropsy of the Ovum.

Case 193.—On June 27, at 7.30 a.m., I was requested by a midwife to the Royal Maternity Charity to see Mrs. G., in Whitechapel, one of the patients, who had borne many children. She had been under my care for six or seven weeks with œdematous legs and an abdomen immensely

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distended. When I first saw her, she thought herself between seven and eight months advanced in pregnancy, but for some time I doubted that she was pregnant, in consequence of her enormous size, which was rapidly increasing, and the very evident abdominal fluctuation, which was as distinct as in most cases of ascites. However, on June 25, I made a vaginal examination. I then found the os uteri dilated to the size of a half-crown piece, and I could detect the head presenting. When I was sent for on the 27th, I found that she had been in labour all night, but that the pains had been slight and infrequent. I immediately ruptured the membranes, and we caught in basins more than a gallon of liquor amnii; besides this quantity, there was *in utero* about half a gallon more, which flowed away. The pains came on strongly after the escape of the liquor amnii, and she was delivered naturally at 9 a.m. The child was alive, but its abdomen was distended with water. Soon after it was born it became perfectly livid; it never cried, and died at 1 p.m. As the parents were of the Jewish persuasion, an examination was not permitted. It would have been interesting to know whether there was any fluid in the chest, and whether the foramen ovale was open or not. I have almost invariably found, when the fœtus has been hydrokephalic, or otherwise dropsical, that there has been an excessive quantity of liquor amnii, as also with akephalic fœtuses, which condition, indeed, has its origin in hydrokephalus.

Besides the three cases of face presentation which I have already detailed, one of which I delivered by the forceps, and two by craniotomy, two others occurred in my practice during these five years.

Face Presentation—Prolapsed Bladder.

Case 194.—On March 23, 1840, at 2 p.m., I was called by one of the Surgeons to the Royal Maternity Charity to Mrs. B., living in the Borough, in labour of her sixth child. I had delivered her of her last by the long forceps about two years before, in consequence of diminished space at the brim. The membranes broke at six the evening before, and the pains had been strong and frequent ever since. The head was almost entirely above the brim, the anterior fontanelle was presenting, the crown of the head was looking towards the left sacro-iliac symphysis, and the face necessarily directed towards the right groin. The bladder was distended and prolapsed, filling up the greatest part of the pelvic cavity, as a fluctuating tumour. I drew off the urine, and applied the long forceps over the face and posterior part of the head, without, however, much hope of being able to deliver with them. Nevertheless, I brought the head a little lower; but the chin came down, and then the case was converted into a complete face presentation. Fearing to use any more exertion than I had already made, as the uterus was acting well, I took off my instruments, and the head was expelled in an hour, the chin appearing under the symphysis pubis. The child was living. The placenta was soon expelled, and she recovered favourably.

Face Presentation.

Case 195.—On January 23, 1843, at 4 p.m., I was sent for to a patient of my own, at Leyton, in labour of her fourth child. There had been pains coming on every fifteen minutes since twelve the night before. I found the os uteri very high, soft, and thick, not dilated to a larger size than a six-penny piece. The pains continued, though not strong; and at 2 a.m. of the 24th the os uteri was the size of a crown, and quite thin. I then detected that the centre of the brow was presenting,—the middle indeed of the frontal suture. I could feel the nose quite distinctly, and the chin was towards the right sacro-iliac symphysis. I made some counter pressure, hoping to raise the face, and bring down the posterior part of the head; but in this I was foiled; for although, the membranes being unbroken, I succeeded in pushing up the face somewhat, it always returned to the same position as soon as the counter pressure was removed. I therefore desisted from any further efforts; for, knowing that the lady possessed a very roomy pelvis, I hoped the head would be expelled with the face foremost without any injurious exertion. The membranes broke at 3.15, and the head was born at 3.30, the chin under the pubis. The child was living, the placenta passed soon, and she made an excellent recovery.

N.B.—When the face comes down into the pelvis foremost, in whatever position it is placed as regards the pelvic brim, in its exit through the outlet I believe it invariably passes with the chin underneath the symphysis pubis, provided no interference either by instruments or otherwise is used. Dr. Meigs, indeed, gives an illustration, in which he shows the head passing with the chin sweeping the sacrum, and details a case in point; but he had brought the head into the pelvis by the forceps: and Dr. Lee also gives a cut of the same kind. I can only say that no such case ever came under my observation.

8, Portman-square.

(To be continued.)

NOTES ON CAUSES OF EARLY MORTALITY.

By J. WHITEHEAD, M.D.

No. V.

General Death-rate.

(Continued from page 340.)

As already intimated, the general rate of mortality for France is considerably higher than that for England. Such has been the case for many years past, even when the average duration of life in this country was far lower than it is at present. The following table exhibits the fatal results for 1856, the most favoured year, in this respect, of the last seven:—

General Death-rate at Different Ages in France for 1856.

	To 100 Births.		
	Males.	Females.	Total.
1st year . .	9·24	7·48	16·72
1 to 5 years . .	5·36	5·22	10·58
5 to 10 ,, . .	1·70	1·74	3·44
10 to 15 ,, . .	1·02	1·13	2·15
15 to 20 ,, . .	1·33	1·44	2·77
20 to 30 ,, . .	2·49	2·95	5·44
30 to 40 ,, . .	2·55	2·74	5·29
40 to 50 ,, . .	2·84	2·72	5·56
50 to 60 ,, . .	3·95	3·60	7·55
60 to 70 ,, . .	4·56	5·39	9·55
70 to 80 ,, . .	5·33	5·79	11·12
80 to 90 ,, . .	2·10	2·77	4·87
90 to 100 ,, and upwards . .	0·2	0·30	0·50
Total . . .	42·67	43·27	85·94 (a)

From the preceding table it appears that for every 100 births in France in 1856, there had occurred,—

At the age of 5 years . .	27·30	deaths
,, 20 ,, . .	35·66	,,
,, 50 ,, . .	51·95	,,
,, 90 ,, and upwards	85·94	,,

The comparative results of the last two tables (English and French) present two or three notable points of difference. Although the rate of mortality during the first five years of life is constantly higher in France than in England, yet is the value of life during nineteen-twentieths of this term considerably and as constantly lower in the latter than the former country. The excess in the French table for the first 5 years is occasioned by a remarkable preponderance of deaths during the first three months, which, in this instance, amounts to 2·61, but in many others to 3 or 4 per cent.; while, for the rest of this period—from three months to five years—it is below the English estimate to the amount of 1·82, and in some years considerably more,—in 1857, 2·40.

These relations for 1856 are exhibited in the subjoined statement:—

	Deaths to 100 births.		
	First 3 mos.	3 mos to 5 yrs.	Total to 5 yrs.
France . . .	19·26	1 ·04	27·30
England . . .	7·65	18 ·6	26·51

Hence the conclusion, that while in England a more favourable condition is secured for the infant during the first three months, owing, in all probability, as already suggested, to the more frequent practice of breast-nursing during this early period, the credit of a more judiciously-adapted hygiène for young children must be accorded to the French.

(a) This item in the official return stands at 87·06, that is, 1·12 higher than is here represented. The error, if on my part, is due to a deficiency in the decimal numbers of the component items, which might possibly be rectified by re-calculation, but it is equally likely to be on the other side.

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In England it is too much the custom to feed infants, immediately after weaning, even so early as eight or ten months, with foods which are suitable only for labouring men. For instance, in the families of successful artisans and wealthy shopkeepers, one commonly sees the young children, down to that on its mother's lap, seated at the dinner-table, partaking of each article which the parents themselves use. They are especially supplied, not only at dinner, but at other times, with concentrated soups, strong beef-tea, eggs, fish, bacon, tea, coffee, and rich cakes and puddings, with any other hard and savoury article that may be in vogue, not excepting a taste of beer or other strong beverage,—a species of diet assimilable only by those of ripe age who are able to take vigorous physical exercise. The offspring of the needy peasant, who has nothing to spare for them but bread-and-milk and oatmeal food, grow up vigorously healthy and robust, and are consequently often inconveniently numerous; they are not seldom seen pursuing their ordinary play, in and out of doors, while experiencing an attack of some of the much-dreaded children's ailments, which generally visit them but lightly; while those of the other class are thinned in number at every such visitation. These observations do not, of course, apply to the educated classes generally; although, amongst them, there are exceptions. They are more especially applicable to those who possess a greater abundance of means than of knowledge or judgment in their application.

It is remarkable that the rate of infant mortality for the Seine department is lower than the general estimate, and still lower for Paris than for the rest of its department. This may possibly be accounted for by the fact that a considerable number of the children born in Paris are sent out beyond its precincts for nursing, and doubtless, also, the abundance of resources available in the capital for the treatment of children in times of sickness must be taken into this account.

The general death-rate for Paris and the department of the Seine is considerably below that of the whole country, the average mortality for 1856 and 1857 being 75·53, or 10·41 per cent. below that for the whole of France. In a commercial point of view, the value of life of the Parisian citizen is at least 10 per cent. higher than that of the rural inhabitant. This result tells favourably for a city whose population is, perhaps, more densely packed than that of any other large city of Europe (b), and is probably due to the improved sanitary condition of the capital, effected under the auspices of its present enlightened ruler.

With this one exception, namely, the more prosperous condition of the infant from the age of three months to that of five years, the French death-rate exceeds the English at every subsequent stage, being higher at fifteen years than the English is at twenty, and as high at fifty as the English at sixty-two. It arrives at 50 per cent. in France at the age of forty-eight, while in England not until upwards of sixty.

The wide and persisting difference in the relative healthfulness, as indicated by the respective death-rates of two countries so nearly alike in geographical position, the staple products of the soil, the industrial pursuits of the people, and in other points, may appear somewhat paradoxical. In most of these respects France would seem to be more favourably circumstanced than England. Its climate has a geniality far surpassing that of this island. Its alternations of temperature, albeit more widely varying at some seasons, are not nearly so frequent or so sudden, and the atmosphere, of the towns especially, is much purer.

With a limited exception, France lies within the more moderate portion of the temperate zone, between the isothermal lines of 50° and 60°, and consequently with a mean annual temperature, the difference of which, at its north and south extremities, does not exceed 10° or 12°. The extreme climatic severities are experienced in the N.W., where the prevalence of winds from that direction, loaded with the exhalations of a wide expanse of seas, produces a superfluity of moisture, with mists and heavy falls of rain, representing the type of the English climate generally; and in the opposite, the S.E. quarter, where, on the contrary, a sultry, stifling heat sometimes prevails, giving origin at certain seasons to malignant fevers. But setting these aside, more than four-fifths of the surface remains under an atmosphere remarkable, especially in the central districts, for salubrity, serenity, and brightness (c).

The labouring population of large towns in France are not usually so crowded in their dwellings as the corresponding class in England. For, although a far greater number of people are found occupying a given extent of surface, yet, as the houses are generally much loftier, the space of ground covered by an English cottage of two stories high with four apartments, being made, in French towns, by reason of additional stories, to afford three or four times as many rooms, the accommodation as to breathing space is consequently much more ample. The upper stories of such dwellings are far healthier than those below, especially than those of the ground floor and that next above it, from being elevated beyond the reach of the surface stratum of the atmosphere, which during the prevalence of still weather, in some seasons continuing through a considerable period, remains stagnant and for a long time unrenewed, and at all times loaded with noxious effluvia.

French towns possess, moreover, the advantage of large open spaces planted with trees and well-tended flower gardens, especially provided for the recreation of the populace, and the working classes have generally more leisure for the enjoyment of these privileges. In garrison towns also an additional attraction to these resorts is afforded by the presence of military bands at stated hours in the evening, a graceful and highly appreciated tribute which it has become a part of the duty of these professionals to render in times of peace. The omission of this kind of gratification in England is doubtless a mistake which the municipal authorities have it in their power to rectify. Open-air performances of good music, gratuitously afforded, might prove a powerful inducement to the cultivation of this humanising accomplishment among the working classes at their own homes, instead of resorting to places of intemperance, where demoralisation and waste of means are inevitable.

In regard to habits of cleanliness and temperance, in their influence upon health and longevity, it may be remarked that inattention to the practice of these moral virtues can have had but little share in elevating the rate of mortality in France so much above that in England; for the French of all classes are not less observant of personal neatness in every sense, nor less alive to its sanitary importance; and they are decidedly more temperate in their habits than the English.

Peculiarity of race and quality of diet may not unreasonably be assumed to have had an influence in determining the disparity; but the latter, in my belief, much more largely so than the former. Indeed, it is tolerably manifest that the duration of life is not necessarily lower among the Celts than the Anglo-Saxons, as may be appositely illustrated by an example to be found amongst our own population. The Welch, for instance, as a race, are not less purely Celtic than the French, and yet the duration of life presents as high a value throughout the Welch counties as in the other English districts.

Diet and exercise have probably a more potent agency. A sufficient supply of wholesome food of a sustaining quality, and a daily well-apportioned measure of labour—whether pursued as a means of earning a livelihood or as pleasurable exercise—contribute much more largely to the development and maintenance of a healthy and enduring physique than either climate, or the particular nature of occupation, or personal cleanliness, or race, or the mere abstinence from vice in any shape, except intemperance. To the possession and temperate use of the first of these, and the due performance of the other, is man chiefly indebted for his efficiency as a citizen during the longest period allotted to him to live.

The diet of the English peasant, though generally more simple, is everywhere more substantial and of better quality than is found elsewhere; and this, together with the tonic nature of the atmosphere, which, dense though it be, is always more or less of marine character, even in the most inland situations, and especially so during the prevalence of high winds, which are never long absent, predisposing to vigorous open-air exercise. This is sufficiently exemplified in the nature of the prevailing sports and pastimes, spontaneously adopted, and therefore national, all or most of them being of a kind calculated to strengthen and invigorate the physical tone, and to fortify the system against the assaults of disease.

(b) Before the annexation of the Banlieu in 1860, Paris contained 1,174,346 inhabitants, crowded into a space of 6804 acres, or 140 to the acre; and with its present boundaries, now numbering 1,825,943 inhabitants, there are about 80 to the acre; while London has a little less than 36 to the acre.—*Ten Years of Imperialism in France*, p. 52. Impressions of a "Flaneur." 1862.

(c) "Imperial Gazetteer," Art. France.

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REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

CASES OF PURPURA AND SCURVY.

PURPURA is frequently ranked amongst cutaneous affections as a distinct disease, but, as Dr. Watson remarks, incorrectly, even in the "loose sense in which that epithet is sometimes applied to affections which are really *beneath* the skin, but visible through it," as,—"the spots are not peculiar to the skin nor to the subcutaneous tissues, but are found occasionally upon all the internal surfaces also, and within the substance of the several viscera." It is often used to imply "a diseased condition of the blood, whereby it exudes through the textures." It is a hæmorrhage, and may occur in any part of the body, and is a symptom of many diseases, and of diseases very different. It occurs in small-pox, scarlet fever, typhus, pyæmia, and in the form of splenic disease associated with enlarged lymphatic glands. It is met with, too, in artificial poisoning, as by arsenic, as well as in the so called blood-poisoning of disease. Still, there is a disease to which the epithet purpura may be applied with convenience, if not with scientific accuracy, although, no doubt, in time it will be more convenient to substitute some name expressive of its cause, or of the conditions of the blood which give rise to it. Dr. Wilks writes—"Purpura is a term denoting a disease in which the cause of the affection is not evident, and therefore we adopt it as denoting a substantive affection, originating probably in the blood itself. The same condition, however, or a similar one, we know may arise from various causes,—as from improper food inducing scurvy; or in fevers of all kinds, when the rashes becomes petechial; in artificial poisoning, as by arsenic, where ecchymoses have been met with on the endocardium and other parts; also in visceral affections, renal, hepatic, or splenic, where a purpura is not uncommon." Perhaps the condition of the blood which gives rise to the hæmorrhage may be pretty much the same in all these affections. We shall now give the details of several cases, which show most clearly that purpura is often but one symptom in various disorders, and scarcely in itself sufficiently an entity even for nosologists. The case under the care of Dr. Barker, however, is one of those to which it would be difficult to give for the present a better name.

Of purpura in connexion with pyæmia we have in this Journal, July 27, 1861, reported a well-marked instance. The first symptom was purpurous spots, and then glossitis. The lungs and other viscera showed evidences of pyæmia, the starting-point of which was doubtless suppuration of the kidney and bladder from old calculous disease. In reference to this case, Dr. Wilks says, there being no history of scarlatina or other exanthem, we must consider the case as one of pyæmia commencing in the bladder and kidney, the purpura being but a symptom.

In reference to purpura as a symptom of poisoning by certain substances, we may refer to a discussion at the Pathological Society, reported in this Journal January 18, 1862. Dr. Wilks said that in all the cases of poisoning by arsenic which he had examined after death, he had found ecchymosis of the endocardium. Dr. Harley remarked that the poison of the African puff adder produced ecchymosis extensively under the skin, in the muscles, under the periosteum, and, in fact, in nearly every part of the body. We heard Mr. Hulke remark, at the Royal London Ophthalmic Hospital, that he had under his care in the Crimea a man who nearly died from hæmorrhage from a small scratch on the cheek. The patient had salivated himself profusely for some illness or other, and it was to this, and not probably to any permanent "hæmorrhagic diathesis," that the severe bleeding was due. Although there was no purpura in this case, it is worth noting as an instance of poisoning of the blood allowing of great hæmorrhage on slight mechanical injury. These and other similar facts tend to show that purpura, although it occurs in many diseases, depends probably on some common condition of the blood.

Scurvy is a disease somewhat allied to purpura, but there are important differences, at least clinically. These differences are well set forth by Dr. Ward in his remarks on the cases under his care, reported at page 373.

As to the direct cause of the local phenomena in scurvy and purpura, it has been shown by Dr. Richardson that a super-alkaline condition of the blood, producing abnormal fluidity, and a tendency in the corpuscles to disintegrate, is present in many diseases, as typhoid fever, and it is possible that to this may be due also the almost universal purpura occurring in some fevers and in pyæmia. He thinks that typhoid symptoms may be set up by the absorption into the blood of poisons generated in the body, as for instance in gangrenous abscesses. In proof, as one link in the chain, he found that in a patient who had fœtid breath from a cavity in the lungs the fœtor was due to sulphide of ammonium, which, by experiment on animals, he found capable of producing symptoms of blood-poisoning. A case of scurvy lately under the care of Dr. Johnson, in King's College Hospital, seems to favour this view. The patient, a woman, who had a cavity in the lung, in spite of good diet, with plenty of vegetables, had purpurous spots. Dr. Johnson "believed that a morbid state of the blood was kept up by the horribly fœtid gases which continually escaped from a cavity in the lungs." In none of the cases of purpura or scurvy we are about to relate was there any evidence of blood poisoning from so evident a source; but in purpura in pyæmia, to which we have already alluded, it may be on symptoms of an over-alkaline condition of the blood from some form of ammonia, "one of that numerous family of volatile alkaline principles coming from the death of the organic world, of which the common ammonia forms but a type." (Richardson.)

Dr. Richardson has shown that the fixed alkalies may produce symptoms analogous to those of ammonia. He says "the possible influence of common salt in the production of scurvy is not difficult to understand, when the effect of the chlorides of potassium, sodium, and ammonia in rendering the blood fluid is fully comprehended."

GUY'S HOSPITAL.

CASE OF VARIOLA FATAL ON THE FIFTH DAY, WITH PURPURA AND HÆMATURIA—DIAGNOSIS FROM SCARLATINA AND MEASLES DIFFICULT—CLINICAL REMARKS.

(Under the care of Dr. GULL.)

[Reported by Mr. FREDERICK LONG.]

THIS case caused a good deal of discussion in reference to its diagnosis. The roseola variolosa coming on so soon after the onset of the premonitory fever suggested to the gentleman who first saw her that it was a case of scarlatina. It was not until the begining of the third day, *i.e.*, Sunday night, that the features began more distinctly to swell, and on Monday at midday there was a difference of opinion as to the character of the rash, it being supposed by some to be a case of rubeola. Dr. Gull, under whose care the case was, declined to give an opinion at this time. From the duration of the premonitory fever, he considered it would be one of variola, though the crescentic disposition of the papules and their tint gave rise to some doubt. He took occasion, however, to remark at the bedside, that in such cases the surest ground of diagnosis is from the duration and character of the premonitory fever, before the rash appears. The case, he remarked, was plainly not one of scarlet fever, the hyperæmia of the skin (roseola) being attended in this case by general swelling, giving a rounded character to the features, and a puffy appearance to the face, and he much insisted on this being the distinctive characteristic of roseola preceding the rash of confluent small-pox. It clearly then differs from the scarlatinal rash, as the latter is a simple hyperæmia. The occurrence of the rash in this case at so early a period was contrary to what occurs in measles, the premonitory fever being almost universally at least four days. Dr. Gull also remarked that the occurrence of purpura and hæmaturia more often complicates the onset of small-pox than it does the onset of scarlet fever or measles, and would in itself, in a doubtful case be of value in diagnosis. Nor is there either in measles or scarlet fever a severe aching pain in the loins or the tendency to vomit which usually characterise the premonitory fever of small-pox. These things duly considered, Dr. Gull is of opinion, would lead to a safer diagnosis in a different case than the appearance of the rash. As we have seen, there was an actual difference of opinion as to the rash,

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but duration of the premonitory fever is one of the most definite facts in the history of exanthematous fevers.

Elizabeth G., aged 26, admitted March 15, 1863, into the clinical ward, under the care of Dr. Gull. She was a single woman, and had been employed at the bar of a public-house. When a year old was inoculated (sic.) for small-pox, and a large, thick cicatrix was found on the left arm. At the age of ten she had an attack of measles, since which she has had very good health. During the last week or so she has been suffering from a bad cold, but has had no cough; except this, she was perfectly well up to Friday, the 13th, when, in the morning, she had an attack of vomiting, but with this she never complained of any cold or shivering. Towards evening she began to suffer severe aching pains across the loins, which continued all the next day, but she did not keep her bed.

On Saturday, the 14th, her friends just noticed a reddening and a general swelling of her face and arms, and she then complained of a sense of itching over the whole surface. Slight cough came on.

On the 15th, the redness was not more intense, but the cough was a little worse, and the face continued puffy. In the afternoon she was brought to the Hospital, and was taken in as a case of scarlet fever. At night she was seen by Mr. Stocker, who ordered—Pulv. jalap. c. hydr., ℈j.; statim haust. effervescens, 4tis hôris. There was no history of contagion, but in the same house there was "gastric fever."

The reporter of the case continues:—

16th.—At first sight she has the aspect of measles; the face is puffy, and covered with a bright roseolous rash; over the rest of the body an eruption has shown itself to-day. On the hands and fore-arms, which are swollen and of a deep, dull red colour, the epidermis is raised, as if from a number of vesicles in an early stage, some larger than others, and closely aggregated together; but on the chest and abdomen there is a distinct mottled rash, with here and there a few papules and vesicles scattered about; at the lower part of the abdomen, about the groins and upper part of the thighs, the papules are numerous, and at their bases purpura. Lower down the legs, especially by the knees, the eruption is more like that on the chest, and has the crescentic distribution and tint of measles. There is extravasation of blood beneath the conjunctivæ of both eyes, which water slightly. There is a patch of purpura on the lower lip, which is swollen and dry. Tongue soft, moist, and pale; in the centre are three or four ecchymoses raising the papillæ from the surface, and on looking at the fauces, raised spots of purpura are seen scattered over the soft palate, uvula, and tonsils, and the mucous membrane is rather injected. Has a dry, hacking cough, but no expectoration. Feels the throat rather sore. On listening to the heart, a slight systolic bruit is heard over the aortic valves. Urine is high-coloured, from a large admixture of blood; sp. gr. 1018. Pulse 120. Was seen by Dr. Gull for the first time, who refused to give any decided opinion as to the nature of the case, and ordered—℞ Ammon. sesquicarb., gr. iv.; inf. serpentariæ, ℥iss., 4tis hôris.

17th.—Slept last night, and this morning says she feels very well. There is no such nervous prostration as corresponded to the severity of her illness, but she lies on her side, and moves her limbs about quite well, and even got out of bed once with as much strength as if nothing were the matter. No drowsiness, and her voice is quite strong. There is nothing more definite about the face, which is still roseolous; the eyelids are more puffy, and the extravasation is much increased in the left eye, producing almost a state of chemosis. The vesicles on the arms seem rather more distinct, but none show any depression. The mottled eruption on the chest and abdomen is now more papular, and above the left breast is a single vesicle with a well-marked central depression; others can be faintly made out. On the legs the papules are very distinct, and the thighs are thickly covered, and all more or less purpuric at the bases; the summits of some are vesicular; spots of purpura on the lips, which bleed; no headache; cough dry and hacking; the hæmaturia continues profusely; pulse 128, compressible.

18th.—The face continues uniformly puffy and roseolous, without any trace of distinct papular eruption upon it; eyelids more swollen; lips bleed; expectorates a quantity of bloody mucus with the cough. The eruption about the body is still very obscure, though here and there is a vesicle showing a central depression. The surface of the skin is almost universally purpurous, especially about the thighs; on the roof of the mouth are some vesicles very distinct; urine loaded with blood; no distinct malæna, but the stools are rather of a slate colour, probably due to blood. Takes milk and bitter beer. Pulse 136, weak.

19th.—The face is very much swollen, and blood oozes everywhere from the surface, giving a most frightful appearance; the eyelids are closed and black from extravasation; she is *perfectly sensible*, puts out her tongue, and answers quite clearly when spoken to. There is no stupor, and she does not seem to be sensible of her prostration; lies chiefly on her side. The whole body, especially the legs, are quite purpuric, and have a horrible look; what vesicles can be made out are filled with a bloody serum. Blood is constantly escaping from the vagina, saturating the bed-clothes, but none comes from the rectum; cough easier; tongue flabby, whitish; pulse 140, feeble. As the nurse was holding her up to take some milk and eggs, which she drank greedily, she suddenly fell back dead. A few hours before death the skin over the hands and fore-arms had become white, and had the appearance somewhat of one enormous bleb.

DOUBTFUL ERUPTION WITH PURPURA (SMALL-POX?)—HÆMATEMESIS AND MALÆNA—DEATH NEXT DAY.

A boy, 14 years of age, was admitted into Guy's Hospital on December 24. He had pain in the back, and said that he had received a blow on it. He was therefore taken into the Surgical Ward. He appeared to be very ill, and very soon an eruption was observed, somewhat like that of scarlet fever, but there was no marked sore throat. Towards evening the rash became purpuric in character. In the night he vomited blood, and passed some by the bowels. On the following morning, December 25, he died.

Autopsy Thirty-two Hours After Death.—The body was that of a boy who had died of acute disease. On the chest and upper part of the body a purpuric or petechial rash was present. The spots were very small, as if corresponding to some rash. The brain was healthy, with the exception of some purpuric spots in parts of the medullary substance. Spots of ecchymosis were present on the surface of the lungs, and a few on the pericardium, and they were observed on various parts of the peritoneum. The stomach was highly congested, or rather of a purple colour, partly from congestion and partly from staining; the stomach also contained some fluid blood. The small intestine was healthy, large, of a dark colour like the stomach, and contained blood. The kidneys were congested, but apparently healthy. The bladder contained a little urine, which was not albuminous.

Dr. Wilks, from whose post-mortem records we extract this case, adds the following remarks:—

This case was involved in obscurity. There was no proof that the blow was a severe one. The boy evidently died of purpura, but whether this was only one symptom, or whether (as in the other case we have detailed) small-pox, was not very evident. Mr. Stocker, who saw him during life, rather inclined to the latter opinion. A few days afterwards a man who lay in the next bed in the ward was seized with small-pox.

THE LONDON FEVER HOSPITAL.

HÆMORRHAGE INTO THE URINARY PASSAGES, FROM A CASE OF SCARLET FEVER AND PURPURA—DEATH—AUTOPSY.

(Under the care of Dr. MURCHISON.)

John B., aged 19, belonging to the Shoe Brigade, died on January 18, 1863, thirteen hours after his admission into the London Fever Hospital. The patient had been ill four days before he was brought to the Hospital, and the Medical man who saw him pronounced him to be suffering from scarlet fever. On admission there was no sore throat, and the tongue was pale, the papillæ not being enlarged; the whole of the trunk was covered with a dusky purple, slightly elevated eruption, mixed up with numerous petechiæ and purpura spots. There were also numerous purpura spots on the extremities. The pulse was 120, and small. Viscid mucus, stained with blood, run from the mouth, and petechial spots could be seen on the palate. Blood was also passed from the urethra and rectum. Thirteen hours after admission the patient was found dead lying in a pool of blood, which had passed from the bowels and urethra.

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At the autopsy blood was found extravasated in almost every organ of the body. The lower part of the ileum and the whole of the large intestine contained a quantity of dark-coloured blood. There were small extravasations in the subpleural and sub-peritoneal tissues, and extensive extravasations in the areolar tissue surrounding both kidneys and ureters. The infundibula and calices of both kidneys and both ureters were distended with firmly coagulated blood, and a large coagulum was also found in the bladder. In the submucous tissue of the bladder were numerous extravasations, from the size of a pin's head up to that of a sixpence; some of them considerably elevated above the surface. Similar ecchymoses of a smaller size were seen in the submucous tissue of the ureters and infundibula of the kidneys, but no laceration of the superimposed membrane could anywhere be discovered. The kidneys were large and smooth; the right weighing six ounces, and the left five. The cortical tissue was hypertrophied and pale, and the uriniferous tubes were loaded with epithelium. The left kidney contained a cyst about the size of a cherry, communicating with one of the calices; and a calculus, the size of a hazel-nut, was found in the bladder. With the exception of extravasations, the remaining organs were healthy.

It is worthy of note, in reference to the pathology of purpura, that well-formed red blood corpuscles were found in the extravasated blood.

ST. THOMAS'S HOSPITAL.

PURPURA OCCURRING IN A WOMAN OVER-WORKED AND UNDERFED.

(Case under the care of Dr. BARKER.)

ELIZABETH G., aged 35, a married woman, without children, was admitted November 20. She said that she had been ailing for the last two years, during which time she had had cough and general weakness. She said that she had worked very hard, remaining up until one and two o'clock in the morning at washing, and also that she had eaten but very little, on account of her appetite being very bad.

When admitted, she had on the legs, above the ankles, and on the right thigh, a number of spots of a dull red colour, about the size of a millet-seed; some were distinct, others ran together, forming a patch the size of a fourpenny-piece. They were not elevated above the skin, and did not disappear on pressure. There was also effusion of blood into both the upper eyelids. There was swelling and puffiness, much resembling rheumatism, in the right hand and in both elbows, and much pain in these parts. She vomited after taking food or medicine, a light-brown fluid being thrown up. The bowels were costive, the tongue was coated with a thick, creamy fur, and her appetite was very bad. Pulse 65, very feeble.

Dr. Barker ordered her to take:—℞ Quinæ disulph., gr.j; tinct. card. comp. ʒj.; mist. camph. ℥j.; ter. die.

Under this treatment, and a gradually improving diet, together with the quiet and good hygienic arrangements of the hospital, the patient quickly recovered, and was discharged well on December 15.

SEAMEN'S HOSPITAL, "DREADNOUGHT."

CASES OF SCURVY—CLINICAL REMARKS.

(Communicated by Dr. WARD.)

Scurvy, although extinguished from the Navy, still frequent in the Mercantile Marine—Diagnosis of Scurvy and Purpura—Treatment of Scurvy.

THE following cases, although not reported at any length, very well illustrate the conditions under which scurvy is developed, its characteristic symptoms, and the features in which it differs from another disease of the blood, in some respects allied to it, namely, purpura:—

Scurvy, for some years extinguished in the navy, save under exceptional and unavoidable circumstances, still occurs, far more frequently than is generally supposed, in the mercantile marine. From seventy to eighty cases are annually admitted on board the *Dreadnought*, and these form but a portion of all that are brought into the port of London. In justice, however, to London shipowners, it must be stated that nearly all the cases admitted into the Hospital have come from ships belonging to owners in the north of England or in Scotland. The ships have generally come from off long voyages, and have sailed from different ports in India, China, and Australia, badly furnished in regard to essential dietetic arrangements; so that a long continuance upon salt provisions, without vegetables, decomposed or deficient lime-juice, and bad drinking-water, has developed in some or all of the crew that state of nutrition and blood which results in the disease under consideration.

Scurvy has been regarded by some pathologists as identical with purpura, and in all classified arrangements of disease is placed side by side with it; exhibiting in common a tendency to hæmorrhage beneath the skin and from the mucous surfaces. These affections in other respects differ. The hæmorrhagic spots on the skin have a less vivid colour in scurvy than in purpura; the hæmorrhagic tendency in the latter affection being often of an active character, and associated with a plethoric state of system. The swollen, spongy state of gums, the contracted, painful joints, periosteal swellings, and brawny state of the fleshy parts of the lower extremities which characterise scurvy, are wanting in purpura. The aspect also of the sufferer from the former affection tells of a far more damaged state of blood than is met with in the latter. The diseases also differ in their exciting causes, and very often, too, in the appropriate treatment—remedies that give relief in some forms of purpura being such as would prove fatal, or at any rate aggravate the symptoms, in scurvy.

The treatment adopted at the *Dreadnought* for the cure of scurvy consists in the free use of lime-juice, vegetable soups, potatoes, beef, bread, and stimulus where there is much prostration. In severe cases the recumbent position is strictly enjoined, as the principal risk is fatal syncope from suddenly giving the heart more work than it can accomplish. Chlorate of potash is certainly useful for the relief of the gums, but does not seem to have any effect upon the other symptoms. Under the above plan the patients get rapidly and certainly well.

Case 1.—Scurvy coming on during a Long Voyage from Bad Lime-juice and Bad Water—Great Prostration—Examination of the Blood by the Microscope—Treatment—Recovery.

John K., aged 22, was admitted into the *Dreadnought*, under the care of Dr. Ward, on October 15. He had just arrived in a Glasgow ship from Singapore, and had been four months and a-half on the passage. Prior to leaving Singapore, he had been under treatment for rheumatism. For the last six weeks he had been suffering from scurvy. The crew had had lime-juice served out once a week, but it was very bad, having the taste of rotten apples. They had been living entirely upon salt provisions, without any vegetables, and the water was very bad.

On admission he presented the following symptoms:—The complexion was very characteristic, being of a uniform pale, earthy, and dusky hue, with clear conjunctivæ and bright expression of eyes. He was much emaciated, and the breath emitted what may be called the scorbutic odour; the right knee was thickened, and somewhat contracted from fibrinous effusion, and there was marked induration of the ankles and calves of both legs. There were also a few hæmorrhagic, purpurous spots scattered over the thighs and legs. The gums were spongy, but not to any marked degree. The following general symptoms were also recorded during the first few days after admission:—Tongue very pale, clean, and smooth; bowels open once daily, with healthy character of stools; urine, specific gravity 1022, slightly acid, free from deposit, and also from albumen, the pulse was weak and compressible, and varied in frequency from 100 to 140; the skin dry during the day, freely perspiring at night; he had but very little sleep, owing to the pain; once or twice there was slight hæmorrhage from the mouth and also per anum.

The treatment of the case was as follows:—On his admission, in consequence of his great prostration, he was ordered an ounce of mistura vini Gallici every two hours. Strong beef-tea, milk, and three ounces of lime-juice daily were also ordered, and a mixture of fifteen grains of chlorate of potash in an ounce of decoction of bark, three times a day. When his gums were well enough to enable him to masticate with comfort, he was put upon the ordinary diet of the Hospital, which consists of fresh meat, with vegetable soups, and a fair supply of potatoes and greens.

October 26.—He reports himself as having slept well for the last two or three nights, although last night he had sweated very profusely. His bowels are acting once in the

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twenty-four hours, and his urine is free and clear. He is gaining flesh and strength, his complexion is healthier, the fibrinous effusion in the knee and legs is becoming rapidly absorbed, and the hæmorrhagic spots are getting fainter. From this time he continued to improve, and was discharged convalescent on November 7.

The blood was examined under the microscope once or twice soon after the patient's admission, and with the following result:—The red corpuscles cohered together into irregularly-shaped masses; some of the corpuscles had a shrivelled appearance, the others did not fringe by exposure at the edges; the white corpuscles varied in size, and seemed to be more numerous than usual.

The subjects of the following cases, reported by Mr. Leach, belonged to a Liverpool ship, which arrived in the Thames in the early part of January, 1863, having made a passage from Tuticorin and Bombay of 127 days. The meat and other provisions served to the crew were all good of their kind; the lime-juice is said to have been good, regularly given and taken; but, in spite of the facilities for obtaining good water at Bombay, the supply for the passage home was taken from Tuticorin, where the quality of the water is always notoriously bad.

Cases 2 and 3.—Scurvy occurring from want of Good Water, Provisions and Lime-juice being good—Extreme Prostration—Treatment—Recovery.

B. Q., aged 19, ordinary seaman, admitted January 3, 1863, under the care of Dr. Ward. He had been confined to his berth during the last thirty-five days of the passage. He was hoisted on to the deck of the *Dreadnought* in a state of extreme prostration, with feeble pulse, anxious aspect, and sunken, hollow eyes. The gums were in some places so much inflamed, and so spongy, as almost to hide the teeth. There were purpurous spots about the anus, thighs, and legs, with much fibrinous deposit about the tendons of, and generally around, the left popliteal space. There were two or three small bed-sores on the back, and the skin over most of the bony prominences was threatening to break. The bowels had been confined for two or three days. He was placed on a water-bed, and ordered lime-juice, strong beef-tea, and six ounces of wine daily, with the following mixture:—℞ Potassæ chloratis, ʒss.; decoct. cinchonæ, ℥j., ter. die.

6th.—The treatment was continued up to this day, with occasional opiates to relieve the pain and restlessness at night. The quantity of wine was now increased to eight ounces, and a diet of beef and potatoes substituted for the beef-tea. There was a great amount of swelling and tenderness in the left groin, which was relieved by hot fomentations and poultices. The bowels also required frequent assistance.

10th.—Still weak, but takes animal food well; the pain and stiffness of joints greatly diminished. Wine increased to 12 oz.

14th.—Placed on full diet to-day with a pint of porter. He continued to convalesce, though slowly, without an untoward symptom, and was allowed to get up on the 24th. He was discharged on February 6, in order that country air might complete the cure.

B. D., able seaman, aged 54, admitted also on January 3, 1863. Was attacked with scurvy seventy-seven days after the commencement of the passage home, but did not give up work for some time after.

Symptoms on Admission.—Great general prostration; spongy gums, and hæmorrhagic spots about the lower limbs; complains of great pain and stiffness in the lower joints. Heart's action feeble. Has had some diarrhœa during the last eight days. His aspect is dusky and anæmic, denoting a damaged condition of blood. Strong beef-tea, lime-juice, and six ounces of wine daily were ordered, and a mixture of bark and chlorate of potash.

4th.—The diarrhœa continuing, five minims of tincture of opium were added to each dose of the mixture.

6th.—From this day he improved quickly; was placed on ordinary, and afterwards on full diet, and was discharged cured on the 20th of the same month.

Both these patients spoke independently as to the good quality of the lime-juice, and both had previously enjoyed good health. In six other cases admitted at about the same time the passages had been long, the quality of the meat, lime-juice, and water was bad, and, with one exception, the patients had come from north country ships.

ST. BARTHOLOMEW'S HOSPITAL.

SEVERE CASE OF SCURVY—DEATH—AUTOPSY.

(Under the care of Dr. JEAFFRESON.)

Alfred C., aged 16, a sailor, was admitted April 17, 1862, with purpurous spots on the legs and ankles, with some swelling of the joints, and slight pain and tenderness. His gums were slightly swollen and vascular. Urine, specific gravity 1024, containing a small quantity of albumen. There was a systolic murmur heard all over the cardiac region, loudest at the apex, and heard posteriorly. The second sound was loud. He had been in the Navy since July, 1860, and had been on the sick-list at intervals almost ever since. He had lived on meat and biscuit, but very few vegetables. He could not say when the purpura appeared, but had had several attacks of pain and swelling of his joints. He knew nothing of his family history. He was ordered a tablespoonful of lemon-juice three times a-day, and on April 25 a grain of acetic extract of colchicum every night.

28th.—The pain and swelling of the knees and ankles has increased, the spots remaining as before. There is cough and some mucous expectoration. ℞ Potassæ bicarb., gr. xv.; acidi hydrocyanici, dil., ♏j., ⏲tis horis.

May 5.—Better in every respect. No spots, no swelling of joints; knees painful at night. ℞ Ferri ammon. citrat., gr. v., ter. die.

12th.—He has been up, and the purpura has returned. ℞ Potass. chlorat., gr. xv., ter. die.

From this time he continued much in the same condition, the purpura disappearing when he was in bed and reappearing on his getting up, till August 2, when he was attacked with erysipelas of the face. This passed off, but he had an increase of pain and swelling of limbs, dyspnœa, and extreme exhaustion, and died August 17.

Autopsy on August 18, by Dr. Andrews.—Body poorly nourished; lower extremities œdematous; spots of purpura on trunk and limbs. Heart weighed eleven and a-half ounces; right cavities filled with soft, watery fibrinous clots; both greatly dilated. Walls of right ventricle somewhat increased in thickness; walls of left ventricle also somewhat hypertrophied. Mitral valve scarcely, if at all, thickened, but along the free edge of the auricular surface was a dense row of long, filiform vegetations, some as much as an inch in length, projecting into the cavity of the ventricle. The chordæ tendineæ were somewhat matted together and short, the muscular portion of the papillæ coming close up to the valve. Soft globular vegetations were attached to the ventricular aspect of the aortic valves. There were slight patches of atheroma in the first two inches of the aorta. Under the microscope, a few of the fibres showed slight fatty degeneration, but the transverse structure was nowhere entirely lost. Liver: capsule normal, surface mottled with dark red patches; its section was nutmeggy. Kidneys: capsules separate readily, leaving surface smooth, intensely congested, and ecchymosed. On section, cortex much diminished in amount, especially the peripheral portion; slightly granular. Other organs normal.

ROYAL INSTITUTION OF GREAT BRITAIN.—At the General Monthly Meeting, Monday, April 6, 1863, the Rev. J. Barlow, Esq., M.A., F.R.S., Vice-President, in the chair, Leveson Francis Vernon Harcourt, Esq., B.A., William Harvey, Esq., F.R.C.S.L., Joseph Norman Lockyer, Esq., F.R.A.S., Paul Julius Reuter, Esq., Octavius Sturges, Esq., Frederick Thompson, Esq., and Robert Wigram, Esq., were elected Members of the Royal Institution. Colonel Dickens, Abraham Pope, Esq., John R. Russell, M.D., and John Rivington, Esq., were admitted Members of the Royal Institution. The presents received since the last meeting were laid on the table, and the thanks of the members returned for the same.

POISONING BALLET-DANCERS.—A few days since the dancers in a new *ballet* performed at Hamburg, who represented the water-nymphs, were clothed in a green costume. These dresses first nearly cost the lives of those who made them, and then of the girls who wore them. So large was the quantity of arsenic contained in the fabric, that some of the dancers fell ill, and others exhibited unequivocal signs of poisoning even during the representation.

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Medical Times and Gazette.

SATURDAY, APRIL 11.

BROMWICH *v.* WATERS.

It has been our duty on many occasions of late to comment on actions brought against Medical men accused of misconduct with female patients. In such actions, the naked testimony of any woman whatever may cause (as Mr. Baron Bramwell observed of the case of Bromwich *v.* Waters), a Physician, a married man, the father of grown-up children, to be put on trial, and to have his character, position, fortune, nay, even his very life dependent on his being able to rebut by accidental and indirect testimony facts directly and positively sworn to by the complainant. The whole features, statements, details, and complexion of such cases cannot, then, be too closely scrutinised by the Medical journalist. In another column will be found an abridged report of the trial from the notes of a Professional gentleman who was in court the whole time. Here we will offer a commentary on the facts, and on the conduct and testimony of the chief persons concerned, in doing which we would record our admiration at the conduct of Mr. Baron Bramwell, whose charge to the jury consisted of the most lucid and unmistakeable vindication of the defendant, and through whose firmness and good sense it was that the jury were prevented from yielding to the weakness and mental confusion of one of their number, and so frustrating justice by being discharged without giving a verdict.

Of the plaintiff, Miss Bromwich, we are willing to agree with the judge in believing that she brought the action under a firm conviction of the innocence of her servant, although she fully deserved the censure which his Lordship passed upon her for her levity and unfairness in allowing her servant's illegitimate child to be baptised in Dr. Waters' name.

Yet there is a singularity in the circumstance that a middle-aged lady, living in a country town, whose counsel remarked that she was of no great means, and that the expenses of a lawsuit must be seriously inconvenient to her,—to say nothing of the worry and turmoil,—should think of going to the enormous expense of such an action as this. It would interest us all very much if all the motives and advice, legal and otherwise, which prompted a step so momentous could be fully known and analysed.

As for the girl Whalley, her whole statement bears, to our eyes, distinct internal evidence of the entire innocence of Dr. Waters. There were, to begin with, symptoms of uterine irritation, followed by very decided hysteria. It is the misfortune of our Profession, in cases like the present, that the jury neither can know beforehand nor be taught adequately, how much of physical and moral aberration may be involved in that simple term hysteria. According to her own statement, Dr. Waters used her coarsely and indecently when he first examined her; often made use of disgusting expressions, and once exposed himself indecently; and yet for all this, she never complained to any one, but continued her visits to his house without the protection of any other woman as a companion and witness. Moreover, as the judge said, during all the twelve months during which these alleged occurrences took place

"Nothing happened—they did not hear of his taking liberties with her, even according to her own testimony; and he would again remark that if Dr. Waters was desirous of getting possession of her person, how strange it was for him to recommend her to have a husband, which would diminish his own chances. If he had got his trousers open at one time, it was remarkable that they heard of no blandishments—no kissing, no feeling of other parts of her person, as her bosom, or her throat, or doing anything to excite her passions. On the other hand, Mr. Serjeant Shee had replied that if her story were false, she would have said he had done these things. But this created a greater difficulty for the plaintiff. If he had made such indecent overtures, as a decent woman she ought never to have gone again—she ought to have told her mistress. On the contrary, she did go from time to time. Was it not a strange thing that, if the defendant began this course, and persevered in it for a year, that she could only impute to him one single act of indelicacy—his trousers being open; and two or three trivial remarks, such as 'You want a husband;' 'Supposing I were your husband.' From that they were asked to infer that he wanted to debauch her. But it was very curious that, during the whole of that time, he, to use a vulgar expression, never 'tried it on.'"

At last, as she swore, on Saturday, November 9, she arrived at his house faint and ill; she took from his hands a glass of some liquid like wine, immediately after which she became insensible, continued so for two or three hours, and woke up, finding herself sick upon the hearth-rug in a different room, and with an obscure recollection that part of her dress had been opened. She went home in a cab. From this day she dates her pregnancy. As the learned judge well put it:—

"The woman's statement was this, 'I never had connexion with any man, or had anything done to me which could by any possibility have made me the mother of that child, except when I was in a state of insensibility in company with the defendant; therefore he must be the father.' This statement, it was obvious, depended entirely upon the woman's own oath. The charge was substantially one of rape; and it had been said by learned judges who lived long ago, that if there was one charge more easy to make and more difficult to refute than another it was that of rape. Most crimes left a trace behind them; if a murder had been committed, there was the dead body; if a forgery, there was the document and the man who swore it was not his handwriting; if a sheep had been stolen, it would be found elsewhere. There would be a physical indication of a wrong done. But not so in a case of rape. In such a case the man's guilt or innocence depended solely upon the inclination of the woman's mind, which could leave no trace behind. Those remarks applied with more force to the present case, because in it there was insensibility."

There are just two circumstances, and no more, to corroborate Mary Whalley's statement. She had been insensible before, therefore might be again; and her whole conduct, up to the time of her delivery, seemed that of an innocent woman,—courting examination, and apparently quite unconscious of her situation. But in every substantial point which admitted of contradiction her statements were negatived by many independent witnesses; and we call especial attention to these points:—

1. There is the moral contradiction involved in her account of Dr. Waters' indecent conduct, and in her continuing to visit him.

2. She swore that the alleged outrage took place on November 9. It was proved by the oaths of four witnesses that it could not have been on the 9th, but that it must have been on November 30.

3. She swore that she received the wine from the hands of Dr. Waters; that she immediately became insensible; and that

she was wakened up between two and three hours afterwards in another room. On the contrary, Dr. Waters' servants swore that they gave her the wine; that she went into the other room before she had the wine, and that she was not insensible. As the learned judge put it—

"According to Whalley's account, she went into the study on the day she went there, and the Doctor at once gave her a glass of wine; stupefaction immediately followed, and continued two hours, and when she came to herself she was in another room. The interview being identified by the cab, it was immaterial for this purpose whether it occurred on the 9th or the 30th of November, because both the servants contradicted her as to this. They stated that it was not true that she was insensible in the study; it was not true she continued insensible for two hours; and they had sworn that she was in the little room sitting on a chair before the fire, and that she was in a sensible and coherent condition the whole of the time. This was a contradiction which did not depend on the day. Were it the 9th, or the 30th, or any Saturday, it was not true that she had the wine in the study, or that she was unconscious two hours, because she remained in the little room with her shawl and bonnet on in a state of perfect sensibility, and conversing.

4. She swore to her own good conduct and integrity. At least three if not four witness swore to acts of indecent familiarity with men, and Dr. Waters swore that she was not a virgin.

5. She was delivered of a child—which the plaintiff's counsel admitted to be "full-grown"—on July 26, 1862. According to the plaintiff's case, which dates her "insensibility" on November 9, this full-grown child was born on the 259th day after impregnation; but according to the irrefragable testimony of half-a-dozen independent witnesses, which dates the alleged occurrence on the 30th, it was on the 238th day. A statement which the learned Judge called a "clumsy invention."

In the next place we will turn to Dr. Waters, the defendant. It is, we believe, indisputable that he is a Physician of unblemished character and great scientific attainments, a grey-headed man, the father of a large family. Baron Bramwell said:—

"Dr. Waters was a married man, and had arrived at a tolerably sedate time of life. But an old judge had said, 'There is no wisdom below the girdle,' and he would quote from an old author, who had truthfully said, 'A man will leave an angel's feast to prey on garbage.' But they would hope it was not common. In the box they had had the defendant's oath—that would carry the case very little further, but they had seen the demeanour of both parties, which they must judge of. Mr. Welsby had said that the woman's conduct in the box had displayed a want of modesty, and an extraordinary acquaintance with Medical terms. On the other hand, there was no fault found by Mr. Serjeant Shee with the manner in which Dr. Waters gave his evidence, and it was a trying thing for a man thus to undergo the cross-examination of Mr. Serjeant Shee, for if a man had any untruth in him it must come out. If they thought Dr. Waters had stood that cross-examination well, it was very much in his favour. . . . If Mary Whalley had been a particularly inviting person, one could have easily understood that the defendant might have fallen a prey to her attractions. If he were a generally lascivious man, he might have caught at the opportunity. But was she an attractive person? They had seen her in the box, and they were to judge of that. Her complaint, too, would be anything but stimulating to a man who had to deal with her in the way the defendant had. Then the Doctor had never been charged with such an offence as this before, and up to this time, as acknowledged by Mr. Serjeant Shee, his reputation had been unimpugned. He had conducted himself as a gentleman of education, and had occupied an honourable position in Society."

Passing on from the probabilities of the case, we would next call attention to the utter absence of all proof that Dr. Waters was alone with the complainant at all on the day of the alleged outrage; and to the positive testimony of two of the servants, that they saw the complainant frequently during the time she was in Dr. Waters' house; that she was not insensible; that he was busily occupied in selling a pony, and could not have been alone with her, unless they had observed it. Really, there never was a case less supported and more contradicted by positive evidence.

But, as honest commentators, we are next bound to inquire, for the instruction and warning of our brethren,—supposing there was no misconduct,—were there any indiscretions, any want of prudence in Dr. Waters that could have laid him open to this charge? Alas! yes. He was guilty of giving gratuitous advice; of attempting not merely to relieve the bodily illness of a poor wretch, but also of sparing her feelings, of admitting her to his house, and giving her the privileges of a private patient, without fee or reward. Verily, here is a warning to any one against similar offences, unless he has a cool thousand at his banker's to conduct a defence against an action on an hysteric patient.

Dr. Waters deposed that the patient on one occasion behaved to him with offensive familiarity. It is to be regretted that, after this, he allowed her to repeat her visits.

But he may be open to the charge of imprudence, or of mistaken practice in using the speculum at all. On this point, generally, we re-echo the sentiments of the best members of our Profession when we reaffirm the statements made by our Reviewer in another column as to the possible abuse of that instrument. But, as it is there laid down, no Medical attendant is justified in neglecting to ascertain the state of the uterus in any case of obstinate illness, even though of clearly hysteric origin, provided that the health is seriously compromised; and if there be local disease, the Physician must determine whether there be just grounds for local treatment. Moreover, there is just one point which makes all the difference. Was Mary Whalley a maid? If, as Dr. Waters has sworn, she were not, all the moral and sentimental objections to local treatment are withdrawn, and Dr. Waters may fairly rely, as Dr. Ferguson so well puts it, on his character, position, and scientific attainments to justify his treatment in the eyes of society and of the Profession. We have the best private information that Dr. Waters is not a "speculum man," and not given to the over-use of that instrument in his practice.

This brings us to the last part of the case, in which we shall consider the conduct of the three Professional witnesses, Drs. Lee, Ramsbotham, and Taylor. We take the liberty of referring to articles in the *Medical Times and Gazette* for 1862, vol. i., on the case of Rich v. Pierpoint, in which it is shown that the attendance of witnesses to give *opinions* is quite voluntary, and that they may refuse if they please; and in which we denounce that most monstrous and uncharitable doctrine, that because A. and B. may differ in treatment, therefore A. is justified in coming into a court of justice and swearing that B.'s treatment is wrong. We again point to the emphatic *dictum* of Justice Erle, that it is "a pity that one Medical man should be ready to come forward and condemn the treatment of a brother in the Profession, and say that *they* would have done *this* or *that*, when probably, had they been in a position to judge of the case from the first, they would have done no better." Every man who does so is putting a rod into the hands of the public by which himself may be scourged.

As for Dr. Taylor's evidence, it was to the indisputable fact that impregnation may take place during unconsciousness. This was no injury to Dr. Waters; whilst, in repudiating the notion that any poison could have produced sudden unconsciousness followed by sudden recovery at the end of three hours, Dr. Taylor's evidence was on the side of truth and justice.

Drs. Lee and Ramsbotham (if we are rightly advised) were compelled to attend, because they had to depose to matters of fact, viz., to the state in which they found the cervix uteri of Mary Whalley when they examined her in the early part of 1863. They deserve great credit also for having strongly

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advised the plaintiff's attorneys against bringing the action into court. But, for all this, Dr. Waters' friends complain most bitterly of their presence in court, and affirm that their evidence on a matter of *opinion* and not of *fact* was of material service to the plaintiff; we are therefore compelled to see what that evidence was, what its drift was, and how far it was justified.

The *fact* was that Mary Whalley was examined by these gentlemen in January (Dr. Lee said that he was two hours so engaged on her cervix uteri!), and that no mark of *cicatrix* could be discovered. A very simple matter of fact. But see the momentous chain of inferences! If there were no cicatrix, it is pretended that there was never an ulcer. Dr. Lee is reported to have deposed that no ulceration had ever existed at all; and Dr. Ramsbotham, that had there been an ulcer there would have been a cicatrix. Therefore it is argued the use of the speculum and caustic was unnecessary and wrong; and from this the further inference would be drawn by the plaintiff's counsel, that the use was merely colourable, prompted by base motives, viz., in order to indulge in filthy propensities, and give the defendant the opportunity of gratifying his base lusts.

As to the possible existence of "superficial ulceration," or excoriation, which may be benefited by nitrate of silver, and heal without a scar, we believe that most of our readers will not question it. They will therefore question the right of Drs. Lee and Ramsbotham to give such a dictum as we have ascribed to them.

In the next place, they may refer to Dr. Lee's own book, published in 1853, and there see the identical treatment advised; and they likewise will see from Dr. Ramsbotham's evidence a vindication of the same practice, under certain circumstances.

The whole Profession agrees that there are cases in which the "speculum and caustic" are justified, and others in which they are not. We claim for Dr. Waters the right to judge to which class Mary Whalley's case belonged. We do not say whether he was right or wrong, but we affirm that mistaken practice, on a point where opinions differ, is not to be visited as a crime. Baron Bramwell said:—

"But was it made out that the treatment was improper? They had had Medical evidence in favour of the plaintiff's case. There was Dr. Lee, who was not altogether a satisfactory witness, although, doubtless, a very learned man. There was Dr. Ramsbotham, who gave his evidence in a very satisfactory manner, and who also expressed his opinion that the treatment was improper. There was Dr. Taylor, to whom the learned Judge paid a very high compliment, who would scarcely express an opinion on that part of the case, and in fact declined to say whether the treatment was proper or not, he having no practice as an accoucheur. Against their testimony, they had on the other side Dr. Simpson, of whom Mr. Serjeant Shee had spoken in the most eulogistic terms, and who no doubt was one of the most eminent men in the world in that department of his profession; Dr. Keiller, who gave his evidence in a most satisfactory manner; also, they had had called before them Mr. Brittain and Dr. Fyfe—all four gentlemen of position and intelligence—who had told them that the treatment exercised by Dr. Waters was not improper, but, on the contrary, was perfectly correct. One observation on this point might be fairly made; that these four gentlemen would have done precisely the same thing as Dr. Waters had done, under the same circumstances; that is to say, they would have treated the case in the same way. *They might have been wrong, but it would only amount to a mistake*, and Dr. Waters might merely have fallen into the same Medical error, and in that case his improper treatment would be no assistance to the plaintiff's case. And here it might fairly be said that the recommendation of a husband had turned out to be a correct prophecy."

In conclusion, we can only say that we heartily regret the evidence given by Drs. Lee and Ramsbotham. We would speak of neither without the sincerest respect; we would fain believe that they can represent themselves as misled, or drawn in against their will, but justice to our whole Professional brethren—any one of whom may be the victim of an ungrateful and unprincipled patient—forces us to say that we wish, before consenting to attend as witnesses, they had put themselves in the defendant's position, and imagined the long and fearful agony of such a lawsuit.

ARMY MEDICAL DEPARTMENT.

The authorities now find themselves very much in the position of the uninitiated who took the Magician's Wand and found it easy enough to raise up spirits, but impossible to manage or dispel them afterwards.

At the time of the appearance of the Warrant of 1858 the Medical Department was contented! Now the case is altered, and we do not think this new Warrant likely to dispel the cloud of discontent which a more judicious and honest course a few years ago would have prevented altogether. (a)

It is all very well for the Secretary for War—knowing little and caring less about the Department—to usher in this Warrant with the promising words "that it would satisfy all parties."

The Profession may congratulate itself that the authorities have been forced into conceding something. A Surgeon will henceforth take his relative rank, and the advantages attending it, according to the date of his commission. We cannot believe, however, that all the recommendations of the late commission are embodied in this concession, or that it will prove sufficient to attract the promised redundancy of candidates. No earlier retirement has been granted, nor any means taken to ensure a more reasonable rate of promotion, or to overcome the dead-lock at present existing.

The candidate for a Medical appointment in Her Majesty's army will still find himself an Assistant-Surgeon until he attains his step in rank as Surgeon Major; and this very long service in a subordinate position will be still further increased by his being placed upon half-pay whenever he may be invalided from a foreign station.

However, the official hook has been supplied with a tentative bait, and we shall see whether it takes!

The Department can scarcely be blamed for having learned the lessons taught them by the Horse Guards; it is quite possible that something in the shape of a confidential Circular may have emanated to interpret the meaning and nullify the effect of the present meagre concessions.

We still hold that further and more radical changes are required in the Department before the best men can be tempted to enter it.

Military authorities and journalists alike seem to ignore the fact that Medical Science and the Medical Profession are quite different from what they were a few years ago. The course of education has been widely extended, and rendered far more expensive than formerly, and a student of the present day will do well to calculate what prospects and remuneration the service offers him in return.

For our part, we advise him yet to hesitate before he commits himself for life to the tender mercies of Government officials.

THE WEEK.

MEDICAL PROVIDENT ASSOCIATION.

We wish to call special attention to a letter from Mr. R. B. Carter, of Stroud, Gloucestershire, which we publish in another part of the journal. The subject of the letter is the establishment of a Medical Provident Society, to provide support for its members during sickness. If such an Association be formed and supported by the whole mass of the profession, the wealthy who may not be likely ever to require its aid, as well as those of scantier means, it must be a source of

(a) The loss to the service by the resignation of its best men is lamentable. We had to regret the resignation of Dr. Frank, and now we hear Mr. Buckland retires!!

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incalculable good. We would suggest that a Mutual Protection Fund, to secure Medical men against the ruinous expenses of unjust lawsuits incurred in the practice of their profession, should be included in the scheme.

THE SECOND CHATHAM TRAGEDY.

That great crimes occur in clusters has been often observed. Our forefathers accounted for moral epidemics by planetary, or other occult but all-pervading influence. We ascribe them to imitation, an instinct shared by man with the brutes which approach him nearest, and most powerful in man when the higher faculties of reason and volition which distinguish him from those brutes are least educated and exercised. The second horrible child murder which has taken place at Chatham is clearly an imitation of the first. A soldier, of previously good character, and mild, inoffensive disposition, because he is piqued by a reprimand from a sergeant, makes up his mind to "get rid of the world." But his wife, with whom he has lived on the best terms, in case of his death, would have to provide for their child. He therefore kills the child with the intention of being hanged himself. Without expressing any opinion on the case before it has been tried, we may state that the morbid train of thought thus indulged by a man of previously good character strongly suggests insanity. And this probability of insanity is supported first by the fact that the man's brother committed suicide by hanging, and that the murderer appears to have been labouring under a dominant idea that a similar fate awaited him; and secondly, by the circumstance that after a total abstinence for six months he had drank freely during the week before the murder. We do hope, in the interests of humanity, that Alfred Holden's mental condition will be carefully investigated by a Physician of acknowledged skill in mental affections before his case is submitted to a jury.

WEISS *v.* MACKENZIE.

This was an action by the plaintiff, a Medical agent in London, to recover commission upon the introduction of the defendant as a partner to Mr. Margetson, a Surgeon, practising in George-street, Hanover-square. The plaintiff had been employed by Mr. Margetson to find him a partner, and Mr. Margetson had already paid him commission; but the plaintiff claimed to be entitled, under the terms of his printed circular—which he said he had shown and explained to the defendant—to receive commission from the defendant also. The defendant, on the other hand, stated that he never employed the plaintiff to find him a partner, and only called at his office in consequence of seeing the plaintiff's advertisement of the partnership in the *Lancet*, and denied that he ever saw the plaintiff's circular until the plaintiff sent one to him after the partnership had been completed. The jury found their verdict for the defendant. In this case the defendant was fortunate enough to avoid being saddled with any alleged contract between him and the plaintiff. We have reason to believe that it is often otherwise. The agents, knowing that they have no chance of recovering against a person who never employed them, no doubt endeavour if possible to get both parties on their books before they bring the arrangement to a conclusion. It is probably not uncommon to issue an advertisement on behalf of an imaginary party, for the sake of getting the names of persons seeking such an opening as that held out, and then obtaining, as it were, retainers from them, in order, when the occasion offers, to pocket a commission for introducing them to what they desire. The frequency of such actions shows that it is advisable either to abstain altogether from answering agents' advertisements, or to guard in every way against what might be construed into taking the agent into employ, or contracting to remunerate him if that be not the intention of the applicant.

REPORT OF THE TRIAL, BROMWICH *v.* WATERS.

(*From a Correspondent.*)

A cause was tried at Chester last week, occupying the whole of Thursday and Friday, before Baron Bramwell, not only of the greatest possible importance to the highly respectable Physician whose character was arraigned, but also to every individual member of the Medical Profession—Bromwich *v.* Waters. It was ostensibly to assess damages for loss of service, but it really implicated the honour and Professional conduct of the gentleman we have named. The charge against him was as follows:—The plaintiff, Caroline Bromwich, is an elderly maiden lady, who with her sister, also a maiden lady, near her own age, reside at Boughton, in Chester. They had a servant, Mary Whalley, now 28 years old, who had been in their service fifteen or sixteen years, who had nursed both themselves and a brother in his last illness, in whom they implicitly relied, and to whom they were deeply attached. Dr. Waters had attended their brother, and occasionally themselves; and Mary Whalley applied to him for advice, at the suggestion of the plaintiff, in February, 1860, for vomiting, and other symptoms of gastric derangement. Getting no better, she was taken by her mistress to Llandudno, and thence to the Isle of Man, and returned to Boughton in July, 1860. Being still ill, she again applied to Dr. Waters, who saw her in bed at her mistress's house, recommended her to go into the Infirmary, where she would be under his care; and, on her evincing great repugnance to do so, told her she might come to see him at his own house, for which he would charge her nothing, as the expense of medicines would be as much as she could afford. She used always to go to him on a Saturday. On the first Saturday in December, 1860, he made a vaginal examination, told her she had ulcers in the womb, and on the second Saturday applied lunar caustic, and this he continued to do at intervals of a week or fortnight, according to her account, for more than a year; according to his, five or six times, certainly not ten. In April, 1861, her mistress took her to the Isle of Man again, where she became the subject of aggravated hysteria. In August she again saw Dr. Waters at his own house, having often seen him at her mistress's during the summer, as he was attending Miss E. Bromwich under illness. No examination by the speculum was made in her mistress's house; but, on her resuming her visits to him, he began again to apply the caustic, and continued to do so until Saturday, November 9, 1861. On that day, according to her account, she walked to Dr. Waters' house, rather more than a mile, having been very ill all the morning, and taken nothing all day but one cup of tea. On seeing her so faint when she arrived, he gave her a glass of wine, almost immediately after drinking which she became insensible, remained so for more than two hours, and was unconscious to everything until between five and six o'clock, when she "was awoke by the Doctor," lying in another room, and found she had been sick over the hearth-rug. He got a cab for her, and she went home in it. After this he saw her at her mistress's once or twice, and two or three times at his own house, but did not use the speculum. Her menses had appeared regularly until November, 1861, after which they ceased. The last appearance having been the last week in October, and one or two days in November. On April 2 her mistress took her to Malvern, having previously consulted Dr. Waters as to how she should treat her, and whether she should call in Medical advice there. This latter he dissuaded her from doing, saying it would be of no use. At this time Whalley's person began to enlarge, and according to her account, Dr. Waters, after an examination of the abdomen, told her her liver was enlarged, that she must take wormwood tea, walk up the Malvern Hills as much as she could, and that she would be better when her menstruation returned.

On May 22, Dr. Gully, of Malvern, was consulted, and pronounced the case one of tumour of the womb. The patient went through all the formula of the water treatment, and on July 26, after evidently a good many hours' suffering from labour-pains, a boy was born. It was acknowledged on all hands that the girl conducted herself as though she had no idea she was pregnant, nor that the pains were those of labour until after the child's birth. Dr. Gully was sent for when she was under expulsive pains; his assistant, Dr. Badgley,

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came, but the child was born before his arrival. She alleged that she must have been taken advantage of by Dr. Waters, while she was insensible at his house for more than two hours on November 9. She did not charge Dr. Waters with any other indecent conduct, except once, when she being on her back, and he striding across the lower end of the couch on which she lay, while the speculum was being used, a knock was heard at the study door; she then hastily removed the handkerchief with which she was accustomed to cover her face while under examination, and saw his trousers unbuttoned, and his shirt protruding. He turned from her, adjusted his dress, and opened the door, and another time when he pressed heavily upon her while making his examination. But she swore to his having made use of the following expressions at different times:—"There are only two things to be done, either I must apply caustic, or you must have a husband." "You want something doing to you." "You want a husband; now how should I do for your husband?" "You have a beautiful colour, and if you could see yourself in a glass, you would think yourself fit to be a bride." She also swore that he requested her not to tell her mistress he had used caustic, "as that was a Surgeon's business." All this, as might be supposed, was denied by the defendant, Dr. Waters, except that he recommended to her marriage, which he acknowledged, as well as telling the same to Miss Bromwich, her mistress, and that he did do this Miss Bromwich corroborates.

To sustain her story, Miss Bromwich was called, but she could only of course speak to the girl's general state of health, the journeys undertaken, and dates.

Dr. Badgley pronounced the child well developed.

Dr. Robert Lee had examined her most carefully with the speculum twice, and found the uterus perfectly healthy; he could detect no signs of previous ulceration, which must be evident had ulceration ever existed; he thought the speculum had been grossly abused.

Cross-examined by Mr. Welsby: The speculum has been very largely employed in exploring diseases of the uterus all over the world.

Mr. Welsby: Would the use of the speculum be proper in inflammation of the uterus?—Witness: I don't understand you.

Mr. Welsby: Inflammation of the orifice of the uterus?—Witness: I don't understand that.

Mr. Welsby: Do you understand by it irritation of the uterus?—Witness: That is a term with no meaning. (Laughter.)

Mr. Welsby: Do you understand by it superficial ulceration?—Witness: No, I do not.

Mr. Welsby (holding up a book): Are you the author of "Clinical Reports of Ovarian and Uterine Diseases?"—Witness: Yes.

Mr. Welsby read an extract from this volume, which stated that the speculum in exploration of diseases of the uterus was much employed on the continent.(a)

The witness said he had published two books. There was another publication.

Mr. Welsby: Do not the words inflammation of the orifice convey to your mind any specific idea?—Witness: No; very different.

Mr. Welsby: What information do you wish to convey to the Profession, that in cases of inflammation of the orifice it is important to use the speculum?—Witness: It is an expression of opinion generally received on the Continent, and if you ask my opinion at the present moment, I will tell you that ulceration is very rarely met with. That book was written a long time ago.

Mr. Welsby: In 1853. Am I to understand that it is unintelligible from the fact that it was written ten years ago? How old are you now?—Witness: I am ten years older than I was then. (Laughter.)

Mr. Welsby: What is your age?—Witness: You would have some difficulty in finding it out. (Renewed laughter.)

Mr. Welsby: Would I. I ask you again, how old are you?—Witness: I don't know.

Mr. Welsby: You won't tell me?—Witness: I cannot tell you.

Mr. Welsby: How long is it since you began your studies?—Witness: My whole life has been devoted to it.

Mr. Welsby: How do you know that? This is not a farce we are now acting, nor a comedy. Just tell me honestly, like a gentleman, how long you are experienced in these diseases.—Witness: These diseases have occupied my attention since I was a student in Edinburgh.

Mr. Welsby: In what year?—Witness: Twenty years ago I studied everything that could be found in Edinburgh.

Mr. Welsby: When did your practice begin?—Witness: I studied on the continent for four years.

Mr. Welsby: In what year did you begin to practise? Why do you not give me a direct answer?—Witness: I was two years with Prince Woronzoff in Russia, when I returned to London, and I have not got a holiday since 1827.

Mr. Welsby: You have got one now, at all events.—Witness: I am bound to say that I have not known an idle hour in my life; and if I am ignorant it is not my fault.

Dr. Ramsbotham had examined her with the finger and the speculum on February 6 last. The uterus was then perfectly healthy, there was no cicatrix at the os uteri, which there would have been had there ever been present an ulcer that had destroyed the substance of the uterus extensively; but if the ulcer had been merely superficial, only destroying the mucous membrane, no trace might be left at such a distance of time, because that membrane possesses such restorative powers in itself, that all marks of previous ulceration on it alone are soon effaced. To require so many applications of caustic for so long a time would generally imply that the substance of the mouth and neck was deeply implicated, because the superficial ulceration mostly gives way to six or eight applications at the farthest; but this superficial ulceration has a great tendency to recur, so that a return of the complaint may require a return to the caustic, and thus the same kind of treatment off and on may be necessary for many months. The speculum is most extensively used in this country and all over the world. He himself never uses it in the case of an unmarried woman of good character, unless it has previously been employed by another Practitioner in the same case. From the description Whalley gave of the attack she had on November 9, 1861, he should call it catalepic hysteria, or hysterical coma. Very distinguished authors both in England, France, and Germany, have expressed their conviction that a woman might be impregnated while in a state of insensibility, and he was of the same opinion. He thought if attacks of hysteria such as Whalley experienced could be distinctly referred to the use of the speculum or the application of caustic, that the application should be discontinued as soon as they appeared. Patients with ulcerated os uteri are generally separated from their husbands while under treatment. The recommendation of marriage in hysteria, where no ulceration exists, would be proper, inasmuch as connubial intercourse often cures hysterical complaints.

Dr. Alfred Swayne Taylor knew that caustic was applied to the os uteri by Physicians as well as Surgeons, and it could not be considered wholly a Surgeon's business. He agreed with Dr. Ramsbotham respecting the character of the attacks to which Whalley became subject, and his remarks about marriage in cases of hysteria. He knew of no drug which would produce perfect insensibility immediately it was swallowed, and continue to affect the person in the same way for two or three hours, its effects after that time passing off. Any drug with such power would produce death.

Dr. Waters, as above said, denied using such expressions as were attributed to him; denied his trousers were ever un-

(a) Extract from Dr. R. Lee on "Ovarian and Uterine Diseases." Churchill. 1853.

"An examination of the physical condition of the uterus in unmarried women, either with or without the speculum, I have always refused to make, even when requested to do so, unless pain, severe, and almost constant, in the region of the uterus, existed; leucorrhœa or hæmorrhage which did not yield to treatment; and where the symptoms did not make me strongly suspect the presence of some displacement or organic disease. In unmarried women, whatever their rank or condition in life may be, the integrity of their structure should not be destroyed with the speculum, nor their modesty wounded by an examination of any kind, *without a necessity* for such a proceeding being clearly shown. Even in married women it is unjustifiable, on the grounds of propriety and morality, to institute an examination of any sort unless the symptoms warrant the supposition that the uterus is displaced, or is in a morbid condition, the nature of which cannot be determined by the symptoms alone."—P. 135.

"The os uteri, . . . and its *red*, swollen, hypertrophied granular state, often indicates morbid conditions of the constitution of the glands, mucous membrane, and walls of the uterus, on the nature, diagnosis, and treatment of which little or no information is derived from the use of the speculum. In these cases I have known leeches, scarifications, caustic, and the speculum employed upon a great scale; and sometimes, I admit, (if the reports of patients are always to be trusted to) with apparent temporary relief. *Scarcely rubbing the os uteri with lunar caustic through the speculum, a few times at long intervals, has appeared to effect all the good which such local treatment can accomplish.*"—P. 137.

N.B.—The italics are our own.—Ed.

buttoned in Whalley's presence; was sure from the first examination he made that she was not a virgin; had certainly not used the caustic more than ten times; considered the girl of a lascivious temperament; and on the first occasion of his seeing her at his own house, she put her arms round him when he was examining with his ear the action of the heart, and drew him towards her in a caressing manner. He then told her that was wrong, he had a family, and nothing improper must take place between them. This she was called afterwards to refute.

Besides Dr. Waters' denial, the defence was based upon two circumstances,—the first, that the day on which Whalley got a glass of wine and was sick was not November 9, but the 30th, on which day the Doctor, though at home, could not have been with her for many minutes together, because he was selling a pony in the paddock at some distance from the house; the second, that the girl was of a disreputable character, used to talk about her sweethearts, etc., and was often seen kissing a certain Joe Smith, and other men.

Joe Smith was called, and swore he never kissed her except once, ten years ago, and that was for a wager.

One of her fellow-servants, indeed, deposed to her very often having seen her straddling with her legs across a boy who was kept in the house, of 14 years old, while he was sitting in a chair, so that her naked legs could be seen, and he had his breeches down at the same time. This always happened in the kitchen, and at dinner time. She never told her mistress of the misconduct.

Mr. Serjeant Shee, however, drew out of this witness that she had a great hatred to Mary Whalley.

The boy was examined, who swore it was false.

Mr. Brittain, Dr. Fyfe, and Professor Simpson, of Edinburgh, all concurred that the treatment pursued by Dr. Waters was correct; and Dr. Simpson told the court that a child born three weeks before its time would not be fully developed.

The jury, after six hours' deliberation, found a verdict for the defendant. This announcement was received outside the Court with tremendous cheering.

On the next day, Saturday, an action for slander was brought by Dr. Waters against Miss Bromwich. The plaintiff's case having been proved, it was proposed by the defendant that a juror should be withdrawn, upon which his Lordship remarked, "This case was most satisfactorily investigated yesterday, and if I were the plaintiff's counsel I certainly would not permit him to consent to the withdrawal of a juror." A verdict (by consent) was then taken for the plaintiff, damages 40s. and costs. His Lordship remarked, "*I think it is most correct for the defendant to express her satisfaction with the jury's decision yesterday, in which I most heartily and entirely concur.*"

In another action against a Mrs. Arthur Potts, a juror was withdrawn.

For the honour of the Profession, as well as for his sake, we rejoice that this trial has resulted in the acquittal of Dr. Waters, but we sincerely wish the advice given early in the case by Dr. Robert Lee, but especially by Dr. Ramsbotham, that it should be withdrawn, and not allowed to proceed, had been taken; much scandal would have been avoided, and a degree of perhaps very natural, but certainly unseemly, excitement in which the city of Chester and its neighbourhood have been kept for many weeks, would have been prevented.

We must say, however, that nothing could have been fairer or more temperate than the speech of Mr. Serjeant Shee (who was specially retained for the plaintiff), and that the evidence of both Dr. Ramsbotham and Dr. Taylor told for, rather than against, the defendant, which, indeed, the plaintiff's counsel and solicitor knew well they would do long before they were put into the witness-box.

*** The Editor of the *Chester Courant* writes:—

"It will be seen from the above trials that the jury in the seduction case were unanimous. The delay in giving the verdict arose from the fact, that originally there was one dissentient. Eleven of the jury were in favour of the defendant (Dr. Waters) five minutes after the judge had concluded summing up. It is the privilege of an English jury that each should be satisfied and agree. But we may safely say that in this case the verdict has given unmixed satisfaction in this city; and we heartily congratulate the Doctor on the result. With respect to the verdict for 40s., in the action brought by Dr. Waters against Miss Bromwich for slander, in consequence of an intimation from the judge that "the verdict in the seduction case had his hearty and entire concurrence," the counsel of Dr. Waters stated that his client had no wish to be vindictive—the object was not to extort money, but the clearance and vindication of reputation, and these would be sufficiently attained by a consent-verdict for the above amount."

REVIEWS.

A Handbook of Uterine Therapeutics. By EDWARD JOHN TILT, Member of the Royal College of Physicians, etc. London: Churchill and Sons. 1863. Pp. 309.

THE sexual organs of women are liable to two classes of maladies, which, though they may be mingled in certain cases, yet are in most instances very distinct one from the other. One class is that of the structural—the changes to which the womb is prone in common with every other part of the body—inflammation from cold, gout, rheumatism, and the like, morbid growths, as cancer, hypertrophy, and the like. The other class consists of certain changes determined by aberrations in those passions, emotions, sensations, and functions, which distinguish woman, as a sexual being, endowed with the desire and the aptitude for maternity, from a creature passionless and sexless, as a child, an old woman, or a eunuch would be. Periodic congestion of the womb and ovaries, even turgidity, and bursting of blood-vessels, rupture of vesicles, and exfoliation of membranes, are parts of the very life of woman, during thirty years and more, by virtue of her sex. Any influence whatever which tells unfavourably on mind or body, even hereditary diseases, blood tainted by gout or rheumatism, debility, unwholesome occupations, depressing passions, and, above all, that unsettled condition of mind and body which arises from a latent consciousness of fitness for maternity, when the conditions for it are denied, are of necessity attended with changes in the distribution of blood to the sexual organs, and may transform the natural processes into nearly allied morbid ones. Abnormal states of nervous and vascular supply are followed by pains, discharges, engorgements, irritability, superficial abrasions, perhaps some infiltration or hypertrophy, or by ulceration.

That such maladies should be difficult or tedious in their cure, is no more than must happen from the circumstances which give rise to them, which usually are of long and deep growth, and often impossible to remove by any means whatever. Maladies of the first class, that is to say such as spring from the wear and tear of life, such as the enlarged and suppurating womb of the woman who rises too soon after parturition or miscarriage, should doubtless be treated just as maladies of an analogous sort when situated elsewhere. As an ulcerated cornea is touched with nitrate of silver, and as a suppurating conjunctiva or congested retina may be treated by astringent washes, citrine ointment, cupping, belladonna, and the like, according to the nature of the case, so should analogous uterine maladies be treated by leeches, nitrate of silver, injections, and the like. But not so those maladies which have their source in mental or sexual disturbance. For, in the first place, they are like Proteus—they have no fixed form nor local habitation. That which is believed to be abrasion or engorgement of the "uterine neck" in January, becomes endometritis, or ovaritis, or pelviperitonitis in June; and, secondly, when the alleged local condition is removed, the whole mass of symptoms may be aggravated, or may crop up in another totally different and worse form. But further, the use of local remedies is not only utterly unable to reach the main source of the illness, but is, in itself—if used in the wrong set of cases—a poison of the worst kind to the mind and body of the unfortunate victim. We cannot too strongly advise our readers, especially the younger part of them, to study Dr. Ferguson's introductory essay on "Irritable Uterus," in his edition of Gooch on "Diseases of Women," published by the New Sydenham Society. They will find this physician—a man of the greatest attainments and of the widest experience amongst that class of patients who are most strongly disposed to hysteric, uterine, and nervous diseases—affirming that "in this malady of the irritable uterus, the greatest amount of benefit is attained from general, and the greatest risk of mischief incurred from topical, treatment." Dr. Ferguson shows how the passion of

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fear, and especially the desire of sympathy, induces women to be dissatisfied with any "but such modes of cure as they think are commensurate with the magnitude of their malady, and worthy of the spirit of martyrdom within them, which makes the most heroic measures the most welcomed." They therefore urge on the Physician to the use of remedies which his inner soul disapproves, but which he consents to adopt lest his patient should be tired of waiting, and go to some more "active" practitioner. It is impossible not to gather from Dr. Ferguson's remarks the conclusion that *local* remedies —that is, the speculum and caustic—have been frightfully abused in the case of single women. For our own parts, we do not hesitate to say that the abuse of such measures in such patients has been the crying sin of the age, and that we have little to boast of in having abolished the custom of draining patients of their blood, and in that improved diagnosis which enables us to distinguish organic disease from that which simulates it, if we have introduced or sanctioned a plan of treatment both cruel and immoral, and calculated to exasperate or perpetuate the worst of the patient's morbid conditions.

Let us not be understood as condemning *all* local treatment in *all* hysteric cases. As organic disease is no bar to hysteria, so may a disease of hysteric or sexual-sensitive origin be complicated with organic changes which require local treatment. *If general health be giving way*, no Physician who treats an hysteric-uterine case can be absolved from the necessity of ascertaining the absence of serious organic disease, which, if found, must be treated according to discretion. If the practitioner believe that the local disease is one which will not get well with merely general treatment, and that the whole case will be benefited if the local malady be removed, he will put to himself the question, whether he should resort to the particular treatment were the patient his own daughter or sister. "The answer," to use the emphatic words of Dr. Ferguson, "must be left to each man to make before his own conscience, and to justify to society by his scientific attainments."

We have been wandering away from Dr. Tilt's book, which has thus set us thinking on paper. He says, "that for many years he has sought to determine the real value of those various modes of treating inflammatory affections of the womb that have been more or less exclusively advocated by eminent Practitioners during the last fifty years." (Or in another place, p. 3), "In the present work my principal object is to discuss the many ways of treating the various forms of uterine inflammation." "It would be singularly incorrect to suppose" (he continues), "that most diseases of women originate in inflammation of the neck of the womb; but besides the fact that many do, it must be borne in mind that the neck of the womb is its only accessible portion, and that the application of remedies to the cervix is often the best way of curing inflammation of the body of the womb and of the ovaries." On which programme of Dr. Tilt's the reasonable commentary is, and it is one which recurs to the mind on reading the whole of the book, that this "inflammation" of the womb is nowhere defined. Be it remembered, that the term "inflammation" of the womb, *per se*, is one of the most indefinite in existence. It may be applied to a state which will kill in six hours, or to one which may get well in an hour on the receipt of good news. It may be anything or nothing—a state in which leeches or marriage may be a remedy. "I have been women," says Dr. Tilt, "so suffering from chronic uterine inflammation that I should have been very sorry to have sanctioned their marriage, yet who certainly improved by it. I have under my care," continues Dr. Tilt, "a patient who suffers severely from *ovaritis* and *internal* chronic *metritis*, and the neck of the womb is *soft, swollen*, and *exquisitely sensitive to the finger*, nevertheless she has no pain on connexion; it does not make her worse, and in fact relieves many of her distressing nervous symptoms. Another lady suffered much from *hysterolysis* on the loss of her husband; *everything* was tried without success," till, after some years, another husband cured her, *tuto, cito, jucundè*. The italics in the passages quoted are our own, and we insert them with a view of showing, that whereas, on the ordinary principles of Medicine—as Dr. Tilt himself says just before—you might as well let a man with a broken leg walk, as let a woman with inflamed womb have connexion; yet that in some "chronic affections of the neck of the womb" in patients of "*strong temperament*" and those "*subject to hysteria*," it is "rather beneficial than otherwise!" We have not a doubt of it; but we should demur to calling such cases "inflammatory," or even speaking of them in the same category with cases which require leeches, speculum, caustic, and all the other implements of the sort, humane and necessary in the right cases, cruel and disgusting in the wrong ones. Pray let us ask what does Dr. Tilt include under the term "everything," in the case of the poor woman who lost her husband and suffered "hysteralgia" till she married again? Was all the uterine artillery employed against her?

If a proof were wanted of the possible confusion that may exist of the organic with the hysterical form of uterine malady, even in the mind of so able and industrious a writer, and one so habituated to the consideration of them as Dr. Tilt, we might adduce the following passage. Dr. Tilt says, and no one will deny the truth of it, page 270:—

"When the body of the womb is inflamed, connexion is very painful."

Here we have a *dictum*, short, precise, incontrovertible, like an aphorism of Hippocrates, or one of the laws of whist.

But the author goes on to say, "when connexion is not painful"—What! Why of course the womb can't be inflamed, is the irresistible conclusion! Alas for logic, Dr. Tilt says, "when connexion is not painful it is rather beneficial than otherwise!" and he is "much less particular" in restricting it than he was when he began practice! Well, there is such a thing as living and learning; and we may learn, as well as Dr. Tilt, that a good many cases which have been considered as "inflammation," were not inflammation, in any real sense of the word, but were instances of that state, call it what you will, for which marriage is a remedy.

If our time permitted we could show from Dr. Tilt how pregnancy cures what he calls "those little-understood conditions of the ovaries to which I have drawn attention, as ovarian irritability and subacute ovaritis." A curious hallucination of Dr. Tilt's, if he imagines that the existence of this ill-understood condition was discovered by himself, although we do not wish to give him the credit of the name "ovaritis," which we affirm to be mistaken and mischievous. Hypertrophy, too, chronic inflammation, and some displacements, are cured by the same magical remedy.

The great defect of Dr. Tilt's book is, as we have said, the confounding together, on the want of distinction between, the two great classes of uterine maladies which we have pointed out, and the sanction which it gives to "local," that is, speculum treatment and caustic to the neck of the womb for these "ill-understood conditions," which have been, by the most grievous abuse of words, called inflammatory "ovaritis," etc. What would be safe in Dr. Tilt's own hands, might be misunderstood or abused by others.

Dr. Tilt does repudiate many local remedies, such as the intra-uterine pessary, which have much better claims to respect than the everlasting caustic, but still the great fault of the book is the exaggeration of local treatment, and want of caution against its misapplication. But it is fair to say that there is a large amount of useful information scattered throughout the book, available for those cases in which local treatment is useful, and that we thoroughly believe in Dr. Tilt's good faith. The very passages we have quoted as examples of inconsequent reasoning and inconsistent statements, are proofs of the writer's sincerity. All details respecting injections, suppositories, incisions and dilatations (on which the author looks with no favour), pessaries, leeches, diet, etc., are here to be found in abundance.

We must say that, in one respect, Dr. Tilt is like a careless player, and shows too much of his hand. He instructs the young Practitioner to "listen to his patient with eyes bent down, or seemingly bent down, to all she may say." But we would rather advise the young Practitioner to be natural, and be a gentleman, and never to resort to any such histrionic dodges.

On Diseases of the Chest, including Diseases of the Heart and Great Vessels: their Pathology, Physical Diagnosis, Symptoms, and Treatment. By Henry W. Fuller, M.D. Cantab., Fellow of the Royal College of Physicians, London, Physician to St. George's Hospital, etc. Demy 8vo. Pp. 703. Price 12s. 6d. London: Churchill and Sons. 1862.

The great bulk of this volume, and the didactic dryness of the author's style, may possibly scare away lazy and dilet-

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tante readers, but it will nevertheless be welcomed by the Profession as a good sound text-book on diseases of the chest, satisfying every real want of the student and of the practitioner. It is by no means a mere compilation of what others have written. Both in form and in matter every portion bears traces of originality. While availing himself freely of the labours of his predecessors and contemporaries, Dr. Fuller does not fail to contribute rich fruits of his own observation and matured experience. He has evidently mastered every portion of his subject for himself, and is able to make his statements, not at second-hand, but as an independent and weighty authority. An adequate summary of the contents of this most excellent book is impossible in the space at our command. We can merely notice a few of its more important and characteristic features.

A considerable portion of the work (over 200 pages) is explanatory of the general principles of physical diagnosis, and their application to the investigation of diseases: 1. Of the lungs; 2. Of the heart and great vessels. Those who are commencing the study of auscultation, as well as advanced students who are aspiring to its greater niceties, will here find real and welcome assistance. Its principles are set forth in plain, unmystified language, so as to be intelligible to the most ordinary capacity. In his explanation of the mechanism and true significance of ægophony and a few other abnormal sounds, Dr. Fuller does not hold with the generally received opinion. Wherever this is the case, the grounds of his dissent are fully stated. Interspersed with the text are some capital tables, showing at a glance the different sounds audible in the lungs in health and disease, their character, mode of production, usual seat, and also the forms of disease with which the morbid varieties are usually associated. This last is a point on which Dr. Fuller lays great stress. It is by endeavouring, he says, to interpret auscultatory sounds without reference to the morbid condition and consequent altered mechanism in which they take their origin, that students "so often find themselves bewildered and ready to discard the stethoscope, as, to them at least, a hopeless mystery."

To facilitate the diagnosis of the different diseases of the lungs, Dr. Fuller adopts the excellent plan of placing the morbid anatomy and corresponding physical signs of the several stages of each disease in parallel columns. The following partial extract will give an idea of the nature and value of such an arrangement (p. 253):—

"*Chronic and Passive Œdema.*

"*Morbid Anatomy.*	"*Physical Signs.*
"Lung of a pale greyish colour; collapses slowly and imperfectly; is inelastic, doughy, pits readily on pressure, and scarcely crepitates on being handled. On section, a large quantity of almost colourless serum, unmixed, or nearly so, with air, oozes from the surface; the lung tissue is tough and resistant, and portions of it sink instantly in water without being previously subjected to pressure. The lining membrane of the bronchi is often of a dark, livid colour, consequent on chronic vascular congestion."	"*Inspection* affords no information. "*Palpation* is said sometimes to disclose increased vocal fremitus. This has not been the result of my experience. "*Percussion* sound duller than natural, and parietal resistance increased. Skoda speaks of a tympanitic sound on percussion, but I have never met with it. "*Auscultation.* — Respiration weak, or almost absent, or else harsh and coarse, and accompanied by bubbling râles, according to the precise degree of infiltration of the portion of lung auscultated. If, as often happens, bronchitis co-exists, sonorous and sibilant rhonchi will be heard."

The same method (of tabular juxtaposition) is adopted to contrast the salient diagnostic features of diseases liable to be confused, as, for instance, pleuritic effusion and pneumonic consolidation, bronchitis and incipient phthisis. The tables are well constructed, and much enhance the usefulness of the book.

Dr. Fuller's account of the various diseases of the lungs and heart will be found quite up to the level of the most recent researches. The several *varieties* and *complications* (as well as the ordinary typical form) of each disease receive full consideration. Disputed questions are impartially weighed, and the reasons for his own conclusions thereon definitely stated. On certain points his opinions are more or less at variance with those ordinarily entertained in the Profession, and, we are bound to add, have very weighty evidence adduced in their support. Some of these we will very briefly notice.

He disbelieves that exposure to cold has that agency in the causation of pleurisy which is generally attributed to it. "Cold," he says, "however intense, and however applied, will not produce pleurisy in a healthy person; and when exposure to cold is followed by inflammation of the pleura, the disease is due to some morbid condition of the blood, and not merely to cold. . . . Cold is a mere accessory cause of the disease; a predisposing or exciting, but not the proximate or essential cause. . . . Experience has long since proved that a tuberculous, scrofulous, or cancerous diathesis, and the cachectic condition of the blood which results from Bright's Disease of the kidneys, intemperate habits, syphilis, pyæmia, gout and rheumatism, are amongst the more active provocatives of pleurisy, and equally so of serous inflammations, and that we should at once suspect and search for one of these when called to a case of pleurisy in which 'cold' is the only apparent cause of the attack."—Pp. 177-8.

He is at variance with the opinion so generally entertained that warm climates are preventive and arrestive of phthisis, and that cold ones have the contrary effect. The consideration of certain facts of every-day life, and the results of recent statistical inquiry, have satisfied him that "not only is cold not productive of phthisis, but that in many instances it invigorates the animal economy, and thus proves antagonistic to the accession and subsequent progress of the disease. And, if this be so, it follows that, in certain instances at all events, warmth must not only enervate the patient, and thus expose him to an attack of phthisis, but, when the disorder is once developed, must have a prejudicial effect on its progress."—P. 418. Dr. Fuller's remarks on the influence of climate in phthisis are most valuable. In a very few pages—discarding theory and making facts alone the basis of inference—he gives all that is really known on the subject in the present state of medical science.

He maintains that permanent recovery from pulmonary consumption, provided the disease be not hereditary but merely the result of temporarily impaired nutrition and deterioration of the blood, is not only possible, but, in a considerable proportion of cases, a matter of actual occurrence. We wish we had space for a summary of his arguments in support of this opinion. We must refer our readers to pages 403—412 of his book, in which he endeavours to show that so cheery a prognosis of this gloomy malady is not only consistent with *a priori* considerations, but further justified by the facts of clinical observation and pathological research.

The latter part of the work is devoted to diseases of the heart and great vessels. The account of these is full, at the same time simplified to the utmost, and thoroughly practical. The remarks on the prognosis of the various forms of disease of the heart, on its dilatation, fatty degeneration, and functional derangement, and on the means of distinguishing symptoms of functional derangement from those of organic disease, will be appreciated by those who have felt the difficulties of this class of diseases. The commonly received views of the action of digitalis he holds to be "utterly inconsistent with fact." He appeals to experiments and observation in proof that "digitalis stimulates the muscular fibre of the heart and augments the contractility of the capillaries. When it kills, it does so not by producing paralysis of the heart, but by giving rise to tonic contraction and spasm of that organ. Such being the case, it is a most valuable remedy in the treatment of *dilatation*, and is dangerous only when administered in *hypertrophy*. Whenever the pulse is feeble and irregular, and more especially when from any cause its feebleness and irritability are temporarily increased, digitalis is, of all known remedies, the most useful."—P. 502.

In discussing the treatment of chest diseases, Dr. Fuller makes no mention of remedies which experience has proved to be valueless, and contents himself with pointing out those particular methods of treatment "which have appeared to him most successful and based upon the soundest physiological principles." In this he has certainly acted wisely; but we think it would have been better in several cases if his methods of treatment had been a little more detailed. Well-approved formulæ of medicines, available for the treatment of different diseases, might with advantage have been given either in the text, at the foot of the page, or in an appendix.

The book has an index and an analytical table of contents, but it wants yet more facilities for casual reference. In long

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chapters, as, for instance, that on Pulmonary Consumption, there should have been running titles, or else such slight change either of type or textual arrangement as would indicate at a glance the particular portion of the subject under discussion.

Klimatographische Uebersicht Der Erde: Climatographical Survey of the Globe. By A. Mühry, M.D. Leipzig and Heidelberg. 1862. 8vo, pp. 744.

Dr. Mühry speaks of climatology as a science of modern origin and of youthful attainments, nevertheless as a science of warm and lofty aspirations. This is not the first-fruit of the author's laborious investigations into the subject of which he treats. In 1856, he published his "Nosogeography," and in 1860 appeared his "Investigations into the Influence exerted by the Elements of Climate upon the Sanitary Condition of different Countries." The former consists of two parts, the one explanatory of Medical geography, the other comprising a general description of the climatology of the several regions of the earth. The latter also is divided into two distinct parts, in the first of which is given a treatise upon general, in the second one upon special climatology. Besides these, other works of considerable interest have proceeded from the pen of the author now before us.

The present volume may be regarded perhaps as a third part of the author's scheme, being in its general character similar to its predecessors, but containing information of a more diversified nature concerning the climate and statistics of our own and foreign countries. The author does not profess to comprehend every place in his volume, but such only as are of chief interest to Europeans; and concerning these he does not confine his observations to bare climatological facts, but supplies also such other information as may be of service in a Medical, agricultural, or commercial point of view, thus rendering his work valuable alike to the emigrant and colonist, to the missionary and the commercial traveller, as well as to the health or pleasure seeker.

The body of the work is divided into five larger and upwards of twenty smaller sections. The first larger section—the torrid zone—comprises descriptions of the Andes and their vicinity, the east coast of South America, the West Indies, and those portions of Africa which occupy the corresponding parallels of latitude, India and its Archipelago, Australia, and the South Sea Islands. The second section—the north temperate zone—comprises middle and southern Europe, northern Africa, and mid-Asia. The third section—the south temperate zone—comprehends the southern portions of South America and Africa, Southern Australia, and New Zealand. The fourth section—the North Polar zone—comprises the Arctic portions of America, Europe, and Asia. The fifth section—the South Polar zone—completes the survey, by a glance over the seas of Antarctic regions. The volume concludes with an appendix, which is also divided into five parts. The first of these contains a description of the meteorology of the North Polar zone, with its bearing upon the wind-systems; the second relates to the influence of the trade-winds; the third to some peculiarities in the meteorology of the South Polar zone; the fourth to the description of an atmometer; and the fifth to the principal Ocean currents. Lastly, there is a short supplement consisting of a paragraph upon monsoons; one upon the vital statistics of Sweden; a third concerning peculiarities in the summer of 1861, bearing upon the same subject as the second part of the appendix; and finally, a few remarks upon the distribution of rain.

In a work of this kind it would be impossible for the author to exhaust the subject at any point, since it is quite obvious that a single country would of itself have afforded ample materials, not for one only, but for several volumes. Dr. Mühry tells us that he collected his notes originally for his own use, and not for publication; and that he was led into the latter procedure from a desire to put others in possession of knowledge which he found to be so useful to himself, and, moreover, with the view of encouraging the pursuit of cognate researches. To follow the author through his descriptions is beyond our space. In some instances we think perhaps more recent information might have been made available to the reader, and in others we should have been glad of information upon matters of practical utility which are passed over in silence. But the limits of the volume are too narrow to permit of much extension into detail, and we owe our thanks to Dr. Mühry for the instruction which his work contains. It is a book which cannot fail to be of use to all who are interested in the climatic characteristics of foreign countries, and one which, especially they who contemplate a sojourn abroad, would find it greatly to their interest to consult. The previous volumes, to which we have adverted, were dedicated respectively to Baron Humboldt and Sir John Herschel; the dedication of the present volume is equally graceful on the one part as it is well merited on the other; it is made to Sir James Clark, whom the author mentions as one of the founders and supporters of the science of climatology.

Memoir of the Life and Writings of Robert Whytt, M.D., Professor of Medicine in the University of Edinburgh from 1747 to 1766. By William Seller, M.D., F.R.S.E. Pp. 33.

Dr. Whytt was born in Edinburgh in 1714, studied general literature at the University of St. Andrew's, attended Medical lectures at the Medical school of the University of Edinburgh, under Monro and others, thence proceeded to London, about 1734, and became the pupil of Cheselden, and afterwards went to Paris, where he attended the lectures and dissections of Winslow. He next repaired to Leyden to hear Boerhaave, who was then very old, and Albinus (the Latinized name for White or Weiss), who was in the prime of life; and, after six years employed in the study of Medicine, he took the degree of M.D. at the University of Rheims, which seems to have been much frequented in the eighteenth century for Medical degrees, but which was suppressed altogether at the first French Revolution. The same degree was conferred upon him by the University of St. Andrew's, and he afterwards joined the Royal College of Physicians of Edinburgh, and entered into practice, in which it appears he was very successful. He published a considerable number of papers on scientific subjects, and, among other minor controversies of the period, he entered into one with the illustrious Haller, on the "Nature of the Contractility of Muscular Fibre," Unzer and Prochaska ranging themselves on the side of Whytt. In 1747, Whytt was appointed Professor of Medicine in the University of Edinburgh; in 1762, he was elected a Fellow of the Royal Society of London, to the *Transactions* of which he contributed several papers; in 1761, he was made first Physician to the King in Scotland; and, in 1763, he was elected President of the Royal College of Physicians of Edinburgh, which office he retained until his death, which took place in 1766.

The claims of Dr. Whytt as a great pioneer to the discovery of physiological truths, if not a great discoverer himself, are too little regarded in the present day; and Dr. Seller deserves credit for rescuing his name and his works from the neglect into which both have rather unjustly fallen. One of his earliest essays was a paper on the "Virtues of Lime-Water in the Cure of Stone," the attention of the public as well as the Profession being much attracted to this subject in the middle of the last century by the great success of a secret remedy for calculous disorders invented by a Mrs. Stephens, who received a grant of £5000 from Parliament for the discovery. It appears that the ingredients were chiefly egg-shell powder and soap, the latter, from containing an alkali, being, in all probability, the real solvent of the calculus, supposed when it consisted of lithic acid. Whytt, however, thought that the lime was the solvent, though he always gave it in practice combined with soap, and, in some experiments on the solution of calculi out of the body, he hit upon the real nature of the chemical action, for he put some grains of a calculus (consisting, no doubt, of uric acid) into a mixture of carbonate of potash and quicklime, and he actually explained the results, foreshadowing the more accurate and brilliant discoveries of Scheele, who first described uric acid, and of Black, the discoverer of carbonic acid. But still more important in their nature and in their effects on Medical science were the other papers of Whytt, particularly his "Essay on the Vital and other Involuntary Motions of Animals," published in 1751, his "Inquiry into the Causes which Promote the Circulation of the Blood in the very Small Vessels of Animals," his "Observations on the Sensibility and Irritability of the Parts of Men and other Animals," and his "Account of some Experiments Made with Opium on Living and Dying Animals." The three latter papers all bore upon the question of his controversy with Haller, who maintained that muscular fibre owed its property of contraction to a power inherent in itself, while Whytt attributed it to an influence derived from the nerves. Whytt also maintained that the circulation in the

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capillaries was due to the action or oscillation of the small arteries, and not to disturbances of the blood itself, as was argued by the humoral pathologists of the day, nor exclusively to the action of the heart. Whytt's views on the nervous system are generally supposed to be founded upon, if not identical with those of Stahl, but such is not the case, for, instead of the soul, or anima, or archeus of Stahl, Whytt supposes the nerves to have properties and powers independent of the mind or thinking principle, and, in fact, he may be considered as agreeing with those, who, like Unzer and Prochaska, paved the way for the full development of the theory of reflex action, by which Marshall Hall has placed himself among the first ranks of modern physiological discoverers. The sum of Whytt's doctrine on this subject is, that an impression conveyed by nerves to the central nervous organs excites involuntary animal movements by a physiological necessity, without reason, intention, or consciousness: and we agree with Dr. Seller in thinking that these views contain the nucleus of the modern theory of reflex action in the spinal cord and brain.

This brief memoir of Dr. Whytt's life and writings will amply repay perusal.

Familiar Letters on the Diseases of Children. Addressed to a Young Practitioner. By James Bower Harrison, M.D. London: Churchill and Sons. 1862.

In itself an inoffensive, innocent little book; a well-watered reproduction of the ordinary practical teaching in children's diseases. For Medical men we do not see its use, for, unless unusually ignorant, they know all that it contains, and, if not, they have already the information within reach in a hundred different forms. To mammas and nurses, for whom, from its popular style, we suppose it principally written, it offers a proverbially dangerous thing—a little knowledge.

FOREIGN CORRESPONDENCE.

ITALY.

Florence, March 5.

The Italian universities are indebted to the late minister of public instruction, Professor Matteucci, for two valuable acquisitions from Germany—that of Professor Moleschott for Turin, and that of Professor Schiff for Florence. The exchange may be advantageous to both countries; not only could Germany spare some of her physiologists while Italy stood sorely in need of them, but the undue and unduly fostered predilection with which physiology is cultivated by the German student is far from being favourable to his clinical training, while the comparative indifference with which this gigantic (though only nascent) science has hitherto been treated on this side of the Alps, was of course still more objectionable than the German excess of zeal. Florence has no University, nor, strictly speaking, a Medical faculty, but it has much of the auxiliary apparatus for the student of Medicine. It has three *cliniques*, a botanical garden, and the celebrated museum for natural history, and it is in this last named establishment, that Professor Schiff delivers his lectures on Physiology. Should they continue to be as numerously attended as hitherto, it may be hoped that the Italian taste for physiological researches will soon rise to a healthy level, and propagate itself over the rest of the Peninsula.

Independently of these lectures, Professor Schiff continues his interesting researches on the "Function and Distribution of the Vascular and Calorific Nerves," and he has quite recently published a paper on the "Influence of Reflex Action on the Vaso-motor Nerves," which adds new and somewhat unexpected results to those of his former experiments published last autumn. For the reader's convenience, I will endeavour to recapitulate the latter, before mentioning the new additions contained in Professor Schiff's last pamphlet. For the details concerning the vivisections themselves, I must refer the readers to the September numbers of the *Comptes Rendus* of the French Academy. The results may be briefly summed up as follows:—

The vaso-motor fibres, *i.e.*, the fibres whose section or paralysis produces dilatation, and whose irritation produces contraction of the corresponding blood-vessels, have their origin neither in the ganglia nor in the spinal cord, but in the *medulla oblongata* itself. Nor can their origin be higher, since lesions of the pons Varolii do not disturb the state of vascularisation in any part of the body. Only the vaso-motor nerves of the abdominal viscera can be physiologically (not anatomically) traced as high up as the *thalami optici*. Part of the fibres originating in the *medulla oblongata* remain, throughout their course on the same side, while others cross over to the other side. The crossing seems to take place (at least in the lower half of the spine) close to the level of the anterior spinal root, with which, and through which, the vaso-motor nerve leaves the cord. Hence, Professor Schiff assumes two distinct systems of vaso-motor fibres, the one consisting of one-sided fibres, the other of crossing fibres. The former go to the face, the hand, and the foot, and the lower third of either extremity; the latter (the crossing fibres) go to the upper two-thirds of the leg and arm, and also to the integuments of the thorax and the abdomen. The former leave the cord together with the anterior roots of the fifth, sixth, seventh cervical, and first dorsal above, and of the four lower lumbar and the sacral pairs below. They thus enter into the brachial and lumbo-sacral plexuses respectively, and join the great nervous trunks of both extremities. The crossing fibres, issuing from the spine by the anterior roots of the second, third, fourth, fifth, and sixth dorsal pairs above, and of the last three dorsal ones and first lumbar pair below, spread partly over the thoracic and abdominal integuments, partly on the parietes of the blood-vessels of the arm and leg respectively, but they reach these vessels straightways, only joining on their way the axillæ and pelvic plexuses, but not the chief nervous trunks of the extremities. Hence, a lateral section of the cord just above the roots of the sacro-lumbar plexuses would produce an increase of heat in the foot and lower third of the leg of the *same* side; and a lateral section just above the tenth dorsal vertebra would produce the same effect as the former section (viz., increase of temperature in the foot and ankle of the same side), *plus* an increased vascularisation of the thigh and knee of the opposite side. A lateral section of the *medulla oblongata* would produce vascularisation the facial half in the hand and foot of the same, and in the humerus, thigh, and abdominal integuments of the opposite side, etc.

These results were published soon after Mons. Claude Bernard's beautiful experiments on the sub-maxillary ganglion, showing that this ganglion, as long as its sympathetic root is intact, can become the centre of reflex actions between the tongue and the sub-maxillary gland, after its connexion with the brain has been destroyed by the section of both the lingual nerve and the *corda tympani*. While Prof. Schiff's results have greatly reduced the importance of the sympathetic nerve, by showing that it is a compound nerve, containing motor, sensitive, and vaso-motor fibres, and giving origin to none, not even to the vaso-motor ones, yet there is nothing in them that would militate against M. Bernard's conclusions, who vindicates for the ganglia the honour of being real, though only auxiliary, central organs for reflex actions.

If we add to all this Budge's discovery of the cilio-spinal region (more justly called oculo-pupillaris by Bernard) and the more recent discovery of the direct connexion of the heart with the four upper thoracic ganglia (a), it would appear as if every province of the nervous system had been searched and explored, and as if this branch of physiology had attained something like completeness. Yet, how much still remains to be done, and how many phenomena to be explained, may be seen by Mons. Collins' late experiments on the sensibility of the blood-vessels, and still more by the experiment which forms the subject of Prof. Schiff's recent publication.

Prof. Schiff found that slight tickling caused the central artery in a rabbit's external ear to dilate, and this dilatation was prompt, very considerable, and strictly confined to that part of the artery which had been touched by the tickling finger (through the integuments, of course, which are exceedingly thin in that part of a rabbit's ear). Above and below this region the calibre of the artery remained unchanged. The section of the cervical sympathetic (on the same side) and the extirpation of the first cervical ganglion altered nothing in these phenomena. But when all the sensitive nerves of the ear were cut, the tickling had no further effect on the vessel, which, however, could be caused to dilate again, when friction was used instead of tickling; while, lastly,

(a) See *Medical Times and Gazette* for 1862, October 4, p. 365.

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the opposite effect, or contraction, took place on further increasing this friction.

One is almost bewildered by these apparently contradictory phenomena. We see, in the first place, that the dilatation is a really active one, not preceded by any contraction, so that it cannot be explained by some passive relaxation after previous over-action. Nor can this dilatation be the mechanical effect of an increased afflux of blood, which would swell the calibre of the artery more uniformly and far beyond the part touched by the finger. The phenomenon being independent of the sympathetic, but depending entirely on the sensitive nerves, may therefore be explained either by a reflex action propagated by yet unknown ways and means, or else, according to Professor Schiff himself, by the idio-muscular action of the circular fibres of the muscular coat of the artery. Such an action being proper to all muscles, even when they are separated from their motor nerves, or from the living body altogether, it would not be wrong, even *à priori*, to attribute the same force to the muscular fibres encircling the arteries. Moreover, the alternation of the two opposite effects of dilatation and contraction, after the application of the same irritation in different degrees, may be seen in a prepared muscle as perfectly and as regularly as in the circular fibres of the rabbit's auricular artery in Professor Schiff's interesting experiment.

It is evident that pathology must sooner or later be benefited by these researches. The phenomena of congestion, erection, inflammation, and fever, as well as those of aneurism and other diseases of the vascular system, will be traced to their proper causes. And we may fairly expect some indirect advantages even to therapeutics. Professor Schiff, in one of his former publications, points out the curious fact, that the regions of the body, which in feverish diseases are of the greatest semiotic importance, viz., the face, hand, and wrist, are precisely those which derive their vaso-motor innervation from the system of one-sided fibres.

GENERAL CORRESPONDENCE.

EPIGASTRIC VENOUS MURMUR.

LETTER FROM DR. HERBERT DAVIES.

[To the Editor of the Medical Times and Gazette.]

SIR,—The subject of venous murmur is one of sufficient interest, that no apology will, I believe, be necessary for troubling you with a few notes of a case in which the above unusual sound was distinctly evident.

Charles J., aged 46, a brewer's man, much addicted to drinking beer and gin, was admitted in the early part of this year under my care into the London Hospital. His sallow and jaundiced aspect, wasted frame, and distended dropsical abdomen clearly pointed to cirrhotic degeneration of the liver as being his predominant disease—a diagnosis fully confirmed by the post-mortem examination.

On applying the stethoscope to the upper part of the abdomen, a loud continuous, almost roaring murmur, rising and falling in intensity with the inspiratory act, was distinctly audible. It could be heard right and left of the mid-line, and as far as the level of the umbilicus, and pressure on the superficial epigastric veins arrested it. There could be no doubt of its source being in these vessels which were large and greatly distended.

The marked cirrhosed state of the liver observed on post-mortem sufficiently indicated the great impediment which must have existed to the portal circulation, and the absolute necessity of a collateral and regurgitant current being established from the hæmorrhoidal plexus through the epigastric veins to the vena cava superior.

These veins did not elucidate on examination the physical cause of the sound, beyond the fact of their abnormally increased size. The murmur probably arose from their valves being insufficient to arrest the backward current, which therefore set their edges into vibrations capable of producing sound. The deficiency of blood discs which characterises chronic alcoholic cachexia, would also, by causing diminution in the specific gravity of the blood, favour the production of murmur in the regurgitant current.

I am, &c.

HERBERT DAVIES, M.D. Cantab.

23, Finsbury-square, March 28.

ACUPRESSURE AS A MEANS OF ARRESTING ARTERIAL HÆMORRHAGE AFTER OPERATION.

LETTER FROM MR. EDWARDS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg to offer three cases of operations in which, within the last three weeks, I have made use of acupressure, stated as shortly as possible.

Case 1.—J. S., aged 25, applied to me with his right arm stiff and straight. He had suffered a compound fracture some months before, and met with other severe injuries at the same time. Thanks to the skill and attention of my friend Dr. Braine, now of Bayswater, he had so far recovered. Portions of bone had been removed from the elbow from time to time, but since Dr. Braine left Edinburgh the patient preferred keeping the arm straight and motionless,—hence its present condition. I advised removal of the ends of the bones, and he accordingly called the next day to have the operation performed. The parts were unusually vascular, and somewhat altered in their relative positions. Although I kept as close as possible to the bone, I divided a large artery which lay in the thickened tissue, a large vein, and several smaller vessels. An artery spouted from the cut end of the bone, and required a wooden peg to arrest it. To all the others I applied short sewing needles, threaded with twisted iron wire. After the wound was dressed, and the arm placed in a sling, the patient awoke from the chloroform, and walked to his home in a neighbouring street. I saw him about half an hour afterwards, and found that there had been slight oozing, as there generally is after any operation, but no arterial bleeding. All the needles and wires were removed in twenty-two hours. The peg was not removed until next day. The patient has since done well.

It will be seen that in this case there were three classes of vessels bleeding—arteries, veins, and a vessel in the osseous tissue. The plan of pegging an artery in bone is very ancient, the bleeding from the vein would probably have ceased spontaneously very soon, but still was likely to pour out a considerable quantity of blood before stopping. I should have been unwilling to tie this vein, and being also reluctant that the patient should unnecessarily lose blood, I applied the needle and wire; all the arteries cut in the soft parts were of such a size as to require ligatures, had the latter been used and they would have stopped the bleeding equally well with the needles, but have remained in the wound for a week perhaps. Now, all the foreign bodies necessary for arresting hæmorrhage from the soft parts were in this case removed in the twenty-second hour. Surely an advantage.

Case 2.—Amputation of the Left Arm.—Miss M. S., aged 15½. I was called to this girl by Dr. James Sidey. He had only seen her once before, when her timidity prevented any examination being made. The history was that of an ordinary case of diseased elbow-joint of two years' duration, apparently set up by an injury. Latterly she had suffered severe pain, and moving the limb was scarcely possible. When I saw it the elbow was packed in large heavy poultices, the weight of which had, during some moment when the arm was left unsupported, broken the humerus about two inches above the joint. The fractured ends threatened to pierce the skin. The joint was evidently disorganised. She was not a favourable subject, being thin and feeble; a large swelling, apparently a chronic abscess, over the left side of the thorax; but she was suffering so acutely from the fractured arm that I thought it my duty to amputate, which I accordingly did the next day, having to go close under the tuberosities, so as to secure tolerably healthy soft parts. All the vessels, including the brachial, were secured with needles and wires by Professor Simpson; they effectually prevented hæmorrhage, and were all removed in twenty-two hours; the flaps adhered, and, except a little pouting at the skin margins, the stump was healed in five days; on the fourth she was out of bed, and was able to walk to my house on the eighth day.

In this case it was a great object to get the patient out of the close air of a sick room, with its other depressing influences, and I cannot help thinking that the use of acupressure, inasmuch as it enabled us to remove all foreign bodies from the wound in such a short period, greatly assisted us, and hastened the recovery of the stump.

On examination, the joint was found to be necrosed. The fracture was situated above the apex of the olecranoid fossa.

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Case 3.—Excision of the Elbow.—Miss K., recommended to my care by Dr. Alexander Wood, has suffered from disease of the right elbow-joint for two years; believes she can trace its history to a fall. She has seen various Surgeons, and undergone all the usual forms of treatment. As she suffered much with nocturnal paroxysms of acute pain, and a probe passed into the joint, I advised excision of the latter, which was accordingly performed. Only two vessels of any importance bled; they would have required ligatures, but I preferred needles and wire. I called four hours after, and drew out one of the needles, the other I left in until next morning. There was no hæmorrhage, and the case has done well hitherto.

It may be objected that in most of these cases the arteries were small. So they were, but large enough to require something to secure them. Formerly, I would undoubtedly have tied them; now, I should prefer the temporary compression of a wire on one side and a needle on the other. Besides, the brachial in the upper arm is not a small artery. What has always appeared to me somewhat tantalising in operations, especially amputations, is that the largest and the smallest vessels are treated alike; for, how seldom is torsion practised. The only difference is, that the ligature round the most important vessel is marked by a knot. I know that great authorities affirm that ligatures are not in the way of the healing of a wound, and some even do not follow invariably Mr. Veitch's suggestion of removing one end of the thread. But although I have heard many Surgeons declare that ligatures were no impediments, and others say they actually did good and were favourable to healing, I cannot remember a single instance (except, of course, where bleeding followed) where a Surgeon expressed anything but satisfaction when his ligatures came away.

It will be seen from the manner in which I have reported these cases that I bring them forward only as additional evidence in favour of acupressure. I can only hope that other Practitioners will do likewise. I am, &c.

Edinburgh, March 9. A. M. Edwards.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a Meeting of the Court of Examiners on the 7th inst., and, when eligible, will be admitted to the Pass Examination:—

Messrs. F. H. Appleby, Alfred Easer, Henry Clothier, and George Grewcock, Students of the University College; H. L. Pewne, G. V. Langworthy, A. H. Brewer, and H. M. Brewer, of St. Bartholomew's Hospital; W. F. Knott, E. F. Turner, and R. R. Dagliah, of Guy's Hospital; Thomas Edgelow, George Edgelow, and John Cavaty, of St. George's Hospital; J. E. Adams, and J. H. Craigie, of the London Hospital; H. V. Bertin, and W. T. B. Hamlyn, of St. Mary's Hospital; Joseph Snape, and M. A. Wood, of King's College; J. W. Jones, and W. B. Shorto, of Charing-cross Hospital; E. J. Armstrong, of the Middlesex Hospital; C. J. Cullingworth, and C. W. E. Foster, of Leeds; Edward Mackey, and John Lloyd, of Birmingham; Joseph Moorshead, of Belfast, and J. M. Fisher, of Hull.

The following passed on the 8th inst., viz.:—

Messrs. Henry Barner, J. B. Liddall, F. J. Wadd, Edward Bellew, A. J. Freeman, W. N. Bergate, W. H. Reed, and Francis Smith, Students of St. Thomas's Hospital; Thomas Bond, John Grimes, T. P. Fothergill, and T. C. Shard, of King's College; J. W. Hayward, N. H. Lower, R. W. S. Barraclough, and E. C. Roberts, of Guy's Hospital; Llewellyn Powell, John Powdrell, and F. W. Richards, of St. Bartholomew's Hospital; W. V. Snow, Griffith Griffiths, and Marshall Hooper, of University College; W. N. Symonds, H. C. P. Mauser, and G. E. L. Pearse, of the Westminster Hospital; Henry Cribb, and Robert Cribb, of the Middlesex Hospital; F. F. Brockman, and William Leigh, of St. George's Hospital; Henry Wilson, of the Charing-cross Hospital; G. W. Mackenzie, of the London Hospital, and F. J. Marshall, of St. Mary's Hospital.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, April 2, 1863:—

John Prior Purvis, Blackheath, Kent; Horatio Rate Goodit, Gosport, Hants; Francis Wm Slow Wickstead, St. Bartholomew's Hospital; Matthew Trevan, St. Bartholomew's Hospital; George Jenkyn Thomas, Haverfordwest; Wm. Adolphus Fred. Bateman, Richmond, Surrey.

The following gentlemen also on the same day passed their First Examination:—

James Mare Taylor, Queen's College, Birmingham; John Henry Ashton, St. Bartholomew's Hospital; Alfred Square Cock, St. Bartholomew's Hospital; Pavlin Martin, St. Bartholomew's Hospital; Thomas Claye Shaw, King's College; Ralph Gooding, King's College.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Booth, Samuel, Jun., M.D., has been elected Medical Officer and Public Vaccinator for the South Salford District, Manchester.

Cock, Benjamin, M.R.C.S. Eng., has been appointed Certifying Surgeon under the Factory Act to Wigston Magna, Leicestershire.

McIntosh, W. Carmichael, M.D. Edin., has been elected Medical Superintendent of the Perth District Lunatic Asylum, Murthly.

Middlemost, Robert P., M.R.C.S. Eng., has been elected Surgeon to the St. Pancras and Northern Dispensary.

Playfair, Dr. William S., M.D. Edin., F.R.C.S.E., has been appointed one of the Physicians to the Margaret-street Infirmary for Consumption and Diseases of the Chest.

Spencer, Thomas, M.R.C.S. Eng., has been appointed Certifying Surgeon under the Factory Act to Earl Shilton, Leicestershire.

Swann, H. J., M.R.C.S. Eng., has been appointed Certifying Surgeon under the Factory Act to Barrowden, Rutlandshire.

Thompson, Mr. E. Symes, M.D., has been appointed Assistant Physician to the Hospital for Consumption, Brompton

Toulmin, Frederick J., F.R.C.S. Eng., has been appointed Consulting Surgeon to the Stamford-hill and Stoke Newington Dispensary.

DEATHS.

Brownell, Thomas F., F.R.C.S. Eng., at the Crescent, Salford, Manchester, on March 26, aged 54.

Bridges, W. H., at Aylton, near Ledbury, on March 13, aged 83.

Davey, James S. Engledue, M.R.C.S. Eng., on his passage home from the West Coast of Africa, on January 8, aged 24.

Fogarty, Thomas T., M.R.C.S. Eng., at Lawrence-street, Drogheda, on March 31.

McArthur, Andrew, L.A.H. Dub., at Shinrone, King's County, lately.

Martin, R. E., M.R.C.S. Eng., at Ipswich, on March 25, aged 46.

Parkes, William, M.D., of the London Mission, at Ningpo, China, on February 2.

Paterson, Dr. Colin, Deputy-Inspector General of Hospitals, at Nagpore, India, lately.

Waterman, Henry, at Saigon, China, on January 14, aged 45.

Academie des Sciences de France.—The Academy, in two successive weeks, has made two elections into the Section of Medicine and Surgery,—that of M. Bouisson, of Montpellier, as we have already recorded, and last week that of M. Ehrmann, of Strasbourg (in place of M. Bretonneau) who obtained thirty-six suffrages, fifty-six voters being present.

Rose-coloured Teeth.—Professor Moritz Heider, of Vienna, gives an account of two twin children who had red teeth, this not being explicable by hereditary influence or any peculiarity of diet. The permanent teeth, when they succeeded the milk teeth, assumed the same colour, and only became paler at the end of some years, without even then entirely losing their rose tint.

Births and Deaths in Vienna in 1862.—The births amounted to 22,853 (11,620 boys and 11,233 girls) being 514 less than took place in 1861. The deaths, exclusively of those which took place in the military Hospitals, amounted in 1862 to 19,662. Of these 4536 were caused by tuberculosis, 1277 by inflammations of the respiratory organs; 855 by diseases of the abdomen; 840 by typhus; 636 by scarlatina; 412 by small-pox; 151 by apoplexy; and 116 by pertussis. Of the deaths 4056 occurred before the first year.

The Pathologico-Anatomical Department of the Vienna Hospital.—According to the report for 1861 of this Department, of which Professor Rokitansky is the Director, there were during that year 1464 autopsies executed. It may be of interest to refer to the proportionate frequency of certain affections. Among the 1464 autopsies, 23 were cases of meningitis, 52 of atrophia cerebri, 40 of cerebral hæmorrhage, 9 of encephalitis, 5 of abscess of the brain, and 12 of œdema of the brain. There were 12 cases of myelitis, 6 of œdema of the glottis, 20 of pleurisy, 120 of pneumonia, 11 of gangrene of the lung, 13 of pericarditis, 105 of disease of the heart, 67 of peritonitis, 15 of granular liver, 4 of acute atrophy of the liver, 7 abscess of the liver, 178 of typhus, 57 of dysentery, 39 of Bright's Disease, 9 of atrophy of the kidney, 14 of nephritis, 196 of puerperal disease, 19 of anæmia, 4 of lukæmia, 30 of pyæmia, 9 of scorbutus, 10 of delirium tremens, 7 of variola, 14 of syphilis, 255 of tuberculosis, and 104 of carcinoma.

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New Process for Recognising Sugar in Diabetic Urine.—MM. Trousseau and Dumontpallier have been recently making some experiments with *tincture of iodine* as a test. This tincture when added to urine which is acid, imparts a deep colour to the fluid, and if the urine in jaundice be treated by some drops of the tincture, the green matter, termed *biliverdine*, is rendered very manifest. During the trials which produced the above results, some diabetic urine was treated with some drops of the tincture. The urine, almost colourless at first, after the addition acquired the colour of barley-sugar; but this colour gradually disappeared, the urine again becoming completely colourless at the end of a few seconds. The experiment was repeated again and again with the urine of various diabetic patients, and always with the same results,—the power of this urine in producing the discoloration of the tincture being in proportion to its density. Tried with urine from various sources, the conclusion has been arrived at that diabetic urine alone possesses the power of rapidly rendering the tincture colourless. The researches are still being carried on with the hope of being able to measure by means of the tincture the exact amount of glycose contained in given urine.—*Union Médicale*, March 31.

Dreadful Death.—The *Huddersfield Examiner* contains the following:—"An accidental death, attended by circumstances of an unusually painful character, occurred at Longwood, at the commencement of the present week. The unfortunate subject was a girl of 17, named Anna Maria Balmforth, daughter of Joseph Balmforth, joiner, residing at Cliffe-end, Quarnby. Death took place on Monday morning, and the inquest was held by Mr. Dyson on Tuesday. It appears that the girl had been suffering from a cold, which defied ordinary remedies, and her mother, by the advice of a neighbour, resolved to administer a hot vapour-bath. This resolution was carried into effect on Sunday last. The deceased was enveloped in blanketing in the usual way, the hot brick, according to custom, was placed beneath her, but instead of being put in cold water to produce the vapour, it was placed in water at the boiling point. The result may be easily imagined. The girl soon began to feel the vapour unbearably hot. She was told, however, to bear it; and this she did with noble endurance as long as she could. The heat, however, grew more intense, until at last it was unendurable. The girl cried out to be released, but, unfortunately, the old woman left in temporary charge was deaf, and did not hear her entreaties; and, after one or two vain appeals, the girl sprang from her trammels with a shriek, and rushed to bed. It was then found that her whole body was dreadfully scalded, so much so that the skin came off with the slightest touch. She lingered in great pain till Monday morning at seven o'clock, when she died, to the great consternation of the family." The only reflection which this case suggests is, that in the hands of ignorant people the simplest and safest remedies may be rendered dangerous. Had the poor girl obeyed her sensations, and retreated from the bath when it became painful, no harm could have happened. She fell a victim to her own fortitude.

Anthropological Society of London.—April 7, 1863, Dr. Hunt, F.S.A., President, in the Chair. Seven new members were elected. J. F. Collingwood, Esq., F.G.S., was elected Hon. For. Secretary, in the place of E. Burnett Tylor, Esq., resigned. A paper was read by R. T. Gore, Esq., F.A.S.L., "Notice of a Case of Microcephaly." The individual in question was for a long time under his observation. She was a female, the offspring of healthy parents, and without any known instance of idiotcy or defective intellect in the family. She lived to her 42nd year, and died of phthisis; her height was about five feet; her figure slight, and rather well proportioned. The intellect was infantine, *i. e.*, corresponding to that of a child three to four years of age beginning to talk. Her habits were decent and cleanly; her gait unsteady and tottering. Accurate photographs and casts of the head were exhibited. The occipital foramen was situated far back, at a point corresponding to one-fifth the antero-posterior diameter of the basis cranii; the anterior lobes of the brain were much narrowed towards their apex; the posterior lobes left a large portion of the cerebellum uncovered. The weight of the brain is remarkably small. Carefully weighed when recent, after the membranes and vessels had been removed, it weighed 10 oz. 5 gr. avoirdupois (=283·75 grammes). The smallest case previously known was "Theile's case," mentioned by Wagner, in which the brain weighed 300 grammes. The idiot's brain in St. Bartholomew's Hospital, described by Owen, weighed 332 grammes. There is no evidence of any disease having been concerned in the production of the microcephaly in the present case. The mental phenomena were very similar to those of early infancy, contrasting strongly to those exhibited by ordinary idiots. Professor Owen, F.R.S., remarked that instances of analogous arrest of development had been recorded in the different varieties of the human species, as, *e.g.*, in the negro variety, called by her showman the "Hottentot Venus," and by the hybrid Spanish and Indian children from St. Salvador, termed "Aztecs;" likewise in the brain weighing 1 lb. 4½ oz., described by Dr. Todd, and by the present instance. So far as Professor Owen's researches extended, the present instance exemplified the smallest instance of a brain, otherwise of sound structure, in which the individual has lived in health beyond maturity to middle age. The brain so arrested was, however, widely different from that of the quadrumane. Professor Owen entered into an extended description of the psychological characters associated with the cerebral modifications in those idiotic brains which had been observed by him. Mr. Carter Blake read extracts from Rudolph Wagner's "Vorstudien," and from the valuable tables compiled by Dr. Peacock (St. Thomas's Hospital), respecting the average cerebral development, and the occasional abnormal departures from it exemplified by microcephalic and macrocephalic brains. He also urged the advantages which would accrue to science if translations of the works of Wagner and Gratiolet were in the hands of every student, and stated that the preparation of such works were in contemplation by the Society. An animated discussion ensued, joined in by Professor Owen, Mr. Robert Dunn, Mr. Carter Blake, Mr. Prideaux, Dr. Drachaichs, Mr. Burke, Mr. Mackie, the Duke of Roussillon, and the President. The Rev. H. F. Rivers presented to the Society the remains of two human skeletons, discovered in brick earth at Chatham, and which exhibited a low frontal development, rather large frontal sinuses, and well-marked muscular impressions on the limbs.

The New Metal Thallium.—At the Royal Institution, on Friday, March 27, 1863, Mr. William Crookes gave a highly interesting lecture to a small audience on the "Discovery of the Metal Thallium." During the last century philosophers record the discovery of thirty-two new elements. The importance attached to the three latest is due more to the means by which they have been brought to light than to the metals themselves. Previous to the discovery of these elements the number known was seven, which we may call the seven ancient elements. Sir Humphrey Davy separated, by means of voltaic electricity, the metals of the alkaline earths. The discovery of the metal thallium is inseparably connected with the spectrum. There is a curious historical parallel between the discovery of thallium and that of selenium. Berzelius, while searching for tellurium in sulphuric acid deposits, found selenium. The lecturer, while examining SO_3 deposits for the same element, found thallium. He examined it through the spectroscope, and, by the appearance of the green line, he suspected some new feature. The great care required in these operations may be seen when we say that there were only three grains of thallium in three lbs. of seleniferous deposit obtained from oil of vitriol works. One grain to the lb. distilled from copper pyrites. The name was given from the Greek θαλλός—a budding twig. It was in September, 1862, that the lecturer first obtained the metal precipitated in crystals. This precipitate squeezed in the fingers and pressed well in a small steel mortar and placed in a powerful vice, then melted in a manner to prevent the oxygen of the air acting upon it. Up till now the investigation has been carried on under very great difficulty, in consequence of the very poor stock of accessible working material. Arrangements have now been made with sulphur manufactories to alter the condensing flues. Only yesterday one cwt. of deposit was sent up, from which the lecturer expected to obtain one or two lbs. of thallium. In a short time thallium will be a very common metal. One ton of pyrites contains about ten ozs.; hydrochloric acid three or four grains to the cwt. *General Properties.*—1. Heavy. 2. Ductile. 3. Malleable. 4. Very soft—the softest heavy metal. Lead scratches it with the same facility as steel will scratch lead, the fingernail will make a very deep mark upon it, and a knife will cut it as if it were cheese. 5. Its property of being welded together in a mould as perfectly as if it were melted is peculiar. 6. Easy

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way in which it marks upon paper.—This mark upon paper has a gold-coloured reflection, and in a few hours it will almost completely fade away, but can be revived by passing over the characters a solution of the sulphide of thallium. 7. Electrical power of thallium.—Mathieson discovered that thallium conducts almost as well as lead. 8. Its behaviour between the magnetic poles.—It stands next to bismuth as a diamagnetic body. 9. Volatility.—It is one of the most volatile metals; burns with a beautiful green flame. Has a great affinity for O. The oxide of thallium has the property of dissolving in water; has an acrid, biting taste, and colours turmeric paper as strongly as caustic potash would. When thallium is melted in the air it forms an oxide. An alloy of thallium and silver can be cupelled. 10. Chemical properties of thallium.—It forms a beautiful series of well-defined crystalline salts. 11. The position of thallium in the scale of elements.—The general opinion on the Continent is that it is an alkaline metal. The lecturer gave his reasons for supposing it to belong to the lead and silver group, and exhibited the tests which supported his view. The only uses to which it seemed capable of being applied were for making bullets and fireworks for pyrotechnic displays; its beautiful green colour while burning would make it useful, and its density and property of being easily moulded would bring it into requisition for bullet manufacture.

St. Bartholomew's Hospital.—The great old charities of London know nothing of those shocks and alarms felt by younger institutions, when cotton famines, and money panics, and seasons of dear bread arise. The cause of the difference is not occult; it is, in fact, all resolvable into the question of endowment on one hand, and voluntary support on the other. The income of St. Bartholomew's Hospital amounted last year to £54,767, towards which there was contributed in benefactions only £599. Of course it is well understood that the safety of the Institution, which derives its increasing income from estates, prevents the extension to it of individual voluntary aid, or rather, as the income is secured, the charitably disposed find other ways for doing good with their surplus means, and there is no stint of personal charity because of ancient endowments. There was a balance of £2989 brought forward from last year's account, and there is a balance carried on from the account closed the 31st of December last of £4196; so that the income appears to gain upon the expenditure. The principal item in the receipts is the sum of £29,260, received on account of rents; dividends on stock produced £4870; and another sum of £4476 resulted from the sale of Consols. The most interesting item on the debtor side of the accounts is a temporary loan of £5000 from the Bank of England, required for the recent improvements effected in the Hospital. On the creditor side we see an entry of £10,000 temporary loans repaid; and observing also that the balance carried on amounts to £4196, it is obvious that the incurring of a small amount of debt would have obviated the borrowing of the £5000 which comes into this account. But as moneys prospective and uncertain are of less value than moneys in hand, we make no complaint, though we cannot but think an institution of this kind ought to improve and extend itself without borrowing at all. The total outlay last year, on account of Hospital management and managing estates, that is, inclusive of "extra expenditure," was £40,546. Looking down the long list of payments, it is not easy to determine the necessity of all, or the non-necessity of any; but it is worth while to note that the total amount paid for "diet for the poor patients and nurses," and for "drugs, chemicals, etc.," was £13,101, that is, a trifle over one-third of the whole expenditure, the remaining nearly two-thirds being wholly absorbed in management. Tradesmen's bills amounted to £6129 salaries to £9903; there are other payments for annuities and liveries, and the rest of the account consists of entries for insurances, rates, lighting, law charges, rents, printing, and other such items. The entry for Hospital dinners is only £219, and for viewing estates, £88; these, then, are not the causes of the distribution of so large an income. Perhaps a statement of assets might explain the matter, by showing that some of the entries on account of extra expenditure will result in an increased future rental; such, indeed, we should expect, as most of these payments are for purchases and improvements, which are always supposed to insure a good return.—*City Press.*

Taste of Medicines Disguised by Chloroform.—M. Grave has shown that the taste of bitters may be entirely disguised by the addition of chloroform, as, *e g.*, in the tincture of aloes or gentian and a solution of quinine. M. Lamon also states that chloroform instantly and completely annihilates the odour of assafœtida. It remains, however, to be seen whether the chloroform does not also deprive these substances of the whole or part of their therapeutical properties.—*Journal de Pharmacie*, vol. xlii., p. 336.

BOOKS RECEIVED.

The Glasgow Medical Journal, No. XLI., April, 1863. Quarterly. Mackenzie, Glasgow.

. Contains a full and very interesting Medico-legal Report of the Trial of Jessie M'Lauchlan for Murder, a very scholarly article on Malformations of the Aorta, by Professor Allen Thomson, M.D., a Case of Ovariotomy, by Dr. Lyon, and much other interesting matter. A paper on Bathing, by Dr. Hatrick, is a curious *omnium gatherum*, which contains at least one amusing passage. The writer deprecates daily bathing. "Its expediency is less obvious among those who are accustomed to change their under-clothing regularly. . . . Daily immersion of the entire skin in water tends to injure its tone, and, along with the subsequent friction in drying, debilitates and leaves the pores exposed by removing too rapidly the sebaceous secretion and loose external scales of the epidermis. . . . Too assiduous washing of the head and body may not improbably induce premature gray hairs. The almost innumerable sebaceous glands were implanted in the skin for a purpose, which was scarcely in order that their city exudation might be removed every day." O happy Glasgow! whose citizens need to be thus cautioned by a learned Physician against excessive cleanliness! How times must be changed!

The Westminster Review (New Series), No. XLVI., April, 1863.

. The politician will find an elaborate article on Austria, the Biblical critic will regale himself with a defence of the everlasting Bishop Colenso, the man of material good sense will turn to an article on the Resources of Ireland, the Ethnographer will be interested in an Account of the Jews in Western Europe, idle old women will read about Lady Morgan, disputatious young men about "Truth *v.* Edification," and the curious young lady may set her soul on fire by speculations on the Antiquity of Man, and his co-existence with the huge extinct pachyderms of Northern Europe. The original articles are accompanied by the accustomed bibliographical notices, with short critical comments.

A Hand-book of Uterine Therapeutics. By Edward John Tilt, M.D. London: Churchill and Sons. 1863. Pp. 310.

The Quarterly Journal of Microscopical Science. Edited by Lr. Lankester and Mr. Busk. New Series. No. X., April, 1863. Churchill and Sons.

. This number is full of articles of interest. Amongst them is a paper by Dr. Greville, on the genus Aulicus, a genus of Diatomacæ, introduced by a discussion on the vexed question of "What is a Species?" Lines of specific separation are very hard to find in the Diatomacæ. Dr. Ciaccio, of Naples, publishes a paper in support of Dr. L. Beale's observations on the Anatomy of Nerve Fibrils and Cells. The Editors reprint from Silliman's Journal Professor Wyman's Experiments on the Formation of Infusoria in Boiled Solutions of Organic Matter enclosed in Hermetically-sealed Vessels and supplied with Pure Air. The experiments are of the highest interest, but they are open, like all others of the same kind, to objections founded on the observations of De Quatrefages, Robin Pouchet, and Pasteur.

The Edinburgh Medical Journal, No. XCIV., April, 1863. Oliver and Boyd.

. Contains a good lecture by Mr. William Turner, M.B., on Cellular Pathology, erring perhaps on the side of exclusiveness. The conclusion supported is that pus, cancer, and tubercle all originate in the same way from pre-existing cells of healthy tissue; that up to a certain time they appear the same, and that their ultimate difference is one of the mysteries of organisation involved in the question, "What is disease?" Dr. Keith publishes two instructive cases of ovariotomy, one fatal, the other successful.

The Madras Quarterly Journal of Medical Science, No. XI., January, 1863. Gantz, Brothers, Madras.

. This Journal loses nothing by comparison with our home productions. One of its most attractive papers is by a native Doctor, W. Venkatasawmy Nardoo, Medical Subordinate of the Madras Establishment, proposing a scheme for establishing European Medical Practice and sanitary measures amongst the native population. It gives a curious account of native quackery. The village quack, like Sir W. Scott's friend, the blacksmith, who treated all his friends with two simples, laudanum and calomel, has two remedies—black medicine (opium), white medicine (mercury). The results may be conceived. The writer naively recommends that all respectable natives who contract syphilis should be compelled to pay double for their medicines. He suggests that the idle population in the towns are under the influence of syphilitic poison. Amongst other valuable papers are those by Mr. Wood and Mr. Lowe on Tetanus, and Mr. Blackbock on Delirium Tremens.

The Edinburgh Veterinary Review, No. XXXVI., April, 1863. Maclachlan and Stewart.

. Professor Gamgee's paper, on the Anatomy of the Horse's Foot, is worth reading. We commend it to our country friends, whose horses' shoes are periodically pared away by the village blacksmith's apprentice. Professor Ferguson publishes a Report on Hot Iron in Sheep, and Mr. J. McGillivray a paper on Diseased Joints in Cattle and Sheep. Mr. Barey's mode of horse taming is found to produce curb, spavin, and enlarged fetlocks.

Irish Facts and Wakefield Figures in Relation to Convict Discipline in Ireland. Investigated by the Rev. John T. Burt. Longmans.

. The main conclusion of the writer seems to be that we are all wrong in ascribing garotting, etc., to the present "convict system." This doctrine is supported (like most others) by statistics.

The York Star, Vol. III., No. 2.

. Very creditable both to the inmates and managers of the York Asylum.

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An Account of the Medical Evidence connected with the Trial of Jessie M'Lauchlan. By G. H. B. Macleod, M.D., etc. Glasgow: Mackenzie. 1862.

*** A temperate statement of the conclusive evidence against the prisoner.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Medicus.—We believe he can refuse to give evidence unless his fee be previously paid.

W. C. L. will find papers on Faradisation in the *Medical Times and Gazette* of August 30 and September 13, 1862.

Nothing can exceed the ability and good feeling which mark the reports of the *Chester Chronicle* and *Courant* in Dr. Waters' case.

Morgan v. Lingen.—An action for libel in which a member of the Medical Profession, Dr. Lingen, of Hereford, is defendant, stood over from the late assizes held at that town. It will be satisfactory to the professional brethren of the defendant to know that the action—should it be proceeded with, which may be doubtful—is in no respect likely to affect his reputation as a Medical man. We may add, that a statement which has appeared in the Supplement to the *Hereford Times*, to the effect that a compromise and apology had been offered by the defendant, is unfounded, and has or will be contradicted by his counsel. We are informed that the Judge wished the matter settled out of Court, as being a trifling affair, but that such a course will not be adopted.

Erratum.—The writer of the letter on the case of Russell *v.* Adams, published in the last number of the *Medical Times and Gazette*, p. 350, is "Mr. Edward Cottew, L.R.C.P. Ed., *not* "Mr. Edward Cottem."

The Apothecaries' Company of Ireland.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Dr. Leet, in his letter published in the *Medical Times and Gazette* of the 4th instant, has omitted to inform your readers that the opinions of Mr. Napier (ex-Chancellor of Ireland) and of Sir R. Bethell (Chancellor of England) were submitted by the Poor-law Commissioners to the Attorney-General and the Solicitor-General for Ireland, who gave the following opinion, February 11, 1863:—

"We think that the Apothecaries' Hall, Ireland, has no power to grant a diploma or license to practise Medicine.

"Thomas O'Hagan.
"James A. Lawson."

Dublin, April. I am, &c. Anti-Humbug.

Restoration from Chloroform Accidents.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you allow me to make a few practical observations on restoration from chloroform accidents. It was stated in your impression for March 28 that "the great desideratum in such cases is to re-establish the action of the diaphragm and respiratory muscles. May it not be of the first importance to remove as quickly as possible the chloroform from the patient's lungs—to get rid of the exciting cause of the asphyxia?

The first thing to be done in the case of the apparently dead from chloroform is immediately and suddenly to compress the front and sides of the chest by the patient's own arms, the compression to be continued for about two seconds. By this means the poisoning vapour is expelled; and upon the pressure being suddenly relaxed, the elastic parietes of the chest recoil, and give the primary impetus to inspiration. This should be taken advantage of, and the ribs drawn up by means of the pectoral muscles, as I have elsewhere described. The chest may be made to draw in and again expel air mechanically as a pair of bellows. What is chiefly required is dexterity in the operator. A forcible expiration not only serves to remove the poisonous vapour, but is the first step towards the succeeding inspiration. I am, &c.

Clapham-common, April 7. Henry R. Silvester.

Faradisation in Chloroform Accidents.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I am very pleased that such a practical man as Mr. Lobb approves of the "Faradisation" current through the respiratory nerves in cases of apparent death from chloroform. I was previously aware that the needle or pins into the sterno-mastoid or diaphragm was not indispensable, still I think, in the hurry of the moment when these appalling miseries occur, not especially in hospital practice, but elsewhere, that it is a good plan, first to stick a needle at once into these parts; a needle into the diaphragm alone will do no harm, and may sometimes save a valuable life; and the magnet or cell battery is not always at hand. This subject is perfectly new, or I should not dwell on it; the "Faradisation" current alone seems to answer, and through the phrenic, but no other nerve. It is only necessary to read a report of my excellent friend Dr. Richardson in the current number of the *Medico-Chirurgical Review* to see what deplorable ignorance exists in all our standard and severely genteel classic journals on this point. I could not help smiling, sitting at the College of Physicians at the collected wisdom of Sir Charles Hastings' Association, when this old world lore was read by Dr. Richardson, viz., that we had no hope in Chloroform accidents from electricity, but if one passed a galvanic wire into the right auricle, and slit open an unfortunate patient's pericardium, then the "Association" would have reason to see something very miraculous; the battery being applied also to the nape of the neck or heart! "This orthodox plan," as Dr. Richardson says, only assisted to kill the patient more completely. I can corroborate this in a chloroform case I saw at Guy's, and I have asked at least a dozen men who are in the habit of administering chloroform how electricity should be used, but they invariably gave the wrong plan, the "orthodox plan," as saith the *Medico-Chirurgical Review.* I am, &c.

Sackville-street, April 3. Charles Kidd, M.D.

P.S.—We have had three deaths from chloroform very recently in the London Hospitals, no notice taken of them in the Journals. This new plan of Mr. Faraday's is known over a year and a-half, it has been tried in thousands of experiments on the lower animals poisoned by chloroform with the same beautiful and marvellous result. This was the first case of such accident in the human subject in which it was tried.

Expert Swearers.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—"Dr. Edward Waters, more than 50 years of age, with grown-up children, and enjoying a most extensive practice and a high character as a Physician in the city of Chester," has just had to rebut a charge of seduction, with Serjeant Shee (specially retained) and a string of counsel against him.

Dr. Waters fortunately vindicated his character from this most serious charge, and also gained a verdict in two subsequent actions for slander therein; so that the Profession has nothing to regret upon his account; but it is astonishing to find Drs. Lee and Ramsbotham down from London to sustain the charge by swearing that "the use of the speculum is improper where there are symptoms of hysteria." Now, is this a fact? Can anyone rightly affirm that in a troublesome and anomalous case of "cataleptic hysteria," with evidence of uterine irritation, a Physician is acting improperly in searching for ulceration of the os uteri, and in using the speculum for the purpose of applying caustic thereto? If the Profession think as I do on this question, they will hasten to reprobate the conduct of Drs. Lee and Ramsbotham for risking the credit of the Medical Profession by dogmatising upon a point whereon they had not the means of judging, and for doing this in such a way and at such a time as to jeopardise a fellow-practitioner of high position and reputation.

A charge of seduction may be brought against anyone; and how many of us are in a position *to disprove* a charge of having taken liberties with a patient in our consulting-room some eighteen months ago? Yet, had Dr. Waters not sold a pony on the day of the alleged misconduct, and had the purchaser not been at hand to furnish the date of the sale, and so contradict material points in the plaintiff's case, Dr. Waters would very probably have left that court mulcted of £1000, and blasted for the rest of his life, and chiefly in consequence of the unwarrantable assertions of these two obstetric specialists.

A short time since, in a trial for malpraxis in a forceps case, Dr. R. Barnes, I believe, deposed on oath "that the forceps should never be used without a consultation," and this also against a brother-practitioner. I am, &c. James Edmunds, M.D.

35, Finsbury-circus.

Medical Provident Association.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I beg leave to inform you that, in consequence of the various letters that have appeared in the Medical journals on the subject of Health Assurance, a meeting of Medical Practitioners was held at Cheltenham on the 31st ult., for the purpose of taking the matter into consideration. The meeting was held at the house of Wm. Dalton, Esq., F.R.C.S., under the presidency of Dr. Abercrombie, F.R.C.P. It was convened by circulars signed by the above gentlemen, as well as by Dr. Colledge, Mr. Rumsey, Dr. Eves, Dr. Rooke, and myself.

I will not attempt to give anything like a verbatim report of the remarks of the various speakers, but will only say that the meeting regarded the question under a threefold aspect:—Wishing to ascertain, first, whether a Medical Provident Association, for the purpose of giving its members an income during sickness, would be generally acceptable and useful to the Profession? Secondly, what would be its proper scope and aim? Lastly, what would be the cost of maintaining it in operation? It was the opinion of the meeting that the two first questions must be satisfactorily answered by the Profession, as a necessary preliminary to the solution of the third by an actuary.

It was therefore moved by Dr. Eves, seconded by Mr. Dalton, and carried unanimously,—"That the proposition for the formation of a Medical Provident Association is one entitled to the best consideration of the Profession."

It was moved by Dr. Hobson, seconded by Dr. Philson, and carried unanimously,—"That the editors of the Medical journals be requested kindly to give publicity to the following questions, and that individual Practitioners be requested to reply to them:—

"1. Do you think such an institution desirable for the Profession generally?
"2. Should you be inclined to become a subscriber?
"3. What has been, in weeks, your own annual average of sickness sufficiently severe to disable you from practice?"

Having intimated to the meeting that I was prepared to receive and arrange the answers to these questions, I was requested to undertake the task. I hope that all gentlemen who feel interest in the matter will favour me with early communications; and, in a fortnight from the publication of this paper, I propose to commence an analysis of the letters I receive. If the scheme should be generally approved, a second meeting will be in a position to make public an outline of the scope and aim of the association, as a basis for the discussion of details into which it would now be premature to enter. As soon as this can be done, it would be advantageous to hold meetings in various parts of the country; but, at present, in the absence of further information, such meetings would hardly produce benefit equivalent to the trouble and inconvenience of holding them.

Having said thus much as the mouthpiece of the meeting, I would beg leave most earnestly to urge the matter upon the attention of my Professional brethren. If a Provident Association can be carried out at a moderate cost, it will be a great benefit to a large number of Practitioners; and, on the contrary, if there be insuperable difficulties or objections in the way, they may now be brought to light, and the question set at rest for ever. I am, &c.

Stroud, Gloucestershire, April 4. R. B. Carter.

The So-called "Tobacco Amaurosis."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The *Medical Times and Gazette* for the 4th instant contains a report of a case of atrophy of the optic nerve seen at the Royal London Ophthalmic Hospital, and attributed by Mr. Wordsworth to the influence of tobacco. In similar cases I have heard a similar opinion expressed by some of Mr. Wordsworth's colleagues, but I am not aware upon what kind of evidence it is based.

I do not by any means wish to deny that tobacco-smoking may be among the causes of the disease in question; but I do not know of any

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facts that justify a positive statement in the matter. In this country a very large proportion of adult males are habitual smokers; and the mere coincidence of white atrophy with the use of tobacco proves nothing whatever. Moreover, a hasty, and possibly erroneous assumption, may tend to shut our eyes to the influence of other causes that ought not to be overlooked.

By "white atrophy" I mean a disease that is attended by gradual and painless loss of sight, and commonly by sluggish and rather dilated pupils, upon which atropine exerts less than its usual influence. The optic nerves are at first invaded by white patches, generally wedge-shaped—the rest of the nerve circle being either slightly hyperæmic, or appearing so by contrast with the altered portions. Gradually the white colour spreads over the whole nerve, the central vessels dwindle, and the blindness becomes complete. It is not uncommon in the progress of the disease to see slight capillary apoplexies at various points of the *fundus oculi*.

In this description I wish to include only those cases in which there is no evidence of cerebral mischief, and no physical obstruction, such as an orbital or intracranial tumour to the blood supply of the nerve.

I have seen this white atrophy in persons whose circumstances and habits differed so widely, that I have been much puzzled to find any cause common to them all. I have seen it several times in young women, none of whom used tobacco in any form. The last four cases that I remember were:—1. A lace manufacturer, about 50 years old, of regular life and habits, not a smoker. 2. A young countryman, of 24, a great smoker and hard spirit drinker, but whose powerful constitution seemed scarcely injured by his excesses. 3. A cavalry sergeant, aged 34, a steady man and moderate smoker. 4. A young girl of 18, a dressmaker, in comfortable circumstances and of regular life, who had never smoked. All these patients suffered in health by the depression incidental to impending blindness, but none of them presented any disease to which the atrophy could be clearly traced.

Upon the assumption that nineteen-twentieths of Englishmen smoke tobacco, there is hardly any disease that might not be attributed to its baneful influence. If Mr. Wordsworth is in possession of any better evidence than a coincidence that is necessarily frequent, I for one should be grateful to him if he would make it public. Perhaps he may know something about the proportionate frequency of the disease in males and females, or in Germans and Englishmen respectively; or about its occurrence in the classes that use tobacco largely. Perhaps he may have some hypothesis as to the *modus operandi* of the nicotian herb. Perhaps he may possess statistics that place the accuracy of his opinion beyond question. But the Profession has a right to expect from Moorfields something more than a barren statement; to expect, indeed, either philosophical caution or satisfactory evidence. To my judgment, the etiology of white atrophy opens some of the most obscure questions in pathology, and I shall gladly welcome any information tending to elucidate them.

I am, &c.

Stroud, Gloucestershire, April 5. ROBERT B. CARTER.

HEMICRANIA AFTER INFLUENZA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In "Notes and Queries" of last week's *Medical Times and Gazette* I observe a letter from Dr. Norris, of South Petherton, remarking on the frequent occurrence of hemicrania, etc., as a sequence to the very severe epidemic of influenza which has visited his neighbourhood, and asking for information as to its frequency elsewhere. I believe I have never before known so severe an attack of the kind as that which visited this neighbourhood also, and I have also remarked with surprise the very common occurrence of cephalalgia of an intermittent type (generally quotidian) on the decline of the disease. Some of the cases have proved very troublesome, but they have all yielded after a time to the exhibition of the ordinary antiperiodic remedies. Sulphate of zinc has proved very useful.

I have frequently noticed during the last three years (the wet seasons) the peculiar and well-marked tendency of almost every kind of febrile disease to assume the intermittent type, and even chronic disease has often partaken of the same nature. Intermittent fever being, up to that time, a comparatively rare disease in this neighbourhood, I accounted for the tendency towards its manifestation by the excessive quantity of moisture in the air, and the almost constantly sodden state of the ground during that period. About this time last year, during a severe attack of influenza, I experienced in myself a very severe attack of cephalalgia coming on every morning about nine o'clock, and lasting till 5 or 6 p.m., during which time I was almost incapacitated for either mental or bodily work. This lasted a fortnight, unchecked by quinine, zinc, or arsenic. At last, almost in despair, I tried chlorodyne, in a dose of thirty drops. The relief obtained was almost magical, being quite free from pain in half an hour. A smaller dose next morning warded off another attack which was evidently approaching, and the complaint passed off without a recurrence. I have obtained relief in the same way from a similar attack once since.

Whilst writing, I wish to make an observation as to the very great utility of subcutaneous injections in neuralgic and other affections, in which too often opium in any form fails to afford relief, when administered by the mouth. I allude particularly to sciatica, several cases of which I have completely cured by subcutaneous injections of morphia in doses of three-quarters to one grain, after all other treatment had proved unsuccessful. In one case of delirium from fever it proved quite successful after opium and morphia, to the extent and equivalent to six grains of the former, had completely failed to procure sleep. I have a patient still under treatment who was sleepless for five nights. On Friday last he was much worse, and delirium tremens had set in. Opium to the extent of three grains, in divided doses during the night, only caused increased restlessness. At 11 a.m. the following day I gave him thirty-five minims t. opii., and at 1 p.m. fifteen minims more, all to no purpose. At 7 p.m. he was worse than ever. I then injected about half a grain of morph. hydrochlor. which made him quieter, and at 8 p.m. I injected a quarter of a grain more. This was followed by refreshing sleep in naps of from half an hour to two hours in duration during the night, the following day and night, and no opium has been given since. Consciousness has gradually returned, and he is now progressing favourably. I do not assume to any discovery, knowing that the plan has been adopted by others before me, but I do not think its value is sufficiently appreciated, which I believe would be the case if a more extensive trial were made of it, its convenience and facility of use being most important features among its peculiar advantages.

Apologising for the length of this communication, so much of which does not bear upon the subject which induced me first to take my pen, but the importance of which seemed so urgent upon me, I am, &c.

Milton Abbas, Blandford, April 1. JOHN EWENS, L.R.C.P. Lond.

COMMUNICATIONS have been received from—

MR. JOHN EWENS; DR. HERBERT DAVIES; GOBEMOUCHE; DR. BUSHNAN; DR. COCKLE; DR. RAMSBOTHAM; DR. C. KIDD; MR. R. B. CARTER; DR. T. K. CHAMBERS; MEDICUS; PARIS; DR. EVANSON; MR. CHAS. WILLIAMS; NORFOLK AND NORWICH HOSPITAL; MR. CHAS. J. EVANS; THE GENERAL INFIRMARY, HULL; DR. A. SMITH; DR. H. R. SILVESTER; MR. A. M. EDWARDS; DR. EDMUNDS; MR. J. BRENDON CURGENVEN; PROF. TYNDALL; MR. EVAN ROWLAND; MESSRS. SHEA and JACKSON.

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 4, 1863.

BIRTHS.

Births of Boys, 955; Girls, 1017; Total, 1972.
Average of 10 corresponding weeks, 1853-62, 1749·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	795	680	1475
Average of the ten years 1853–62	635·2	608·6	1243·8
Average corrected to increased population ..	..	..	1368
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	6	28	11	3	4	4	1
North ..	618,210	10	4	19	2	14	11	2
Central ..	378,058	12	3	10	2	9	7	6
East	571,158	8	2	21	1	11	14	2
South ..	773,175	9	14	18	..	23	8	3
Total.. ..	2,803,989	45	51	80	8	61	44	14

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·914 in.
Mean temperature	46·3
Highest point of thermometer	61
Lowest point of thermometer	28·3
Mean dew-point temperature	38·3
General direction of wind	Variable.
Whole amount of rain in the week	0·04 in.

APPOINTMENTS FOR THE WEEK.

April 11. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's, 2 p.m.; Charing-cross, 1 p.m.

13. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Mr. Gay, "On Intestinal Stricture."

14. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ETHNOLOGICAL SOCIETY, 8 p.m. John Crawfurd, Esq., "On the Antiquity of Man."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Mr. Henry Thompson, "On Treatment of Severe Stricture of the Urethra by Gradual Distension at a Single Sitting." Dr. H. Weber, "Pathology of Crura Cerebri."

ROYAL INSTITUTION, 3 p.m. Professor Marshall, "On Animal Mechanics."

15. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

16. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

HARVEIAN SOCIETY, 8 p.m. Dr. Cock, "On Rickets, and the Connexion of Laryngismus Stridulus, or False Croup, with that Disease."

ROYAL INSTITUTION, 3 p.m. Prof. D. T. Ansted, F.R.S., "On the Relations of Geology with Allied Sciences."

17. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Frank Buckland, Esq., "On the Culture of Fish."

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON, 8 p.m. Practical Evening, for the Narration of Cases and the Exhibition of Specimens.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday (to-day) at 2 p.m.:—

By Mr. Fergusson—For Vesico-Vaginal Fistula (two cases); For Lacerated Perineum; For Anchylosis of Elbow-joint; For Lithotrity.

By Mr. Henry Smith—For Prolapsus Ani.

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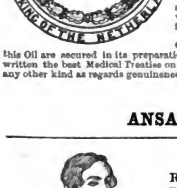

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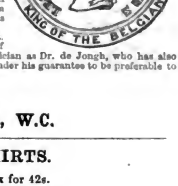

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ORIGINAL LECTURES.

PROFESSOR HUXLEY'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

LECTURE IV.

(Being the Third of Six Lectures on Classification.)

(Continued from page 365.)

THE structure of the *Acanthocephala*, comprising the formidable *Echinorhynchus* (Fig. 5) and its allies, is, on the other hand, pretty clearly made out. They are vermiform parasites, like the *Tæniada*, devoid of any mouth or alimentary canal, but provided with a proboscis armed with recurved hooks. The proboscis is supported within by a sort of rod-like handle, whence a cord is continued, to which the reproductive organs are attached. A single ganglion is seated in the "handle" of the proboscis. Immediately beneath the integument lies a series of reticulated canals containing a clear fluid, and it is difficult to see with what these can correspond if not with some modification of the water-vascular system.

Leaving the division provisionally termed "Scolecida" in this confessedly unsatisfactory state, I pass on to the *Annelida*, a class of large extent, containing the leech, the earthworm, the *Sipunculus*, the lobworm, the seamouse and *Polynoe* (Fig. 6), the *Serpula*, and the *Spirorbis*.

All the members of this class possess a nervous system, consisting of a longitudinal series of ganglia, situated along one side of the body, and traversed anteriorly by the œsophagus, the præ-œsophageal, or so-called "cerebral" ganglia being connected by lateral commissural cords with the post-œsophageal ganglia.

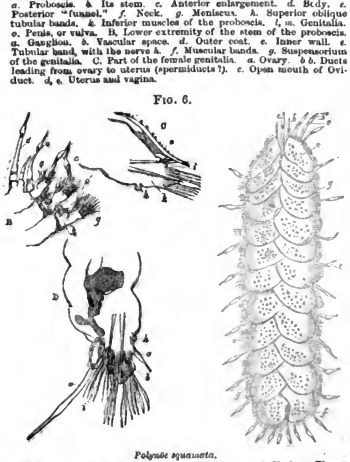
In many of these animals the body is divided into segments, each of which corresponds with a single pair of ganglia of the chain, and each of these segments may be provided with a pair of lateral appendages; but the appendages are never articulated, and are never so modified, as to be converted into masticatory organs, in the cephalic region of the body.

No Annelid ever possesses a heart comparable to the heart of a Crustacean, or Insect, but a system of vessels, with more or less extensively contractile walls, containing a clear fluid, usually red or green in colour, and, in some rare cases only, corpusculated, is very generally developed, and sends prolongations into the respiratory organs, where such exist. This has been termed the "pseudo-hæmal" system; and I have thought it probable that these "pseudo-hæmal" vessels are extreme modifications of organs homologous with the water-vessels of the Scolecida. As M. de Quatrefages has clearly

FIG. 5.

Echinorhynchus. A. Diagram exhibiting the relative position of the organs. *a.* Proboscis. *b.* Its stem. *c.* Anterior enlargement. *d.* Body. *e.* Posterior "funnel." *f.* Neck. *g.* Menisci. *h.* Superior oblique tubular bands. *k.* Inferior muscles of the proboscis. *l, m.* Genitalia. *e.* Penis, or vulva. B. Lower extremity of the stem of the proboscis. *a.* Ganglion. *b.* Vascular space. *d.* Outer coat. *e.* Inner wall. *c.* Tubular band, with the nerve *h.* *f.* Muscular bands. *g.* Suspensorium of the genitalia. C. Part of the female genitalia. *a.* Ovary. *b b.* Ducts leading from ovary to uterus (epermiducts ?). *c.* Open mouth of Oviduct. *d, e.* Uterus and vagina.

FIG. 6.



Polynoë squamata.

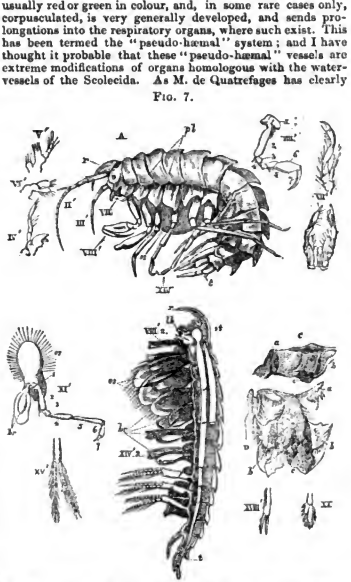
A. Viewed from above and enlarged. *a, b.* Feelers. *c, d.* Cirri. *e.* Elytra. *f.* Space left between the two posterior elytra. *g.* Setæ and fimbriæ of the elytra.

B. Posterior extremity, inferior view. *h.* Inferior tubercle.

C. Section of half a somite with elytron. *i.* notopodium. *k.* Neuropodium.

D. Section of half a somite with cirrus.

FIG. 7.



Amphitoë.—Lateral view, longitudinal and vertical section, detached appendages and stomach. The numbers I to XX indicate the appendages of the corresponding somites. *r.* Rostrum. *t.* Telson. *lb.* Labrum. *d.* Roof of the head, or cephalostegite. *ot* Oostegite. *Br.* Branchiæ. D. Stomach opened from above, and also viewed laterally. *a, b, c.* Different parts of the armature.

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shown, it is the perivisceral cavity with its contents that, in these animals, answers to the true blood-system of the Crustacea and Insects.

The embryos of Annelida are very generally ciliated, and vibratile cilia are commonly, if not universally, developed in some part or other of their organisation. In both these respects they present a most marked contrast to the succeeding classes.

In the *Crustacea* the body is distinguishable into a variable number of "somites," or definite segments, each of which may be, and some of which always are, provided with a single pair of articulated appendages. The latter proposition is true of all existing *Crustacea*; whether it also held good of the long extinct *Trilobites*, is a question which we have no means of deciding. In most *Crustacea*, and, probably, in all, one or more pairs of appendages are so modified as to subserve manducation.

A pair of ganglia is primitively developed in each somite, and the gullet passes between two successive pairs of ganglia, as in the *Annelida*.

No trace of a water-vascular system, nor of any vascular system similar to that of the *Annelida* is to be found in any Crustacean. All *Crustacea* which possess definite respiratory organs have branchiæ adapted for respiring air by means of water, the terrestrial Tropods, with their curious rudimentary representation of a tracheal system which some exhibit, forming no real exception to this rule. When they are provided with a circulatory organ, it is situated on the opposite side of the alimentary canal to the principal chain of ganglia of the nervous system, and communicates by valvular apertures with the surrounding venous sinus, the so-called "pericardium."

The *Crustacea* vary through such a wide range of organisation that I doubt if any other anatomical proposition, in addition to those which I have mentioned, except the presence of a chitinous integument and the absence of cilia,

Fig. 8.

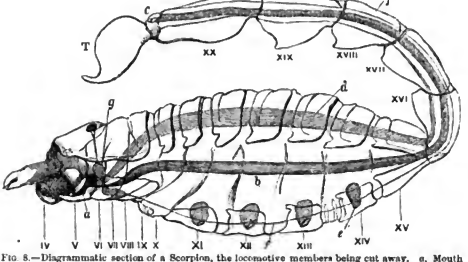

Fig. 8.—Diagrammatic section of a Scorpion, the locomotive members being cut away. *a*, Mouth leading into the pharyngeal pump. The large labrum lies above the mouth, and at the side of it are the bases of the large chelæ, or mandibles, IV., and above them the cheliceræ, or antennæ. VI. to XX. Somites of the body. *T*, Telson; *b*, intestine; *c*, anus; *d*, indicates the position of the heart; *e*, the pulmonary sacs; *f*, the fimbria of the ganglionic chain; *g*, the cerebral ganglia.

Fig. 9.

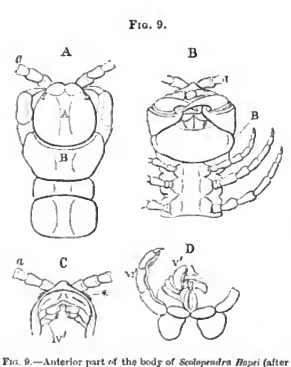

Fig. 9.—Anterior part of the body of *Scolopendra Hapei* (after Newport). A, Anterior part of the body from above; B, from below; *a*, head proper; *B*, anterior thoracic somites; *c*, antennæ; C, antennæ, labrum, and mandibles (IV.) from below; D, under view of head, with the two pairs of maxillæ (V. VI.) covering the foregoing.

Fig. 11.

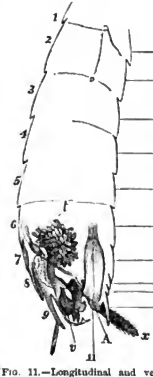

Fig. 11.—Longitudinal and vertical section of the abdomen of a male Cockroach (*Blatta*). 1, 2, 3, 4, etc., tergs and sterna of the abdomen; *t*, testis; *v*, aperture of the vas deferens; *A*, anus.

Fig. 10.

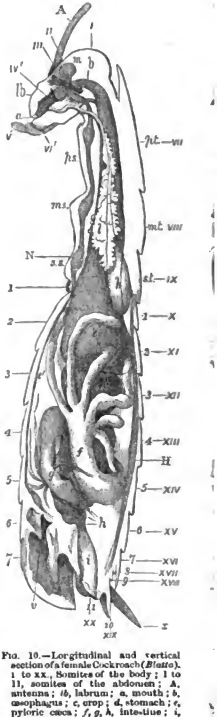

Fig. 10.—Longitudinal and vertical section of a female Cockroach (*Blatta*). 1 to XX., Somites of the body; I to 11, somites of the abdomen; *A*, antenna; *lb*, labrum; *a*, mouth; *b*, œsophagus; *c*, crop; *d*, stomach; *e*, pyloric cæca; *f*, *g*, *h*, intestines; *i*, rectum; *v*, vulva; *k l*, salivary gland and receptacle; *H*, position of heart; *m*, cerebral ganglia; *N*, thoracic ganglia; *x*, palp-like appendage.

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can be enunciated, which shall be true of all the members of the group.

It is this extreme elasticity, if I may so speak, of the crustacean type which renders the construction of any definition of the *Crustacea* which shall include all its members and exclude the next class, the *Arachnida*, so difficult. For the Spiders, Scorpions, Mites, and Ticks, which constitute this class, possess all the characters which have been just stated to be common to the *Crustacea* save one; when they are provided with distinct respiratory organs, in fact, these are not branchiæ adapted for breathing aërated water or moist air, but are tracheal tubes, or pulmonary sacs, fitted for the breathing of air directly, and not by the intermediation of water. But then many of the lower *Arachnida*, like the lower *Crustacea*, are devoid of special respiratory organs, and so the diagnostic character fails to be of service.

The following common characters of the *Arachnida*, however, help out our diagnosis in practice. They never possess more than four pairs of locomotive limbs, and the somites of the abdomen, even when the latter is well developed, are not provided with limbs.

In the higher *Arachnida* (Fig. 8), as in the higher *Crustacea*, the body is composed of twenty somites, six of which are allotted to the head; but in the former class one of the two normal pairs of antennæ is never developed, and the eyes are always sessile, while, in the highest *Crustacea*, the eyes are mounted upon movable peduncles, and both pairs of antennæ are developed.

The *Myriapoda* (Fig. 9) have the chitinous integument; the body divided into somites, provided with articulated appendages of the former groups, and nervous and circulating organs constructed upon a similar plan to theirs. The body consists of more than twenty somites, and those which correspond with the abdomen of *Arachnida* are provided with locomotive limbs.

The head consists of at least five, and probably of six, coalescent and modified somites, and some of the anterior segments of the body are in many genera coalescent, and have their appendages specially modified to subserve prehension. The respiratory organs are tracheæ, which open by stigmata upon the surface of the body, and the walls of which are strengthened by chitin, so disposed as readily to pull out into a spirally coiled filament.

The *Insecta*, lastly, have respiratory organs like those of the *Myriapoda*, with a nervous and a circulatory system disposed essentially as in this and the two preceding classes. But the total number of somites of the body never exceeds twenty. Of these five certainly, and six probably, constitute the head, which possesses a pair of antennæ, a pair of mandibles, and two pairs of maxillæ, the hinder pair coalescent, and forming the organ called the "labium."

Three, or perhaps in some cases more, somites unite and become specially modified to form the thorax, to which the three pairs of locomotive limbs, always present in insects, are attached.

An additional two pair of locomotive organs—the wings—are developed in most insects from the tergal walls of the second and third thoracic somites. No locomotive appendages are ever developed from the abdomen, but the ventral portions of the abdominal somites, from the eighth backwards, are often metamorphosed into apparatuses ancillary to the generative function (Figs. 10 and 11).

A CLINICAL LECTURE
ON
MENORRHAGIA DEPENDING ON MORBID CHANGES IN THE OVARIES.

DELIVERED AT

The Middlesex Hospital,

BY

W. O. PRIESTLEY, M.D.

Gentlemen,—The term "Menorrhagia" is very commonly applied to all cases in which unusual and profuse losses of blood take place from the unimpregnated uterus. And yet, strictly speaking, "menorrhagia," which means over-profuse menstruation, is applicable only to a limited number of such instances. Abnormal uterine hæmorrhage is, in truth, but one of the symptoms which give evidence of some probably existing morbid state in the uterus and its appendages, and it may be produced by several separate and distinct pathological conditions. It is, for example, the common attendant of uterine congestion and hypertrophy, of fibroid tumours, of the various forms of polypi, and of cancer; and when it is caused by these diseases, however convenient it may be to speak of it as menorrhagia, the bleeding cannot then be regarded as an abnormal form of menstruation, inasmuch as the function of menstruation is in no way concerned in the appearance of the discharge.

The form of uterine hæmorrhage to which I propose to direct your attention to-day may, without any lack of precision, be designated "menorrhagia," because the ovaries are supposed to take the initiative in the production of the morbid flow of blood from the uterus, much in the same way that they take the initiative in the order of events which results in the production of the catamenia under healthy circumstances. It is, I believe, of common occurrence, and yet the subject is involved in much obscurity, not only because the ovaries, when situated in their natural anatomical position, are in most cases with difficulty accessible to our methods of examination, but also because the exact relation between the physiological processes which take place in the ovaries and the functions performed by the unimpregnated uterus are yet very imperfectly understood. What we *do* know, however, of the anatomical changes which take place in the organs of generation at the menstrual periods in women, greatly aids us in arriving at intelligent conclusions as to the pathology of this morbid condition. It is now well ascertained that as each catamenial period comes round, the ovaries become swollen, and one or more of the Graafian vesicles imbedded in their substance become matured, and approach the circumference of the organ for the purpose of being discharged subsequently into the trumpet-shaped extremity of the Fallopian tube. Coincident with these active changes in the ovaries, the uterus and the pelvic organs generally receive an increased supply of blood, and the congestion thus produced results in the catamenial flow. Menstruation being completed, the congestion subsides, and in the unimpregnated and healthy woman the generative organs resume their original quiescence.

Various circumstances may, however, conduce at the catamenial periods to excite a state of hyperæmia in the ovaries and uterus, which proceeds beyond the limits associated with normal menstruation; or the hyperæmia, without being excessive in degree, may be prolonged beyond the time when the menstrual molimen ordinarily passes away. In the one case it probably gives rise to excessive loss of blood, which is confined to the ordinary number of days occupied by the catamenia; in the other, the menstrual discharge is prolonged beyond the usual number of days. In some cases, again, by a combination of the two conditions, the menstrual discharge is not only extremely profuse during the usual period, but also prolonged much beyond the time at which it ought to cease. But I may go farther than this, and state what I believe to be the fact, that uterine hæmorrhage may be provoked at any time in the interval between the catamenial periods, if the ovaries become the seat of morbid changes which assimilate themselves to those active processes which take place at the menstrual times. If one or both ovaries become congested, whatever be the cause, the excitement in the ovaries may be followed by uterine congestion, and the congestion be relieved by uterine hæmorrhage.

In this way we may have an irregular and morbid form of menstruation, and yet the phenomena occurring, so far as anatomical conditions are concerned, in the same order as during healthy menstruation.

Congestion and inflammation of the ovaries are not, however, invariably accompanied by menorrhagia, and it is not always easy to disentangle the evidence such cases afford, and to trace with precision the primary cause of the hæmorrhage. Apart from the presence of organic disease, loss of blood takes place from the uterus as the result of various causes, and in many of these instances the ovaries are not at fault, and there is no coincident turgescence of these organs. When no fibroid tumour is present, when there is no polypus, no cancer, or other of the graver diseases which are commonly attended by hæmorrhage, the uterus may become congested, because there is some derangement in the chylo-poietic viscera, and loss of blood from the uterine mucous membrane is the consequence. Or the general condition of the blood may be so deteriorated and impoverished by kidney disease, or some

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other debilitating cause, that it can scarcely be retained in its customary channels, and it escapes more readily from the uterus than elsewhere, because, in addition to the influence of gravitation, its mucous membrane is so constructed that blood can be poured out easily on its surface, as we see it in the performance of its ordinary periodic function. Moreover, such attacks of ovarian irritation as lead to uterine congestion and hæmorrhage cannot be frequently repeated without leading to persistent congestion and even hypertrophy of the uterus. This, of course, increases the tendency to hæmorrhage from slight causes, and so far complicates the diagnosis, that it is often extremely difficult to trace out accurately whether the malady originally began in the uterus or ovaries. In many instances, nevertheless, the evidence is sufficiently clear to lead to correct inference. The diagnosis is often facilitated by the ovary or ovaries being so displaced downwards that they are within reach, and their condition can thus be ascertained by the touch. The tendency of ovarian congestion is to produce increased weight of the ovaries, and by its long continuance the ovarian ligaments become so elongated that the ovaries themselves lie in the retro-uterine cul-de-sac of peritoneum, where they can be felt both by the vagina and rectum.

The following is the short history of a patient whose presence in Prudhoe Ward has led me to bring this subject before you. The case is abridged from the notes of Mr. Spanton, the obstetric assistant:—

Case 1.—E. K., 21 years of age, unmarried, and a lady's-maid, was admitted into the Hospital nearly two months ago. The patient was of middle height and well proportioned, with dark hair and eyes. Her countenance was anæmic, and her lips, gums, and conjunctivæ very pale. She said she had been almost constantly unwell for six weeks, and complained of great weakness, aching pain in the loins and right iliac region, great depression of spirits, and inability to follow her occupation. The tongue was clean but very pale, and her pulse was slow, weak, and easily compressed. There was no distension of the abdomen, and pressure only caused slight pain in the hypogastric and right ovarian region. She had no tenesmus and no dysuria. It was elicited with some difficulty that the patient had an illegitimate child at the full period about a year before. The labour was natural, and convalescence up to a certain period satisfactory. On beginning to go about afterwards, she experienced pain in the uterine region, which sometimes extended over the whole abdomen. At this time there was no history of rigors, fever, or sudden accession of pain, and she went to Brighton in the hope of improving her general health. The catamenia recurred regularly after the confinement, but the discharge was too profuse, lasting eight or nine days, and was accompanied with unusual lumbar pain and lassitude. The last two or three regular periods had been attended by much more severe pain, localised in the right iliac region, and for nearly two months the catamenia had not ceased to flow for more than a day or two at a time, and had sometimes been very profuse.

On examination by the vagina, the uterus was found somewhat swollen, but otherwise healthy. Both ovaries could be reached by pushing the finger up behind the uterus, but the right ovary was so prolapsed that it was on a level with the os uteri; it was considerably enlarged and rounded in its outline, and very sensitive to the touch. A copious discharge of fluid blood poured from the os uteri.

The patient was ordered to be kept in bed, to have simple diet, and to take a mixture containing dilute sulphuric acid every six hours, with an occasional opiate to soothe the pain when severe.

Great care was taken to regulate the bowels, which were inclined to constipation, and to keep the patient in the horizontal posture. In four days after admission the menorrhagia ceased and the pain abated, but the ovary, when examined from time to time, was still swollen and tender. Subsequently she was ordered a more liberal diet, with port wine, and to take the following draught three times a day:—℞ Ferri sulph., gr. lss.; magnes. sulph., ʒj.; acid. sulph. dil., ♏v.; infus. quassiæ, ℥j. oft. haust.

Three weeks later the sanguineous discharge returned in moderate quantity, like a regular period. It was unaccompanied by much pain, and lasted about six days. In about six weeks from the time of admission she left the Hospital much improved; she was weak and pale still, but free from pain, and had no hæmorrhage. The uterus was healthy, and the right ovary, though still prolapsed, was but slightly tender; it was much diminished in size, and its surface could be felt distinctly corrugated, like the shell of a walnut.

The detection of the enlarged and tender ovary, and its association with the pain experienced in the right iliac region, the absence of any sufficient cause for the continued loss of blood either in the uterus or in the constitutional condition of the patient, sufficiently justifies the inference that the symptoms described were produced by undue and prolonged excitement in the ovary. The case is a mild one of its kind, the pathological condition readily subsiding under the influence of rest and appropriate treatment. But instances are not infrequent in which the symptoms are much more aggravated in their character, and in which pain and uterine hæmorrhage are present in a much greater degree. Few cases indeed are exactly alike in their various phases, and they differ not alone in the intensity of their symptoms, but in various other points. In some patients, ovarian irritation manifests itself as one of the forms of dysmenorrhœa, severe pains being experienced in the ovarian region, chiefly about the time of the regular menstrual periods, which are attended by large losses of blood; but yet the hæmorrhage occurs only at those times, and subsides when the period is past. In these cases there is ordinarily no sufficient cause for the symptoms to be found in the condition of the uterus, but one or other ovary is frequently felt prolapsed into the retro-uterine cul-de-sac, enlarged and sensitive to touch even during the menstrual interval, but more swollen and sensitive still before and during a menstrual period. Sometimes the discharge is mixed not only with coagula, but also with distinct membranous shreds. The late Dr. Edward Rigby, to whom we are indebted for various useful contributions to our knowledge concerning these morbid changes in the ovaries, held the opinion that the variety of painful menstruation which is characterised by the formation and expulsion of the so-called dysmenorrhœal membranes had its origin primarily in the ovary, and that those membranes which are now known not to be inflammatory exudations, but the separated mucous laminæ from the interior of the uterus, were formed in sympathy with morbid changes going on in the ovary, just as the true decidua is formed in consonance with those physiological changes which take place as the result of impregnation. Some obstetrical writers regard membranous dysmenorrhœa rather as the result of uterine congestion which has not been primarily and essentially provoked by ovarian irritation. A beautifully injected preparation in this museum taken from the body of a woman who suffered during life from membranous dysmenorrhœa, and who died menstruating, apparently affords some confirmation of Dr. Rigby's view. A dysmenorrhœal membrane is present in the uterine cavity, and both ovaries are swollen to double their normal size, without cystic degeneration. In other patients some accident determines a sudden accession of ovarian congestion in the interval between two periods. Severe pain of growing intensity is experienced in the lower part of the abdomen, but chiefly referable to the iliac region and sacro-iliac synchondrosis of the side affected. General febrile symptoms may be added, and at length uterine hæmorrhage appears, probably bringing with it an amelioration of suffering. In other patients, again, repeated attacks occur of an irregular character, separated by weeks or months, are not traceable to any immediate exciting cause, and are attended by variable symptoms. I have remarked that women who are the subjects of these repeated attacks often menstruate profusely and painfully as a habit, and in more than one instance in which sudden accessions of ovarian pain, followed by uterine hæmorrhage, have been repeated, I have found evidence of inflammation extending from the ovary to contiguous parts,—pelvic cellulitis or local peritonitis being lighted up around the ovary, which was the centre of the mischief. The following case is an illustration in point:—

Case 2.—Mrs. L., a married lady, of 35 years of age, who had borne no children, and who menstruated regularly, but always very profusely, some periods almost amounting to flooding, was seized during a menstrual interval with what she considered to be a severe bilious attack, having previously had several illnesses of a like character. When I saw her she complained of severe pain in the lower part of the abdomen, most intense in the left ovarian region, and there increased by pressure. There was violent bilious vomiting, and some uneasiness in the epigastrium and right hypochondriac region. The attack had been ushered in by rigors, frequently repeated, and the pulse was full and bounding,

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and beating at the rate of 130 in the minute. There was an intense febrile condition of general system, and retention of urine, the bladder being full, and requiring the use of the catheter, which for several days subsequently had to be employed. Hot fomentations were applied to the abdomen, and calomel and opium, with effervescing saline draughts, were prescribed. On the third day a sanguineous discharge, like the catamenia, began to flow from the uterus, and a day later it was so profuse as to amount to flooding. Relief of pain and diminution in the frequency of the pulse soon followed, and there was no longer necessity for the use of the catheter. Copious menorrhagia continued for ten days, and then gradually subsided. At the end of three weeks from the beginning of her illness she was well, and going about as usual. In three months the patient had another attack, characterised by almost the same symptoms, but with suffering even more intense, and only subdued by large and often-repeated opiates. I made a vaginal examination early on this occasion, my experience of the previous illness leading me to suspect some morbid change in the womb or its appendages. The uterus was somewhat enlarged and depressed in the pelvis, but not very sensitive to pressure. Behind the uterus and to the left side, in the direction of the ovary, there was decided fulness, and pressure with the index finger produced acute pain, which was compared to the stabbing with a knife. Menorrhagia came on five or six days later, and brought with it amelioration of all the symptoms, and ultimately convalescence.

I had an opportunity of seeing this patient two months later in a third attack of like character, but more severe than either of the two immediately preceding. On the third day I found the uterus more tender than before, and there was a distinct irregular swelling, most tender to the touch, in the direction of the left broad ligament and ovary. Menorrhagia came on as usual in the progress of the attack, although the regular period had only ceased a week before. The patient was much reduced on this occasion, recovering more slowly and less perfectly. On examination afterwards, I ascertained that the uterus was fixed to the side of the pelvis by inflammatory deposit about the left ovary and in the left broad ligament, which eight or nine months of careful treatment subsequently did not entirely remove. Since the attack last mentioned, others have occurred to the same patient, and indeed they are easily provoked by fatigue or cold at any time; but I need not go into further details; suffice it to say that, on the whole, the patient's health is recently more satisfactory, her illnesses less frequent, less severe when they do occur, and the catamenia have been much more moderate in quantity for two or three months past, which I am disposed to regard as a very favourable point in the prognosis.

(To be continued.)

ORIGINAL COMMUNICATIONS.

AN ACCOUNT OF THE

PHYSIOLOGICAL RESEARCHES OF THE REV. PROFESSOR HAUGHTON, M.D., TRINITY COLLEGE, DUBLIN.

(Continued from page 367.)

THE theory of the Rev. Professor Haughton with regard to the relation between work done and urea is, that the animal excretions significant of work done are three in number—

1. Carbonic acid.
2. Water (in part).
3. Urea.

Before developing this theory, it is necessary to show why the Professor specially connects the work done with the nitrogen eliminated by the kidney.

If the total excretion of carbonic acid for twenty-four hours, under ordinary every-day conditions of life, were known, this excretion would be gladly assigned its proper place, whatever it be, among the representatives of work done; but this is a question which yet remains to be solved. Prout of old discovered daily and hourly variations in the quantity of carbonic acid evolved by the lungs; Barral, Vierordt, and Dr. Edward Smith have ascertained monthly and seasonal differences in the excretion of this gas. Temperature, barometric changes, atmospheric moisture influence its formation; internal conditions of the organism, the chemical nature of the food, and, above all, the rhythm of the respiration affect its production. The methods adopted with a view to experiment on this excretion have been inadequate to overcome the great difficulties in the way of a correct estimate of the total quantity evolved in twenty-four hours by an individual in routine life. Coathupe and Prout sought only the percentage amount of carbonic acid in a few cubic inches of expired air, and the total quantity of air expired was not ascertained. Dr. Smith's elaborate observations cannot be regarded as solving the problem, though adding many new facts to our previous knowledge, the gas being collected for short periods of each hour, and the conduct involved by the carrying out of the investigations certainly not coming under the category of the ordinary every-day condition of life. The experiments of Pettenkofer and Voit with their air-chamber at Munich have surpassed all previous ones in accuracy and attention to minutiæ, but the Professor still objects that the ordinary "*opus mechanicum*" of a labouring man cannot be fairly performed in a room of the dimensions of eight cubic feet.

The objections raised against the percentage mode of estimating the excretion of carbonic acid apply with equal force to the means employed to determine the excretion of pulmonary and cutaneous water—the urinary water being of course observable by direct measurement—and, moreover, another difficulty presents itself to those who would discover what relation the water which leaves the animal body has to the work done, namely, how much of the water was formed in the body—a question in vital chemistry not yet answered. The greater part of the water excreted entered the body as such, and therefore, as it leaves the body in the same condition as it entered it, it represents no work done; the two difficulties, then, with regard to the excretion of water by the skin and lungs are, first, to find the total quantity, and then how much of this quantity was formed in the body. The Professor has felt himself inevitably forced by the difficulties attending the correct estimation of the excretions of carbonic acid and water to regard the excretion of urea, which is easily measured, as an exponent of the whole work. He reluctantly adopts a partial solution of the problem of work in the absence of any better one, not under-estimating the significance of the other excretory products, but regretting that in the present state of our knowledge we are unable to appreciate them.

As before mentioned, the division of work adopted by Professor Haughton is fourfold.

a. Opus vitale.
b. Opus calorificum.
c. Opus mechanicum.
d. Opus mentale.

The first two of these divisions are correlated, and are necessary to the life and health of the individual, but the at present unknown quantity of carbonic acid eliminated by lungs and skin, when determined, will probably fully account for the *opus calorificum*, so that there remain three descriptions of work, the equivalents to which, in grains of urea, are sought for.

For examples of *opus mechanicum* were taken the work done in pedestrian exercise; shot-drill, common drill, oakum picking, in the military prison, and the labour of paviours employed in the streets. The mode of estimating the work done by a person of a given weight walking is to find what the one-twentieth part of the weight of the body lifted through the distance walked amounts to. By No. 1, in table B (see former number), who walked three miles daily, and weighed 173 lbs., the work done in walking was equal to 61·1 tons lifted through one foot; the work done by the prisoners employed at shot-drill is estimated at 160·7 tons lifted one foot; at common drill, 66·5 tons; and at oakum picking, 83·1 tons lifted one foot. By equations deduced from these facts (for which we refer to the Professor's original papers), he finds that the amount of urea equivalent to the pedestrian exercise, or mechanical work done by No. 1, table B, was 24·2 grains, and the amount, representing the mechanical work done by the prisoners at shot-drill, common drill, and oakum picking was 120 grains a man, and comparing together the individuals who differ only in the labour they perform, by some other equations, he finds that the *opus vitale* of a man of 150 lbs. in weight is represented by 297·7 grains of urea per pound weight of body.

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This is the excretion of urea necessary to keep 150 lbs. weight of man alive for four-and-twenty hours, and may in round numbers be called 300 grains; from which it follows that each pound weight of living man requires an expenditure of work, represented by two grains of urea per day to keep it alive, and prevent it from becoming subject to the ordinary chemical laws of inert matter. This calculation does not include the *opus calorificum*, or work necessary to keep the skin at a constant temperature of 90° F., nor the additional force requisite to vaporise the perspiration from a fluid to a gaseous condition, during which vaporisation 1000 times more heat is absorbed and rendered latent than the perspiration held as a fluid.

The remarkable result that the minimum excretion of urea absolutely indispensable to health is two grains per pound weight of living man, deduced from observations made on persons in perfect health, has since been confirmed by the determination of the discharge of urea in diseased conditions, the excretion of a less quantity entailing the symptoms of uræmia or ammoniæmia.

The subjects experimented on, who worked their minds, either did so at "office work" or high class teaching, with severe study preparatory to it. Nos. 2 and 4, table B, were employed in "office work" three and six hours respectively; Nos. 1, 5, and 6, studied five, four, and four hours severally. Both kinds of mental labour indicate a waste of tissue of a higher order than that involved in the common *opus mechanicum*, as seen by a comparison of the equivalent excretion of urea during a day's labour in each.

1. *Opus mechanicum*, or 150 lbs. lifted one mile, } = 136·5 grains of urea.
2. *Opus mentale*, or five hours study, } = 217·0 grains of urea.
3. *Opus mentale*, or eight hours office work, } = 221·7 grains of urea.

The waste of tissue here demonstrated to be involved in the *opus mentale* required in teaching and in the preparation for it, is a scientific explanation of our dearly-bought experience as to the results of overtaxing the powers of mental labourers, and a corroboration of the fact that the finer operations of the animal machine require superior food. Men employed only in manual or routine bodily labour are sufficiently well fed on vegetable diet, and discharge on an average 400 grains of urea per day, of which 300 grains are spent in vital, and 100 in mechanical work; a statement in conformity with the experience of the mass of mankind employed in manual labour in all ages and countries; but when the work is of a higher order, a better pabulum must be supplied, sufficient to allow of a discharge of 533 grains per day of urea, of which 300 grains, as before, are spent in vital work, and 233 in mental work and the mechanical work necessary to keep the body in health.

The following Table exhibits the Work done, expressed in Urea Grains, and divided into its Component Parts:—

No.	Total urea.	Opus vitale.	Opus mechanicum.	Opus mentale, etc.
Table B, No. 1	367·5	343·3	24·2	—
,, Nos. 2, 3, 4, 5	409·0	279·8	129·8	—
Table A, No. 1	465·0	256·1	28·7	180·2
,, No. 2	677·2	250·1	57·4	369·7
,, No. 3	644·6	256·1	57·4	337·1
,, No. 4	554·0	345·3	15·8	192·9
,, No. 5	630·0	375·1	34·5	220·4
,, No. 6	484·3	287·8	83·0	163·5

A CASE OF REMARKABLY PROLONGED AND PROFOUND SLEEP, WITH REMARKS.

By JOHN WARD COUSINS, M.D. Lond., F.R.C.S.,
Surgeon to the Royal Portsmouth Hospital.

J. C., a farmer, aged 43, has been subject at intervals during the last twenty years to attacks of deep and prolonged sleep. He has never suffered from any disease of the brain, or any other illness. The disorder commenced without any assignable cause in the year 1842, and continued nearly a whole year. It returned again in 1848, and having persisted without interruption for eighteen months, it left him entirely for the space of twelve years. The present attack commenced on May 19, 1860. Since that time he has not slept naturally.

He retires to bed at night soon after 10 p.m., and almost immediately falls into a profound sleep, from which all the means at present adopted have failed to arouse him. He generally sleeps on his side, and appears like a person in refreshing slumber. His face and ears are pale; skin generally warm; but the feet are often cold and livid. Pulse slow and feeble; pupils generally somewhat dilated; respiration very gentle and shallow. He seldom moves, but occasionally he turns over from one side to the other. He never snores or moans. He awakes suddenly, without giving any warning, and he always seems refreshed, just as if he had slept naturally. Occasionally he complains of a slight pricking sensation in the forehead.

The longest period he has ever passed in profound sleep is five days and five nights. Lately, he has frequently slept three days, and occasionally four without waking, but the average time is nearly two days. He is awake about four or five hours out of forty-eight. During these remarkable sleeps he never dreams, and the contents of the bowel and bladder are always retained. Before he falls asleep, he says that he "sometimes feels stupid;" but this is the only head symptom he ever complains of. His memory is good. When he awakes he remembers everything that happened the day before he began to sleep, and always asks, "How long have I slept?"

Lately, he has looked pale, and has lost flesh. His appetite is good, and the bowels are active. His manner is quiet and his disposition amiable. He is a good man of business, and is fond of reading. In intellectual power he is by no means deficient, but his early opportunities have been limited.

During the attack in the year 1848, he frequently suffered from spasmodic tremus, which generally commenced soon after he awoke, and persisted for many hours. His jaws were always firmly locked, and at the same time he complained of pain in the back and neck. This affection, however, has never reappeared.

Remarks.—There are many authentic cases of prolonged sleep on record, and they admit of a division into three classes —1. It occurs as a primary affection arising from an altered state of the cerebral circulation; this is very rare. 2. As a secondary disease depending upon organic changes within the brain. 3. It occasionally happens from an overdose of alcohol or opium. After an analysis of the case above, it appears to me that it may be fairly placed under the first division. It consists essentially in a modification of ordinary sleep, depending upon an anæmic and faulty nutrition of the brain. From some condition of this central organ or its blood-vessels those changes are deficient which are necessary to a due supply of nervous force; hence there is a persistent torpidity or suppression of the cerebral functions. This explanation of the phenomena of the case is based upon the following considerations:—

1st. The general condition of the body during sleep. The limbs are relaxed, the surface generally pale, and the extremities often cold and livid. The pulse is soft and slow, respiration almost imperceptible—about eight or nine inspirations in a minute. He looks like a person in a refreshing slumber. The secretions are always scanty, which clearly proves the torpidity of the organic functions of the whole body.

2nd. The characteristic condition of the external ear. Dr. Laycock has shown by his interesting investigations that the state of the circulation and nutrition of the external ear is very commonly associated with a similar condition of the brain, or, in other words, that the vascular activity and nutrition of the brain is indicated by the vascular activity and nutrition of the external ear. Now the ears of my patient are both habitually flaccid and pale, and very remarkably so during a long sleep. This is therefore additional evidence of the very imperfect vascular energy and faulty nutrition of the encephalic tissues.

3rdly. The profound and prolonged character of the sleep. During healthy slumber, an impression upon a peripheral nerve may unconsciously influence the brain and give rise to an unconscious movement; thus an uneasy sensation often does occasion a change of position. Now, although these actions, as Dr. Carpenter says, "are purely consensual, being as automatic as if they were reflex movements," still they are sufficient to prove that the nerve centres are just capable of receiving an impression, and therefore cannot be wholly dormant: moreover, strong impressions upon the various organs of sense are always sufficient to rouse the brain, and produce a return of consciousness. My patient, on the other hand, when asleep, lies profoundly still,

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and seldom moves a limb. The special senses are likewise insensible to the strongest stimuli. A bright light has been poured upon the eye, and an alarm bell rung over the head; he has been dashed with cold water, and then rubbed generally over the body, but without the slightest indication of awakening. This is strong evidence of the entire dormancy of the cerebral organs; the spinal cord and medulla being alone active, by which the reflex actions are slowly carried on.

Again, the brain during natural sleep is often completely inactive, yet there are few, if any individuals, who do not in ordinary health either habitually or occasionally dream. Often the various grades of sleep occur during the same night—the first hours of repose are profound, but when the brain has reached a certain stage of reparation and nutrition this is succeeded by a less perfect slumber attended with dreams, until at length a state of half sleeping is reached. Dreaming is due to a partial or irregular activity of the hemispheric portions of the brain, so that mental manifestations are not completely in abeyance. It can be induced by whatever promotes congestion and increased circulation through these organs. From these considerations, it appears highly probable that the various grades of sleep are directly connected with the various states of cerebral nutrition and circulation, and that habitually profound sleep, and an entire absence of dreaming, are associated with deficient supply of blood and extreme vascular inactivity.

After six or eight hours, healthy sleep terminates spontaneously. Consciousness returns after the exhaustion and waste of the body has been silently repaired, and a fresh supply of nervous force developed. The nourished condition of the nerve centres rouses the body again into activity, by sending a spontaneous rush of nervous power to the muscles,—the limbs are stretched, eyes opened, features expanded, and thus the senses are exposed once more to the influence of the outer world. That spontaneous waking must be due, then, to a change within the nerve centres themselves, is proved by the fact that movement precedes sensation. The application of these remarks to my case is apparent. The sleep is prolonged just because the nerve centres are charged so slowly with that mysterious nervous power, in consequence of the languid cerebral circulation, and the imperfect nutritive changes in the ultimate nervous tissue. The act of awakening is thus delayed for the want of that burst of nervous force which is essential to a spontaneous revival of consciousness.

4. There is an entire absence of any head symptoms, and the general health is fairly sustained. Before going to bed, he experiences only the common sense of fatigue after a day's exertion. He awakes refreshed, and with every mental faculty entire.

Now, when these prominent features of the case are placed together, viz., the general condition of the body, the habitual state of the external—the insensibility of the organs of sense and seats of sensation, the profound character of the sleep, and the absence of all other nervous symptoms, they appear to me plainly to indicate that the prolonged suppression of all the mental faculties is dependent upon anæmia and faulty nutrition of the brain. We may suppose either that there exists some change in the minute structure and capillaries of the nervous substance, or that the diminished vascularity and imperfect nutrition may arise from an alteration in the calibre of the larger vessels which supply the head; as in a case of coma from narrowing of the carotid arteries, referred to by Dr. Copland in the first volume of the "Medical Dictionary," page 392.

It is a well-established physiological principle, that the circulation of arterial blood through the various organs of the body is increased and diminished in direct proportion to the functional changes taking place within them; therefore we have much reason to believe that the brain has a less vigorous circulation during healthy slumber than in the waking state, when it is the seat of all the exalted phenomena of mind. This view is supported by the important observations of Durham, Brown, and Ackerman, who have found that the blood-vessels of the brain are empty in the sleeping state compared to their fulness during waking hours. Very lately this opinion has been corroborated by Dr. Hughlings Jackson, who has shown, by examining the eye during sleep, that the optic disc and retina are paler and the arteries smaller. I hope before long to have an opportunity of making an ophthalmoscopic examination in my case.

The occurrence of trismus during the attack of 1848 appears to have been a subordinate symptom, and by no means an essential part of this singular disorder of the nervous system, for it was entirely absent in the first attack, and has not yet reappeared in the present one. It probably originated in some eccentric irritation, which, in consequence of an increased reflex excitability of the medulla oblongata and pons Varolii, was reflected upon the muscles of the lower jaw. But, although the associating links between this and the other facts of the case are very obscure, still it is possible that all of them may have had a common cause in reflex action,—as contraction of the blood-vessels of the brain, and consequent alteration in the nutrition of its substance, may be generated by an irritation of some centripetal nerve.

My patient resides many miles in the country, so that I have been prevented from adopting a satisfactory course of treatment. The indications are,—1st. To improve the nutrition of the nervous system by general tonics (especially quinine and iron), generous diet, and moderate exercise. Belladonna deserves a trial theoretically, as it appears to possess the power of producing dilatation of the capillaries of the brain. 2nd. During sleep the body should be kept warm, and stimulating and nutritive enemata freely administered; and, after twelve hours, a persistent effort should be made to arouse him by general friction and galvanism.

BRIEF NOTES OF TWO CASES OF VESICO INTESTINAL FISTULA,

ONE OF WHICH WAS COMPLICATED BY AN EXTERNAL FISTULOUS OPENING THROUGH THE ABDOMINAL PARIETES.

By F. BAINBRIDGE, of Harrogate.

THESE cases I should have offered for publication at the time they came under my care, had any points of interest occurred in the treatment likely to have resulted in benefit to others who might be similarly afflicted; but as this was not the case, the record of these and similar cases tends to prove only what an extensive amount of disease the human constitution can tolerate for years without giving way, or even indicating the mischief to which that constitution must ultimately succumb; and, as it appears to me, it is this tolerance of the system in slowly-developed disease which constitutes the chief point of interest in these rare and incurable complications of disease. But, without further preface, except to state that it was the report of Mr. McWhinnie's case in No. 654 of the *Medical Times and Gazette* that tempts me now to add these two to his and any similar cases which may be published.

Mrs. L., aged 43, has been married twenty years, but without issue. Catamenia ceased several years since. Has occasionally for three years previously been under my care for dyspepsia, with disordered urine, and has as often obtained relief. On the present occasion, however, February 24, 1851, she called on me, and described her symptoms as unusually urgent; dull aching about the loins, and under pressure deeply-seated pain above the pubes; pain also and scalding during, previous to, and after micturition, at which time small quantities of urine only are voided. She speaks of a thick deposit from the urine, and insists that it contains bits of her food, such as potato, meat, and gooseberry seeds from the jam, of which she is fond. Upon this point I imagined that she might be deceived; for how, I asked myself, could her system be so tranquil under such a source of irritation as a communication between the bladder and the bowel allowing of half-digested food and free bile to pass into the former organ. Her pulse was 66, and feeble; tongue watery, glossy in the centre, and pointed; bowels rather costive. Enemata of soapy water were ordered, and henbane and sodæ sesquicarb. given internally. According to request, my patient brought me next morning six ounces of her urine, passed between the hours of one and six in the afternoon, in which, as she had stated, portions of comminuted food were visible, mixed with and partially suspended in a thick cloud of mucus, which speedily subsided when set at rest; specific gravity 10·22, feebly acid. So evident were the portions of food as to enable me to tell my patient that she had dined on boiled beef and brown bread.

February 26.—I visited her at her own house, and found her better; less deposit in the urine, on voiding which the pain and scalding were diminished. She states that she is losing flesh, but that this is usual in the winter months, being always better when engaged in her occupation of washerwoman by our summer visitors.

It will not surprise those who have many dealings with the

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uneducated part of the community when I record the difficulty encountered in obtaining the history of her disease, and that the fact of her having suffered from a large abscess twelve years previously, which remained open for two years, discharging its contents through an external aperture midway between the umbilicus and pubes, and which healed of its own accord, was one of the last discovered, and yet one of the most leading symptoms tending to throw light upon her malady.

I saw the patient repeatedly up to March 22, on which day at my request Dr. Bennett visited her with me, and came to the obvious conclusion that an opening, either direct or fistulous, existed between the small intestine and the bladder; moreover, that as the disease was incurable, the indications to be fulfilled were to keep the bowels soluble, avoid crude ingesta, and support the strength.

January 1, 1855.—Since the last date the subject of these notes has consulted other Medical men, but without any alleviation of her symptoms or suffering, and came back to me, as having given her more relief than any one else. She then stated that for several months an abscess had existed nearly in the site of that formerly named, on examining which I found an opening the size of a goose's quill, through which were discharged bile, purulent and fæcal matter excoriating the abdominal parietes for several inches around the aperture. On examination of the urine, I found that it contained pus, albumen, bile, and portions of food. Her suffering was at times very great, obliging me to use morphia in large doses, a combination of that salt with carbonate of magnesia proving the most serviceable of anything I tried. Her life was protracted till May 12, on which day she expired from sheer exhaustion.

With much difficulty I obtained an examination of the body, on condition that I would confine my attention to the abdomen. The system was so much wasted as to be absolute skin and bone; the abdominal parietes like parchment, totally devoid of fat, and adherent in many places to the peritoneal coat of the intestines, which in their turn were so completely massed together as to be quite inseparable except by prolonged dissection, which I had not time for. It was thus impossible to trace the exact portion of intestine from which the fistulas led; neither the opening through the wall of the abdomen, nor that into the bladder, but I satisfied myself that both communications were from the ileum. The urinary bladder was nearly empty, somewhat thickened, and opaque; the abnormal opening was situate at the antero-posterior portion, rather to the left side; this opening surrounded by a thickened margin like a ring, from which I was able to inject water, which, by a tortuous course, reached the abdominal surface, thus proving the connection between the two apertures. The bladder was perfectly adherent to the uterus, which was itself perfectly schirrus, together with the ovaries, that on the right side being adherent to the fundus vesicæ. An old abscess, containing degenerated pus, existed between the muscular layers above the pubes. The stomach was thin and congested; the kidneys and liver congested; the gall-bladder full.

Case 2.—April 16, 1854, I was sent for in haste to Robert Chapman, aged 56, with a statement that he could not pass his water; I therefore took with me a box of catheters, and on arrival found him straining over a chamber-vessel, into which at brief intervals fell pipe-shaped pieces of yellow fæcal matter, which he urged along the urethra at the rate of an inch per minute. I waited until about half a wine-glassful was extruded, when, from a sudden exclamation of pain and a stoppage of the flow, I at once introduced a catheter, which I kept previous by repeatedly introducing the stilette. The process was tedious, but effectual in draining off about six ounces of turbid faeculent urine, which for that time relieved him. This was the first time I had attended the poor fellow, though I had frequently observed him standing near his home, as I then thought from indolence, but as I now learnt from disease, he being afflicted with mitral disease, asthma, and ascites, and, according to his own account, had had inflammation of the bowels some few years since, to which account he added that he had passed small, rough stones with his urine. My attendance was continued to May 19, 1854, on which day his wretched existence terminated by rapid peritonitis which had set in but a few hours previously.

Note.—From the faeculent matter which was voided by the urethra being identical in consistence and colour with that passed *ex ani*, I conclude that the fistula existed between the *rectum* and bladder.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

ST. THOMAS'S HOSPITAL.

CASE OF OVARIOTOMY.

(Under the care of Mr SIMON.)

A. W., aged 22, single, in service, observed about four years and a-half ago a slight but persistent swelling on the right side of the abdomen, the periodical return of the menses ceasing about the same time. From that date the tumour slowly but progressively increased, its development being unattended by constitutional symptoms, and the patient continuing to enjoy tolerable health. She was received as an in-patient at St. Thomas's Hospital, under the care of Dr. Bennett, November 2, 1861 (nearly three years after she had noticed the first appearance of the tumour). The case being diagnosed as one of ovarian dropsy, the patient was shortly afterwards tapped, though about half-a-pint only of clear fluid was evacuated. The size of the abdomen was not appreciably diminished by the operation, and the patient left about a fortnight afterwards, being still in a fair state of health, and promising to return at the end of a month or six weeks to undergo the operation of ovariotomy, this measure being considered advisable by Dr. Bennett.

Circumstances, however, prevented her returning until November, 1862, when she came under the care of Dr. Brinton, suffering at the time from an attack of chronic diarrhœa, by which she was considerably reduced in strength. The condition of the tumour was not much altered since the time of her first admission, the size of the abdomen being, however, decidedly, though not greatly increased. With tonics and astringents her condition gradually improved, the diarrhœa ceasing, and her strength partially returning. Under these circumstances it was decided by Mr. Simon, to whose care the patient was now transferred, to operate on February 27.

Previously to operation, the girth of the patient, measured at the widest part, was about forty-eight inches, the distance from the umbilicus to the pubes being rather more than a foot. Before the patient was removed from her bed, the bladder was emptied, and she was placed under the influence of chloroform, as small a quantity being given as was consistent with the production of its anæsthetic effects. She was then removed to the theatre, the temperature of which had been raised to 72°, and the operation commenced. An incision was first made by Mr. Simon, from about two inches below the umbilicus downwards in the median line to the extent of four, the tumour being readily exposed by a few touches of the knife. He then introduced two fingers of the left hand at the upper margin of the incision, carried them upwards between the tumour and the abdominal parietes, and introducing the knife in the interval, extended the incision upwards through the umbilicus to the extent of three inches, the total length of the wound being about seven and a-half. The margins of the opening were then separated, and the tumour grasped and drawn forwards by the forceps. Its walls, however, possessed such little tenacity that they were torn through by the tension exercised upon them, and the fluid contents began to pour out, but were prevented from entering the abdomen by heated flannels, with which all access to the general peritoneal cavity was shut off. Mr. Simon then introduced his hand into the wound, passed it rapidly round the tumour, and turned it out upon the abdomen. Two omental adhesions at the upper part of the tumour, the only ones which existed, were ligatured with silver wire, cut through, and returned into the abdomen. The pedicle, of considerable size, and containing several large vessels, was drawn forward, tightly included in a clamp, and divided. The tumour, being thus severed from its connections, was removed, the pedicle drawn downwards and forwards to the lower extremity of the incision, and the edges of the wound brought together by silver wire sutures. Some pads of lint were placed upon the line of incision, and over the pedicle; two or three broad pieces of strapping were passed with some degree of firmness round the now greatly diminished abdomen, and the operation was completed.

On examining the diseased ovary, it was found to consist of three large cysts, one of which only had been emptied

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ough the canula; of the remaining cysts, one contained a ious fluid of much greater consistency than the liquid in others. The tumour itself was about a foot in diameter, total contents being nearly three gallons. The patient peared somewhat but not greatly exhausted by the opera-, her pulse, which previously stood at 80 per minute, ring now risen to 90; she vomited three times during the t two hours, seeming at the end of that time more com-table and inclined to sleep; shortly afterwards she fell into ose, and remained so for about an hour, her pulse having en during that period to 80. A small quantity of brandy beef-tea was occasionally administered to her during the rse of the afternoon, and she dozed a little from time to e, expressing herself tolerably easy and free from pain. about 7 p.m. the patient's pulse stood at 80, the tempera-e of the apartment being 70°. At 10 p.m. she became tless, tossing her arms about, but expressing a desire to p. Her pulse at this time was still 80 to the minute, but e slightly during the next three hours. She vomited once ween 12 and 2 a.m., but, at the end of that time fell eep, awaking refreshed, and free from nausea in about ur. During the remainder of the night she was more mfortable, not being again attacked with sickness, and oxing frequently, although she only remained asleep for out half an hour at a time.

February 28.—Remained comfortable during the day, taking little beef-tea, milk or egg, and brandy at intervals, and being e from peritonitic pain or tenderness. Towards evening, wever, she became a little restless and feverish, her pulse nding at 96 per minute at 7 p.m. Subsequently it declined ain, her restlessness also subsiding during the night.

29th.—Slept fairly last night, feeling refreshed, and free m pain or uneasiness in the morning. At 9.30 a.m. the amp was removed and the wound dressed, the edges pearing to be adherent through the greater portion of their tent. A small portion of the margin of the pedicle was mporarily included in a ligature, which, being drawn rwards and attached to a roll of lint, prevented the former on retracting. From this period the progress of the patient owards recovery was rapid, and unmarked by a single adverse symptom. The sutures were all removed on March 4, with he exception of one near the pedicle, which was allowed to remain until the 5th, and the pedicle itself lightly covered with charcoal, a small piece of muslin being interposed. This mode of dressing was shortly after rendered unnecessary by the healthy condition of the part. At the present time the patient is still in the Hospital, but is quite convalescent, and will shortly be in a fit condition to return home. One of the ost noticeable points in this case was the small amount of onstitutional disturbance which followed an operation of so severe a character as that of ovariotomy.

THE LONDON HOSPITAL.

CASE OF PHLEBITIS SIMULATING PHLEGMASIA DOLENS — DEATH — AUTOPSY — CLINICAL REMARKS.(a)

(Under the care of Dr. FRASER.)

For the notes of this case we are indebted to Mr. Weller.

Sarah N., aged 56, a washerwoman, was admitted into the London Hospital, February 24, 1863. She was a short, stout, muscular woman, of lymphatic temperament, and has had very good general health. She has had four children, the youngest 23 years of age. She has always had good times during her labours, and no hæmorrhage. She has had varicose veins of both legs ever since her marriage. Always after a day's hard work at the wash-tub they have swollen to a great size. For many years she has been troubled with dyspnœa.

About a week before she entered the Hospital, while attending to her domestic duties, she felt a slight tingling sensation in the calf of her left leg. Upon rubbing it a little the pain disappeared. Five days later a similar sensation recurred, and from that time the leg began to swell rapidly, commencing from the thigh, and ascending as far as the groin, and then descending to the foot. During the time the leg was swelling she suffered great pain in the limb, and also in her head, with giddiness and sickness. Upon auscultation, a slight mitral murmur could be heard. The urine since the leg began to swell has been scanty.

When admitted, the left leg was as large again as the right. It had a white, shining, and glazed appearance, was tense and elastic to the touch, perfectly cold, and no pulsation could be felt in the posterior tibial artery. She was put to bed, and was ordered a scruple of the calomel and jalap powder; warm fomentations were applied to the leg, and a hot-water bottle to the foot. On examining her at night, a very slight pulsation could be felt at the femoral artery, the leg and foot were much warmer, and the swelling had gone down a little. No enlarged glands could be felt in the groin. The leg was ordered to be wrapped in cotton wool, and enveloped in oil-skin. An effervescing ammonia mixture was ordered, and also twenty minims of the liquor opii to be taken at bed-time To have for diet, milk, beef-tea, two eggs, and six ounces of wine.

February 25.—The leg is still very much swollen, the urine acid, and loaded with lithates. To have ten grains of the bicarbonate of potash every hour, and a large common enema to be injected. A free motion, but no scybalæ came away.

26th.—The leg still very much swollen. She complained of pain on pressure in the groin; no pulsation of the femoral could be felt; the pulse 90.

27th.—Much the same; she still complained of pain in the groin. Eight leeches were ordered to be applied over the spot. A dose of castor oil to be taken every morning, so that the bowels should act regularly once a day. A local vapour bath every night to the leg.

March 1.—Better; she was ordered a chop.

3rd.—The swelling much reduced.

4th.—She has passed a comfortable night. To have the local vapour bath at night and in the morning, and continue the other remedies.

On the morning of Friday, March 6, there was little or no swelling in the leg to be seen. She appeared much better, and ate her breakfast with a relish. About one o'clock the same day she was observed to struggle, as if for breath, assistance was called, but before the nurse could communicate with Dr. Powell, the resident Medical Officer, she was dead.

Autopsy, Twenty-one Hours after Death.—Lungs healthy. Considerable deposit of fat on the surface and around the base of the heart; all its cavities were dilated; the mitral valve thickened and opaque. In the right(b) auricle was a pale clot, adherent to the appendix, and extending thence into the right ventricle and pulmonary artery, occupying rather more than half the calibre of that vessel, and surrounded by loose and dark coagula. The muscular substance was pale, easily lacerable, and at parts had undergone fatty degeneration. The kidneys pale, but apparently healthy. The liver fatty, weighed 5 lbs. The affected leg was found of normal size. The femoral, popliteal, and saphena veins were distended, hard, and cord-like to the touch, the external coat was thickened, vascular, and infiltrated by plastic deposit. The inner coat was softened, and stained of a deep purple colour. The veins were filled by coagula, the latter externally pale and of tolerably firm consistence, and partially adherent in several places to the lining membrane of the vessels. Towards the centre the clot was soft and dark-coloured, but there were no appearances of suppuration. The other veins of the limb were larger than those of the opposite limb, showing an attempt to form a collateral circulation.

Clinical Remarks by Dr. Fraser.—Mr. Weller headed this case "Phlegmasia Dolens," and that he had reason for so doing those of you who saw the case will freely admit, the more so as the swelling was in the left leg, the member said to be the most frequently attacked by phlegmasia dolens; but, when we reflect that twenty-three years had elapsed between her last confinement and the present illness, the idea is dispelled that it had any connexion with parturition. On the other hand, the feeble arterial, femoral, and tibial pulsations raised the question of arterial obstruction; but this view of the case was dismissed on reviewing the other symptoms, and by the simple explanation that the swelling of the parts was sufficient to explain this apparent feebleness. It was therefore placed as a case of "phlebitis," and, as afterwards revealed, a case of "adhesive" phlebitis, as no sign of suppuration appeared. The question now is, was the coagulum primary? and therefore acted as a foreign body, and thereby caused the inflammatory action; or, was the coagulum

(a) See similar case in the "Rapport de la Société Anatomique" for August, 1854.

(b) An exactly similar case is given by Dr. Richardson (page 405), on "Coagulation of the Blood."

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secondary, and the effect of antecedent inflammatory action? From the fibrinous deposit found in the heart—not an offshoot from the deposit in the affected veins—I am inclined to think that the coagulum found in the veins was a consequence of that state of the blood favouring fibrinous deposits, arising from an excess or deficit of fibrin, the presence of septic matters, and greatly aided in this case by a languid circulation through enlarged varicose veins. This subject is too extensive for present notice, and I shall merely observe that the alkaline treatment, and local vapour baths seemed to be most beneficial in reducing "the swelled leg," and conclude by drawing your attention to a most important feature in the history of the case—viz., the sudden, and, to the bystanders, most unexpected death. The disease was apparently cured, the swelling of the leg was gone, all pain had passed away, the woman was cheerful, hopeful, and looking forward to a return to her domestic circle, when in a minute she is struck with death. The fibrinous deposit in the right heart gives the explanation. The formation of this clot may have been going on for an indefinite time, and it was only when the pulmonary artery became nearly, if not completely, blocked up that the fatal event arrived. The moral is, that we must give in similar cases a guarded prognosis, and especially if there be the slightest cardiac *bruit* in either side, the slightest dyspnœa, or any indication of a tendency to fatty degeneration of the tissues and organs of the body.

GUY'S HOSPITAL.

TUBERCULAR DISEASE OF THE LUNG — ABSCESSES IN THE BRAIN (PYÆMIC?)—SUPPURATION OF THE FALLOPIAN TUBE.

(Under the care of Dr. PAVY.)

Ann H., aged 31. This patient, a strong Irishwoman, was a respectable married woman, and had had one child eight months before. Until the disease of which she died, she had never had a day's illness. She was admitted into the Hospital on February 18. For two weeks before this she had been attending as an out-patient for severe pain in the head. She complained bitterly of the pain. She kept a wet rag on it constantly. The pain in the head was, on admission, the principal symptom, but the breathing became difficult, and she had cough. The pain used to come on ten or twelve times in the day, and was very intense. There was pain in the left psoas region, and she had difficulty in moving this leg.

Autopsy.—The following is copied from Dr. Wilks' records: There was no disease of the bones. On removing the dura mater, a small tumour was found growing from its posterior part near the longitudinal sinus; it was imbedded into the posterior edge of the hemisphere; it was firmly attached to the dura mater, and its surface was vascular, as if covered by arachnoid; it was the size of a grape, and when opened was found to contain liquid pus, which poured out, leaving a thick cyst wall. There was no appearance of scrofulous disease about it. In the brain substance were three other abscesses exactly like the one described, each having a thick cyst wall, which could be easily turned out, and which was vascular on its surface. The interior contained fluid pus, which flowed out. They were all close to the surface, and projected slightly, so that their position was indicated from without. They also seemed, in two places, to have pushed the grey matter before them, as this was seen on their inner side. They were about the size of small chestnuts, and quite round. One was situated near the vertex, in the right hemisphere; another on the under surface of the left anterior lobe; and the third partly in the cerebellum and partly in the crus cerebelli. The only approach to tubercular matter was a small patch of yellow matter which closely adhered to the surface of the right hemisphere. This was nearly as large as a pea. The *lungs* were filled with tuberculous matter from apex to base. The tubercle was yellow and soft. There was no abscess and no disorganisation. The left *Fallopian tube* was very much distended and tortuous, its extremity being attached by adhesions. When opened, some mucus flowed out at its end, but nearer the uterus it was filled with soft, tuberculous, purulent matter. When the fluid part was removed, the interior was seen to be covered with tuberculous matter, and this proceeded to the uterus, the interior of which contained a similar material as the mucus near the opening of the tube.

DISEASE OF THE TEMPORAL BONE—PYÆMIA—DEATH—AUTOPSY.

(Under the care of Dr. REES.)

This case is similar to the one related in our Hospital Reports, February 21, in that acute cerebral symptoms followed on caries of the cranial bones. In that case the caries (of the frontal) followed an injury, but in this it was the result of disease of the ear, extending to the temporal bone. As will appear by many cases related by Mr. Toynbee, a patient who has discharge from the ear is not to be considered safe, although he may have escaped ill consequences for many years. In Dr. Rees' case there is unfortunately no history. The most frequent cause of otorrhœa, and, in neglected cases, of disease of the temporal bone, is scarlet fever.

Not long ago a patient, who had been for some time subject to epilepsy, was brought as an out-patient to Dr. Brown-Séquard at the Hospital for the Epileptic and Paralysed. He had discharge from one ear, and was slightly feverish. He died of pyæmia about a fortnight later. There was no post-mortem.

Dr. Wilks relates four such cases in his article on Pyæmia in Guy's Hospital Reports for 1861. "It (pyæmia) may occur," he says, "by two channels—through the vessels of the affected bone, or more immediately through the blood of the lateral sinus, which is involved by contact." In the cases he gives, as in the following, the latter was the way in which the affection occurred.

Whilst pointing out the grave results following what is often, to the patient, a trifling disease in the ear, we may draw attention to a paper by Mr. Toynbee on the "Means of Preventing Caries of the Petrous Bone and the Formation of Abscess within the Brain in Cases of Disease within the Ear," *Medical Times and Gazette*, March 16, 1861; and one by Mr. Wilde, on "Aural Diagnosis and Diseases of the Mastoid Process," in the same volume, May 11, 1861. In these papers the various methods of treatment are discussed.

D. J. C., aged 22, was admitted, under the care of Dr. Rees, on September 3. He died on September 15. This patient was brought to the Hospital with no history, and he was too ill to give a detailed account of his symptoms. He was in a high state of fever, with furred brown tongue, but no eruption. In the absence of all local symptoms it looked like a case of fever. Salines were ordered. Afterwards, it was noticed that he had rigors, and quinine was ordered. He continued in a uniform listless state, making no complaint, until three months before death, when it appeared that he had pleurisy.

Autopsy, by Dr. Wilks.—On removing the brain, the right lobe of the cerebellum was seen to be slightly discoloured; the dura mater corresponding to this was of the same colour. On lifting up the dura mater, the lateral sinus was found to be obstructed, its walls thickened and suppurating. On opening it, it was found to be nearly closed by fibrin adherent to its walls, the latter also being softened and infiltrated with pus. The adjacent sinuses were obstructed by coagula of recent formation, the longitudinal being completely blocked up by it. The surface of the bone was carious, and a probe, passed into the ear, came against dead bone. The right jugular vein was affected in its whole course in the same manner as the sinus. Its walls, as well as the cellular tissue around, were thickened. The interior was covered by adherent fibrin, and almost closed thereby. The right side of the chest contained a dirty-coloured serum and air, from rupture of an abscess in the lung. The right lung was collapsed, from rupture of an abscess in the lung.

MIDDLESEX HOSPITAL.

DISEASE OF THE TEMPORAL BONE—MENINGITIS—DEATH—AUTOPSY—OBLITERATION OF THE LEFT LATERAL SINUS.

(Under the care of Dr. HENRY THOMPSON.)

A woman, 25 years of age, stout and well-developed, was admitted, under the care of Dr. Henry Thompson, December 9, 1862. Seven weeks before she had severe pain in the head, chiefly about the left ear. An abscess formed behind the ear, and broke about two weeks before admission, and at the same time discharge began to flow from the meatus.

When admitted, she was scarcely conscious; her aspect was

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vacant and wild; she resisted attempts to move her, and moaned. The tongue was coated, but moist; pulse 120, soft and compressible. There were no abnormal chest or heart sounds. There was a small red cicatrix with a slight sinuous opening behind the left ear, emitting a slight discharge, and there were also signs of a recent discharge from the meatus. Her head was shaved, and a blister was applied over the scalp; an aperient was given, and two grains of iodide of potassium with citrate of potash were ordered every six hours. Subsequently, the symptom of meningitis becoming more developed, purging, leeches, and cold lotions were ordered. Next day she had vomiting, and a well-marked and severe rigor. On the 11th she appeared sinking, and had a difficulty in swallowing; enemata of beef-tea and brandy were therefore ordered. She made no real improvement, and died on the 13th.

It was found at the autopsy that the left lateral sinus was obliterated by a large, nearly white, firmly-adhering clot. The walls of the sinus were thickened in the whole of its extent, and this condition of the walls extended a little way into the superior longitudinal sinus, and towards the anterior part of the latter the walls were again thickened. The lateral sinus communicated by a small opening with a cavity, the size of a pea, in the mastoid process, containing pus and *débris* of dead bone. Puriform lymph was effused in various parts of the surface of the brain, and the ventricles contained a large quantity of reddish and rather thickened serum, and at the bottom of each of the posterior cornua was a slight purulent deposit.

HOSPITAL FOR SICK CHILDREN.

CASE OF PYÆMIA IN A CHILD A FEW WEEKS OLD—LACERATION OF THE VAGINAL MUCOUS MEMBRANE DURING BIRTH—RECOVERY.

(Under the care of Mr. THOMAS SMITH.)

A FEMALE child, fourteen days old, was brought to the Children's Hospital with erysipelatous inflammation about the vagina and external genitals. The vaginal mucous membrane had been lacerated in the birth.

The local inflammation subsided under treatment, but was in a few days followed by the appearance of abscesses in various parts of the body. These collections of matter were large, baggy, and without tension or redness. Two appeared on the back, three on the abdomen, one on the thorax, one on the shoulder, one in each of the calves, and one in the elbow-joint. The largest were about the size of oranges. They were all opened when the skin became very thin over them, as the child could bear it. She took wine freely, and small doses of cinchona. She, however, became extremely emaciated and feeble. For some weeks the bones of the elbow-joint remained exposed from ulceration of the integuments and soft parts covering them. Finally, all the abscesses closed. The joint has covered in by granulations, and when Mr. Smith saw the child six months after she was fat and well, and had regained perfect movement in the elbow-joint.

This case, Mr. Smith remarks, is instructive, as illustrating (1st) not an infrequent cause of pyæmia, viz., injury during labour. (2.) The power in children of bearing up against prolonged suppuration, and (3.) the advantage of delay in opening abscesses that are chronic. Of the latter there was another instance on February 28, 1863.

PYÆMIA FOLLOWING AN INJURY RECEIVED DURING BIRTH—SUPPURATION IN THE HIP AND WRIST JOINTS—PLEURISY—DEATH—AUTOPSY.

(Under the care of Mr. THOMAS SMITH.)

A CHILD, who had been turned and delivered by the leg, one week after birth showed a swelling of the right hip, which quickly suppurated, was opened, and disclosed a disorganised hip-joint. A week afterwards a secondary abscess formed over the wrist-joint. This was followed by pleurisy; and four weeks after birth the child died.

The autopsy showed the right pleura full of purulent effusion. The capsule of the right hip-joint widely open; the head of the femur absorbed; the bones of the acetabular cavity were deeply eroded; the upper end of the femur was apparently necrosed.

The advantage of delay in the opening of chronic abscesses is well shown by the case of a little girl, aged 11, now under Mr. Smith's care. Fourteen months ago she came to the Hospital with a large, tense, thin-walled abscess in the front of the left thigh, just below the groin. There was no redness over it, and but little pain on pressure. It was at first treated by rest, until the danger of immediate bursting had passed away. Since that time the child has used a crutch, and has taken tonics, and has had gentle pressure of supports applied to the abscess.

On March, 1863, the swelling was about one-third its former size. Its walls are thick and more flaccid; it had travelled down the thigh, and was about half-way between Poupart's ligament and the knee.

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Medical Times and Gazette.

SATURDAY, APRIL 18.

FATHERS OF THE PROFESSION.

IN another column we print a letter from a most experienced Physician and valued contributor to our Journal, Dr. Ramsbotham. We invite the particular attention of our readers to that letter, and we take leave to say that, widely as we differ from Dr. Ramsbotham on the point at issue, we hope to state our side of the question in such a manner as becomes the respect due to the personal and professional position of those whose actions we presume to censure.

We respectfully maintain that Dr. Lee and his coadjutors, Dr. Ramsbotham and Dr. Taylor, were not obliged to appear at Chester in the trial of Bromwich *v.* Waters. It is now well enough known that a man may decline to attend if subpœnaed to give "his opinion;" and these gentlemen cannot plead compulsion. We affirm that the solitary matter of fact to which Drs. Lee and Ramsbotham were able to depose, viz., the absence of a cicatrix on the cervix uteri of Mary Whalley, in February, 1863, was a fact which, if fairly stated, could be shown to have had nothing whatever to do with the case. Whilst the opinions which Dr. Lee in particular delivered, though absolutely contradicted by his own writings, were decidedly hostile to Dr. Waters.

These gentlemen cannot with fairness plead that they went because they relied on a statement made by a woman who afterwards turned out to be a deceiver. They ought to have known that every tale is plausible until the other side is heard. But there is a point of Professional conduct involved here. If these gentlemen thought fit to believe that Dr. Waters had been guilty of rape—if they believed in his profound immorality as a man—they should have recollected the courtesies due to him as a legally qualified Practitioner. If there be one truth more certain in Professional ethics than another, it is, that no one Practitioner has any right to assume, on lay testimony, that another has been guilty of malpractice. Dr. Waters ought to have been credited with skill sufficient to guide him in the treatment of disease. To denounce any other man's diagnosis or treatment, without seeing the patient, is contrary to the whole rules which regulate the intercourse of Medical Practitioners.

Now, be it observed that what made the voluntary and spon-

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taneous, and, as we think, not to be justified, testimony of the three Medical experts so injurious and cruel to Dr. Waters, was, that it was clearly the hinge on which the whole case turned. Every one acquainted with legal proceedings knows that the first point of the lawyers is to nail a man with a fact; then to clinch him with the inference. And so cunningly do they work upon juries, that if they can get them to swallow the fact, the inference usually slips down without further ado. Was, or was not, Bill Sykes in that lane at eight o'clock on that dark night? He denies it, just as he denies that he committed a burglary on the house close by at eleven; but if he can be proved to have been in the lane, the jury will have no difficulty in finding him guilty of all that follows. Still more, if a man can be proved guilty of any one unlawful act, is he liable to be thought guilty of any other connected therewith. If a Physician can be proved to have treated a woman wrongly, and to have pretended that she had a complaint which she never had, then the jury are called upon to believe any further offence that is alleged against him, and most likely will believe it.

This was just the nice point in Dr. Waters' case. Of course the plaintiff had the first innings, and her witnesses were able to make a score, which the defendant had to rub out next day. During this time the minds of the jury could not help being impressed with the fact that three grave and reverend seniors had been fetched from London at great expense, and were there swelling the "imposing" array of plaintiff's witnesses, and adding to the look of solidity and respectability of her case. These witnesses were put into the box to tell the jury that the treatment was wrong, and that no ulcer had existed to justify it. It is but just to Dr. Ramsbotham to say that his evidence, if carefully perused by anyone who understands the matter, contains not much that is condemnatory of Dr. Waters. He said, that if there had been destruction of tissue to any extent, there would have been a cicatrix left; but if only a superficial ulcer or abrasion, the membrane would have restored itself to a healthy condition, and no cicatrix would be visible. He also said, that although it must have been an obstinate ulcer to require continuous applications of caustic for fifteen or sixteen months, once a week or once a fortnight, still that the superficial ulceration had such a tendency to return, that a return to the treatment might be necessary more than once during the interval.

But in vain these qualifications. The fact remains that Dr. Ramsbotham did give an opinion on Dr. Waters' treatment, on an *ex parte* and false description of that treatment, and that the general impression of his evidence on the judge's mind was, "that he had given his evidence in a satisfactory manner, and had expressed an opinion that the treatment was improper." A rare compliment for the clear-headed Baron Bramwell! He describes the evidence as given in a satisfactory manner, and draws from it the opposite inference to what the witness meant. Of course he did.

As for the distinction between "superficial" and "deep" ulcers, that would be beyond the judge and jury, who never would believe that such witnesses could be put up to depose to what was not material to the plaintiff's case.

We again say that Drs. Lee and Ramsbotham formed an opinion on an *ex parte* statement, which they now admit to be false, and that they appeared in the witness-box, and lent the weight of their names and reputation to a most cruel and odious prosecution of one of their brethren. If it is against the rules of Professional taste to listen to the stories which patients sometimes tell against other Medical Practitioners—if no man would venture to say of a case which he did not see, that there was no ulcer, and no need of treatment a year ago—how much less ought he to get into a witness-box and give an opinion about it on oath, to the jeopardy of the very life and character of an innocent neighbour; and how deplorable that this should be done by men who claim to be fathers of the Profession?

MR. PROPERT AND MR. ADAMS.

Every member of the Profession will regret to hear that Mr. Propert maintains the same obstinate silence as before, and steadily refuses all explanation of his conduct in this case. Mr. Adams and his friends allege that Mr. Propert not only sided and abetted Mrs. Russell in her proceedings against Mr. Adams—which of course he had a right to do, if he believed her story—but that when he first took up the case, he refused to Mr. Adams the commonest courtesy and justice. He denied to him—a Professional brother, and once a friend—the opportunity which English justice and fair play accord to the meanest and most notorious offenders. He condemned him unheard, and refused to listen to a word of explanation, and referred him to a jury. Of course Mr. Propert has his party, and hence any one who has the slightest grudge against Mr. Adams, may say that there must have been "something" in the charges brought against him, else they never could have been entertained by so benevolent a man as Mr. Propert.

We think it a misfortune for the Profession that such a source of ill-feeling should exist; and we heartily wish that some means could be devised—some third impartial party be appealed to—who could investigate the matter at issue, and show the world either that Mr. Adams is guilty, or that Mr. Propert was under a delusion when he wrote those implacable letters to Mr. Adams. Mr. Propert has been challenged to speak out, if he have aught to say, in defence of his letters of December, 1861. He would find it easy, without the slightest risk, to justify himself and to crush Mr. Adams, or, on the other hand, to acknowledge his having been misled, and withdraw from the affair handsomely. But he is silent.

It is, indeed, said that he proposes to explain his policy at the approaching dinner of the Royal Medical Benevolent College on the 29th. This, we hope, is a mistake. The College has nothing to do with Mr. Adams, nor with the private proceedings of Mr. Propert. If Adams has done wrong, the College cannot be a bit the better; and if Propert has done wrong, it is a pity that it should be any the worse. Yet the worse it must be if Mr. Propert persevere in his intention. People will object to a charitable meeting which is likely to be an arena for angry discussion, and they will not choose to identify the Propert who founded a College for the destitute and widow and orphan, with him who spurned poor Adams when he made that almost abject appeal to be allowed to justify himself. If Mr. Propert is surrounded with a kind of halo, and must not be rudely dealt with because of his age and benevolence, and his services in founding the College, it must be noted that he should not have put all this *prestige* into the scale against an innocent man. The College must not be used as a sledge hammer to crush Adams, nor yet as a shield to screen Mr. Propert. We must say that his refusal to explain himself, except at the dinner of his own College, reminds us of a man who had a squabble at his club, and then would not walk down St. James's-street unless his wife was on his arm.

THE WEEK.

SYMPATHY FOR MR. ADAMS.

We are informed that a powerful committee is in process of organisation for the double purpose of giving a kind of moral support to Mr. Adams, and making a public profession of disbelief in the charges brought against him, and likewise of raising a subscription to assist in defraying his legal expenses. These expenses have amounted to nearly £1000, and although Mr. Adams expressed his willingness to bear the whole burden, his friends thought that it was unfair to allow him to do so. Such actions, as we have been taught of late, may be brought against any one of us; and they who read the reports with interest, and watch the proceedings with a sense of security and delicious kind of *suave mari magno* feeling, may express their sympathy with the victims, and

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give some trifle as a thank offering that they are exempt from similar persecutions. We shall be glad to hear that Dr. Waters' friends intend to give him a similar substantial testimonial.

THE EPIDEMIOLOGICAL SOCIETY.

Our readers will be glad to learn that this Society is receiving the support which it so thoroughly deserves from men of influence both in and out of the Profession. In a list of recently elected officers of the Society, which we publish elsewhere, occur the following new names:—The Earl of Carlisle, the Earl of Shaftesbury, Right Hon. Wm. Cowper, Dr. Acland, Dr. Copland, Dr. Farr, Dr. Jenner, and Sir J. Ranald Martin.

THE PRINCESS LOUIS OF HESSE.

We congratulate the country on the rapid and uninterrupted progress made in the health of the Princess Alice. To her Medical attendants also are due our congratulations. The following is their final bulletin:—

"Windsor Castle, April 13.

"Her Royal Highness the Princess Louis of Hesse has had a most favourable recovery.

"The infant Princess continues well.

"CHARLES LOCOCK, M.D.
"ARTHUR FARRE, M.D.

"No further bulletins will be published."

PARLIAMENTARY.

THE House of Commons, by adjourning on Wednesday, paid the last tribute of respect to the memory of Sir George Cornewall Lewis. His sudden death has been felt by men of all shades of opinion as a national rather than a party calamity. A political and a literary career so varied and so successful have already furnished themes for many pens, and it would be not only superfluous but out of place in this Journal to enlarge on them. But we may notice with eulogy the tone and bearing which the deceased minister invariably assumed when brought into contact with subjects relating to Medical science, or with its Practitioners. As Secretary of State for the Home Department he had not unfrequently referred to him matters which trenched, in a greater or less degree, on the domain of medicine. Those of our Profession who had on such occasions to meet Sir George Lewis have always expressed with high encomium their impression, not merely of his courtesy, intelligence, and penetration, but of that freedom from prejudice, and willingness to be informed, which were eminently his characteristics. On questions of pure science he did not trust his own opinion. It will be long remembered to his honour that, by referring the question to Sir Benjamin Brodie, he cut the gordian knot in Smethurst's case, and, in thus seeking counsel from the highest Medical authority of the day, satisfied alike the Professional and public mind.

By the time this Journal is in our readers' hands, Mr. Gladstone's budget will have satisfied the curiosity of the country. We suppose that it is vain to hope for a more equitable adjustment of the income-tax, but we trust that the reduction which has been prophesied will turn out to be true. For the clumsy and ineffective *ad valorem* duties on sugar we are promised, by those endowed with political prescience, a more just and equable mode of taxation. The valid objections to the present mode of levying the duty have already been noticed in these columns. Our Profession will be glad to find that the minister has introduced any measure which has for its object the improvement of the quality of this important food-product in the English market.

DROGHEDA QUARTER SESSIONS.—ELLIS v. MILLS.

THIS case belonged to a class which have hitherto received but scant justice at the hands of judges, juries, and taxing-masters. A Medical Practitioner is subpœnaed on a trial by an attorney; he obeys the mandate, and sacrifices time and business for a varying number of days. When the case is over, he is informed that he can only receive the miserable pittance which the law allows him. From this there is no appeal, unless a special contract for proper remuneration can be proved. Fortunately for Dr. Ellis, in this case the jury held that a special contract had been entered into, although the fact was roundly denied by the defendant. We cannot, however, recognise the justice of their pecuniary award to Dr. Ellis; admitting the contract, the motive of diminishing his claim from £22 1s. to £13 3s. seems incomprehensible. The evidence in chief of the plaintiff, will acquaint our readers with the chief facts of the case. The cross-examination was a specimen of the licence which barristers allow themselves, and of the kind of treatment which a Professional man must be prepared to face if he go into a witness-box to obtain what is justly his due. The defendant, Mr. Mills, is an attorney, and the case on which he subpœnaed Dr. Ellis was a "speculative" action for seduction, the plaintiff having been a poor woman in receipt of a few shillings a week. Dr. Ellis attended in Dublin, at Mr. Mills's request, during six days, but was not called as a witness, as the case was settled out of court by the defendant paying Mr. Mills £200 to cover costs and damages.

"Dr. Ellis sworn and examined by Mr. Hamill: I am a Medical Practitioner in Drogheda; I know Mr. Henry Mills, solicitor; I know a person named Bridget Gibson; I was *subpœnaed* to attend as a witness in a case brought by her against a person named Flynn; I got 10s. with the *subpœna;* I went to Dublin in pursuance of that; I recollect meeting Mr. Mills; the trial was to take place in the Court of Exchequer, and I met him in the Round Hall; I had a conversation with him there, and called his attention to the long list; this case was No. 11 on the list; I told him I could not afford to lose all my time; that I would expect three guineas a day and incidental expenses; I then recommended him to get counsel to apply for a certain day to try the case; when I mentioned that I should get three guineas a day and 10s. 6d. for expenses, he assented to it; in consequence of what took place, I came back on Tuesday; on Sunday I received a message from his clerk, and I went on Monday in accordance with that; I saw him on Monday; had a conversation with him, and told him he had no business to bring me up on that day; he told me the trial might come on at any moment; I attended every day; he desired me to do so; I went home that night and returned next day; he told me there was no chance of the trial going on; I attended six days at his instance.

"Court: Did you go backward and forward every day?—Plaintiff: Yes.

"Examination resumed: During those days I had conversations with him about loss of time and expenses in attending from day to day, and he said he would guarantee the payment; I learned from Mr. Mills that the case had been compromised; he told me the terms, and said he would satisfy me according to arrangement, and that the defendant would pay Dr. Horgan's expenses; he said £200 was given in the case; I furnished him afterwards with a bill (bill produced); after I furnished that account, I did not see or hear from him until I wrote. I recollect afterwards going to his office where Mr. Murray lives; he offered to give me £5 on account, and asked me for a receipt; I said I would take nothing of the kind; I called after in a few days; Mr. Murray was there; Mr. Mills began to say the charge was too much, and Murray said he should give another pound; I then walked away; on the first occasion he offered me £5 on account he made no objection to the charge, and it was on the second occasion that he objected to the amount.

"Cross-examined by Mr. O'Driscoll: You thought three guineas a-day was what you should get?—Witness: That was what I always got in Dublin.

"Mr. O'Driscoll: Upon your oath, how many times did you get three guineas a-day?—Witness: I got it for the only principal case I attended in Dublin; it was a case in which a railway company was engaged.

"Mr. O'Driscoll: How many cases did you get three guineas a-day for besides the 'only principal case'?—Witness: I got four guineas for a day in Drogheda the last sessions.

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"Court: Was that in a crown case?—Witness: Yes, your worship.

"Mr. O'Driscoll: Now, how often did you get two guineas a day in a civil court? Now, tax your memory.—Witness: I got two guineas in Drogheda always.

"Mr. O'Driscoll: Then you never got two guineas in your life. Now, I have again to ask you how many times in your life did you get three guineas a day in a civil case?—Witness: I answered before that I never was engaged to my knowledge except in a railway case; I was the plaintiff myself.

"Mr. O'Driscoll: And you summoned yourself?

"Cross-examination continued: The case was heard; I got a verdict, and I presume the costs were taxed; I cannot swear that they were; I am perfectly correct in what I stated regarding the conversation I had with Mr. Mills; his words were, 'I'll pay you;' I might have said that he said 'I'll pay you, or have you paid;' he told me plainly twenty times that he would pay me; upon my oath he did not say he would have me paid such expenses as I was entitled to; I used the word 'guarantee' to him, and I said I would expect three guineas a day, and 10s. 6d.; I told Mr. Mills that it was neither more or less than a speculative suit; I am fully aware that at the time there was a decree in this court against the defendant in the case of Gibson v. Flynn; I did not know there was an action pending for breach of promise of marriage; I might have heard it.

"Court: I mean to tell the jury, Mr. O'Driscoll, that whether it was a speculative action or not, they have nothing to say to that.

"Cross-examination continued: I know that this wasn't a special jury case at all; I attended all those six days at the special request of Mr. Mills; Mr. Murray's son did not say to me three minutes before the train started on one day, that I was not required in Dublin; nor did I say that I would go up, or that I had been very badly treated by Mr. Mills.

"Mr. O'Driscoll: Do you earn three guineas a day?—Witness: I can; five sometimes.

"Mr. O'Driscoll; Every day in the year?—Witness: No, nor you either (laughter).

"Mr. O'Driscoll: I ask you again, do you on an average earn three guineas a day?—Witness (to the Court): I think, your worship, that is a question I am not entitled to answer.

"Mr. O'Driscoll: Well, Doctor, I will ask you no more. You are not angry with me?

"The jury, after a short absence from court, found 'that there was a contract to pay for loss of time and travelling expenses,' and a decree was given for £13 3s. An appeal against the decision was immediately lodged."

THE MOA.

The Moa seems likely to take the place of the sea-serpent in furnishing aliment for the marvel-loving appetite of the British public. Even scientific men are inclined to suspect that there may be some basis of truth in the reports which have reached this country from New Zealand. Professor Owen has long asserted the possibility of some of the smaller species of Dinornis being found living in the Middle Island. About two years ago, a story appeared in a Nelson paper, that some explorers of a remote district in that island had, in the early morning, noticed the fresh footprints of a large struthious bird in a situation where nothing of the kind had been observed on the previous evening. There is also good evidence that, at no remote period, the Dinornis elephantopus furnished food to the natives. The existing species of Apterix and the Notornis, discovered living by Mantell, were contemporaries of the Moa. Still it seems incredible that the larger species, one of which was at least ten feet high, should be in existence and no evidence have been obtained of the fact from the Maori. The Melbourne correspondent of the *Times* now states that some explorers, who have lately penetrated to the west coast, have found recent bones of the Moa on the surface, and also footprints of a large bird. He proceeds:—

"I see no reason to believe that the moa does not exist, and I think the probability is that it does. The Middle Island was never very thickly peopled, and it is nearly thirty years since it was almost depopulated by Te Ranperaha's tribe. The natives were confined to the eastern side of the island, and never penetrated to the mountains on the east coast. Their superstitions militated against it. They believed that a race of wild men inhabited the mountains, which were also infested by the dreaded taniwa, a great lizard which ate men. They also had a tradition that the moa still lived in the ranges. Since the Europeans have inhabited New Zealand no lizards have been seen larger than about eighteen inches, and certainly no wild men have been met with by the explorers, so that the superstition of the natives only proves their ignorance. The bones discovered during the last twenty years prove that the moa lived at no very distant day. Why should he be extinct? We know of no enemy likely to exterminate him, and if the untrodden wastes of the Middle Island furnished him with food at a period not distant enough to fossilize his bones, we know of no change which has altered the condition of the islands on that score up to the present day. There are birds which could not so easily preserve their existence, and which have not as yet become extinct. The kiwi-kiwi (apterix) we instance, and the kaka-po (night parrot), which is also wingless. Both these birds are small, and have numerous enemies, especially native dogs, which would be powerless against the moa. It is therefore by no means impossible—I even think it probable—that Professor Owen may yet be gratified by a recent specimen of this gigantic bird."

The tale, which has been reproduced in the *Times* from an Otago paper, of two miners being disturbed at their camp fire by the apparition of an enormous bird, which, without reckoning the head and neck, seemed seven feet high, is in all probability a fabrication. A correspondent of the same paper, Mr. H. J. Webber, has stated his conviction that the extinction of the Moa has been due to the fires which are constantly occurring in the dense bush of New Zealand, and that all the bones of the bird which he has examined there exhibited traces of the action of fire. Yet there seems nothing unreasonable in the expectation that some specimens of the smaller species of Dinornis (the smallest of which was three feet high), may before long take their place by the side of the struthious birds of the old world in European galleries—relics of a phase of animal life as wonderful as any foreshadowed by fable, or whose history is preserved in the crust of our globe.

MEETING OF THE MEDICAL PROFESSION IN CHESTER ON DR. WATERS' CASE.

On Monday an important and highly influential meeting of members of the Medical Profession of Chester and surrounding districts was held at the Infirmary, to express sympathy with Dr. Waters on the recent action brought against him and decided in his favour. The following gentlemen were present:—Dr. Davies; Dr. Williams, Mold; Mr. Morris, Marford; Mr. Moreton, Tarvin; Dr. Braid, Neston; Mr. Churton; Dr. Biggs, Kelsall; Dr. Fyfe, House-Surgeon, Chester; Dr. Stolterfoth; Mr. Jones, sen., Ruthin; Mr. Bage; Mr. Dickson; Mr. Brittain; Mr. Weaver, sen.; Mr. Brierly, Tattenhall; Mr. Thelwall, Farndon; Dr. Bury; Dr. Jephcott; Dr. Williams, Wrexham; and Dr. Powell.

The Chairman, in opening the proceedings, said they all knew that a gentleman, an ornament to his profession, and one who had gained the credit and goodwill of a large number of persons, had unfortunately been made the victim of a person whose character no doubt had been such as to deceive her intimate friends. She had brought herself into discredit, and evidently wanted to shield herself at the expense of her Medical friend. They all knew the satisfactory way in which that charge had been met, and how very handsomely Dr. Waters had been treated by all parties in the case, the judge himself expressing his full conviction that the charge was not borne out by the evidence. However, the matter would not be allowed to rest there; they had a duty which they owed to themselves and to the Profession. Their Profession was one peculiarly liable to such charges, and whenever a brother fell under an imputation of the kind it behoved them all to rally round him, and endeavour by every possible means to defend him from these imputations. A somewhat analogous case had lately occurred

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in London, in which Mr. Adams was made the victim; but that gentleman got triumphantly through a very painful lawsuit, and met with the sympathy of almost every Medical man in the Profession. He (the Chairman) only hoped the same warm sympathy would be manifested on this occasion. Although Dr. Waters was placed in a trying position, he (the Chairman) hoped that the difficulties under which he had been labouring would only serve to bring more fully into view the many good qualities he possessed, and prove him more worthy and deserving even than ever the regard and esteem of his Medical brethren. (Applause.)

The Secretary then read letters from a large number of Medical gentlemen expressive of the great interest they felt in the case, and regretting their inability to attend the meeting. The Secretary referred particularly to a letter received from Dr. Bennett, of Edinburgh, who suggested a general subscription might be entered into that might suffice not only to express their sense of his merit, but for their desire by means of union to put down the odious calumnies and injuries to which they were all exposed. He thought, however, that the movement should originate amongst the Medical Profession in Chester, who might jointly form themselves into a committee for this purpose. The writer continued that he would be glad to take charge of the Edinburgh subscriptions, to which he would gladly contribute, and recommended that the testimonial should be presented to Dr. Waters at a banquet to be held in Chester, say early in August. The Secretary said he thought this letter of Dr. Bennett's very important indeed, and, although that meeting had been nominally called for the purpose of congratulating Dr. Waters on the issue of the recent trial, the letter was valuable as showing the feeling amongst the Profession in distant places on the subject. (Hear, hear.)

Mr. H. Churton then moved the following resolution:—"That a subscription be entered into by the Medical Profession generally for the purpose of assisting to defray Dr. Waters' expenses of the late trial, and for presenting him with such a testimonial as will be agreed upon by the subscribers."

Mr. Foulkes seconded the resolution, which was carried unanimously.

Mr. Griffith, Wrexham, said all the Wrexham Practitioners were ready to co-operate with a committee in any manner to testify to Dr. Waters the deep sympathy which they felt for him under the painful circumstances under which he was placed, and their admiration of the bold, English way in which he confronted the charge. (Hear, hear.) He thought they ought not to separate without some remark—it might be a delicate matter to do so—but he did think the time was come when some remark should be made respecting those Professional gentlemen who had come down from London in the case, darkening the character and blasting the reputation of a fellow-member of their Profession. (Hear, and loud applause.) On looking at the trial, he could not conceive that either Dr. Lee or Dr. Ramsbotham—for he made no delicacy about names—could form an *ex post facto* opinion, and venture to say the treatment adopted by Dr. Waters was wrong. (Hear, hear.) Not one of them—and although they did not bear the high names of the two gentlemen he mentioned, still they possessed common sense, they possessed a knowledge of their Profession, and most of them had a good deal of experience—would venture to say in such a case that the treatment was improper. It might have been all very well if it had been the case of an ignorant person, who might have adopted wrong treatment, and then in the interests of the Profession and the public he should be held responsible; but there was no such evidence here. What was known of the necessities of the case at the time it came under Dr. Waters' care? (Hear.) Something was due to the reputation, and experience, and skill of Dr. Waters in his diagnosis of the case, and applying proper treatment to it. He (Mr. Griffith) believed that Drs. Lee and Ramsbotham had no adequate foundation for condemning the treatment of Dr. Waters in this case, and guided their statements on preconceived ideas as to a certain point of practice in the treatment of these diseases. As to the speculum, they all knew that Dr. Lee had for a long time been waging a crusade against its use, and he thought that was a point on which the meeting were bound to express their opinion, to discourage men from being made the tools of any party or to fill up gaps in evidence; to sacrifice their reputation and those feelings of delicacy and honour which should exist between one man and another in the Profession, and the time had come when they should generally express their disapprobation of such a course of proceeding. (Applause.)

In answer to an inquiry made by a gentleman present, the Chairman said the subscription to be entered into would be strictly confined to the Medical Profession, inasmuch as there would be a meeting the same evening of a more public character, at which it was intended to have another subscription. In referring to Dr. Bennett's letter, he said this (Dr. Bennett's) suggestion was what the meeting intended itself to have proposed.

Mr. Harrison (Nicholas-street) said there had been a preliminary meeting at which he had been asked to take upon himself the duty of drawing up an address to Dr. Waters. This address at first contained some remarks respecting the course taken by the two Medical gentlemen who had come down from London, but on reconsideration it was thought better to omit these portions. Mr. Harrison then read the address proposed to be adopted, as follows:—

"*To Edward Waters, Esq., M.D., F.R.C.P. Ed., etc., etc.*

"Dear Sir,—We, undersigned Medical Practitioners in the city and county of Chester and the adjacent counties, assembled at the Chester Infirmary, April 13, 1863, beg to tender you our hearty and most cordial congratulations on the issue of the recent trial which has just occurred in this city. The rumours circulated during the past winter in connexion with your name caused us great pain, and it was with an anxiety scarcely inferior to that which you yourself must have felt that we awaited the time when an opportunity should be afforded you of vindicating your character from the aspersions that had been cast upon it. The result, however, has amply proved the exactness of our anticipations, and we now sincerely rejoice that a member of the Profession whose name has been hitherto held in the highest esteem among us has passed unscathed through the painful ordeal to which you have been exposed. Having carefully watched the progress of the trial, we beg to express to you our great satisfaction at the verdict, and to offer you the united testimony of our unabated confidence in your Professional judgment and skill, as well as in your honour and integrity as a man; and we should be glad if we could believe that this slight tribute on our part could afford any consolation to you for the great suffering which you and the other members of your family must have endured for so long a period, and while passing through the painful and appalling trial to which you have been subjected. We beg to subscribe ourselves, dear sir,

"Your faithful friends."

The address was signed by all the Medical gentlemen present.

Mr. Churton said it would be well to form a committee to devise the best mode of proceeding in the matter. He thought the bare presentation of a testimonial—say a piece of plate—would not be sufficient; Dr. Waters had been at a great outlay in getting up his defence, and he ought to have something in money. (Hear.)

Mr. Brittain asked would the subscription amongst themselves interfere with that to be entered into in the evening.

The Chairman replied that it would not.

Mr. Brittain: Because if the other subscription goes to pay the law expenses, ours might be appropriated to the testimonial.

Mr. J. Harrison then moved the adoption of the address to be presented at a proper time to Dr. Waters.

Mr. Morton (Tarvin) cordially seconded the proposition, and observed that they would be justified in expressing their opinion to Dr. Waters on the conduct of Drs. Lee and Ramsbotham.

The Secretary: Don't you think it would be better to leave that to the Medical press? Otherwise I think it would be taking it out of good hands.

Mr. Brittain: I believe there are several Medical gentlemen in Manchester and Liverpool who have expressed a wish to join in the subscription.

The Secretary said that he thought it would be better to have separate meetings in those large towns, as it would have much more effect than having one common meeting in Chester.

A committee was then appointed to carry out the various arrangements, after which the proceedings concluded.

Dr. Lankester has held an inquest on an illegitimate child, nine months old, who had been taking two of Morison's Pills daily.

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REVIEWS.

On Effusions of Blood in the Neighbourhood of the Uterus, or the so-called Peritoneine Hæmatocele. A Thesis for the M.D. Degree. By HENRY M. TUCKWELL, M.A., M.B. Oxon, late Radcliffe Travelling Fellow. Pp. 41. Oxford: Parkers. 1863.

THAT a Doctor of Medicine of Oxford should write a thesis on an obstetric subject is a good sign for that branch of the Profession, which thus shows its attraction for men of the highest education and pretensions. We hope, too, that the barbarism, "peritoneine," will be the last of its class. Dr. Tuckwell gives us a clear *resumé* of what has been written and ascertained on the subject matter in very small compass, and adds a copious table of cases and references.

Jahresberichte der Gesellschaft für Natur und Heilkunde, in Dresden, 1861-62.

Yearly Report of the Society of Medicine and Natural Philosophy, Dresden.

CONTAINS abstracts of the papers read at the meetings of the Society, and of the consequent discussions, and three or four entire essays on subjects in Medicine and Physics; that they are worth reading is sufficiently guaranteed by such names as Erdmann, Keiler, Zenken, Seiler, and Küchenmeister.

In a communication on the "Propagation of Syphilis by Vaccination," Dr. V. Bulmerincq, noticing the doctrine of Viennois and Stricker, that pure lymph, though taken from a syphilitic patient, will produce only a pure pock, but that lymph mixed with blood will communicate syphilis, makes the pertinent objection that it is impossible, however careful the operator may be, to get lymph entirely free from blood-corpuscles.

Dr. Seiler's clinical observations on the "Use of Quinine in Typhus," would possess a higher value if he had given the diagnosis of the fever he treats; he calls it "typhus," but he describes no rash, and he speaks of "diarrhœa" as a symptom; he only advocates the use of "moderate doses" of quinine, and does not go beyond believing them to be a valuable aid to *treatment*, especially of cases in which nervous complications predominate; he does not even hint at *curing* typhus by means of quinine.

GENERAL CORRESPONDENCE.

BROMWICH *v.* WATERS.

LETTER FROM DR. RAMSBOTHAM.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the last number of your Journal you pass a censure, in no measured terms, on Dr. Lee and myself for having attended to give evidence in the late case at Chester. You say "you heartily regret the evidence given by us, and you would fain that we can represent ourselves as misled or drawn in against our will."

As far as being misled, the result has proved that we were grossly misled by the chief witness, who made her statement to us with a degree of simplicity and absence of exaggeration not often united to falsehood, and who never wavered in the minutest particular in the account she first gave, although she underwent many very severe examinations and cross-examinations as well by medical men—myself being one—as by acute counsel and solicitors. She has turned out to be the most artful and thorough impostor, as well as the most arrant hypocrite, that it has ever been my lot to hear of.

For myself, I had been consulted in the case some time before I had an idea that it was to be brought into a court of justice; and, as soon as I ascertained that, I strongly advised, more than once, as did Dr. Lee also, that the case should be abandoned. I told both the counsel and the solicitors that they would certainly lose their cause (whatever might be their feelings on the subject of the girl's truthfulness), supported as it was chiefly, if not entirely, on her testimony, and that my evidence would be of no use to them. I assure you it was with great pain to myself that I became implicated in the case; but, having given an opinion that there was no mark remaining of an ulcer ever having existed in the os uteri, I was obliged to appear to speak to that fact.

With regard to the evidence given by Dr. Lee and myself, which you "heartily regret." You say "Dr. Lee is reported to have deposed that no ulceration ever existed at all; Dr. Ramsbotham, that if there had been an ulcer there would be a cicatrix." I shall leave Dr. Lee to answer for himself, as you well know he is quite capable of doing; but, for myself, I must say you have not put what I said fairly in this passage; and a reference to your own report will show you that. I made a distinction between a deep-seated and superficial ulceration of the os uteri; and I told the court that if the first kind of ulcer had existed, there would have been a cicatrix when I examined; but if the latter kind, there would be no indication of the disease left at that distance of time. But to put the question in an intelligible light, I will transcribe, as far as I can recollect, the substance of the whole of my evidence. I said it must have been an obstinate case of ulceration to require the use of the caustic every week or fortnight continuously for so many months as the girl swore to, six or seven applications being sufficient in ordinary cases. Dr. Waters, after my evidence had been given, contradicted her, and swore he did not apply it more than six or eight times, not ten at the farthest. I said that I never had used the speculum to a chaste, unmarried female, unless it had been had recourse to by some other Practitioner previously. This I said, believing the girl to have been a virgin when she first consulted Dr. Waters. He swore that on his first examination *per vaginam* he discovered she was not a virgin. I said I thought the speculum and caustic should be discontinued, if their use produced such aggravated fits of hysteria as we heard had supervened in this case during the treatment. This was really the only point of practice in which I differed from Dr. Waters. It must be borne in mind that I had not the advantage of hearing his version of the story before I gave my evidence, as Drs. Simpson, Keiller, Fyfe, and Mr. Brittain had; if that had been so, very little difference indeed would have been discovered between his treatment and my own. My evidence was entirely given in reference to what she had sworn to. I said, also, that when I examined the girl I found the uterus perfectly healthy, with no appearance of there ever having existed an ulcer at the mouth. I said that if any considerable portion of the substance of the organ had been destroyed by ulceration a cicatrix would have been left, but if a part of the membrane covering it only had been destroyed, that membrane, in common with other mucous membranes, possesses such a restorative power within itself, that all traces of its having been diseased would soon disappear. I stated that to require the application of caustic every week, or every other week, for more than a year, would generally imply that the substance was affected; but that superficial ulceration, or abrasion of the membrane, had such a tendency to recur, that a return to the former treatment might be necessary more than once during that interval. I said, also, that it did not accord with my experience that hysteric females were invariably given to falsehood, because I knew many hysterical women who were quite truthful; and that marriage was often beneficial in hysterical cases, but that women who had ulcers in their womb were generally separated from their husbands while under treatment.

This I believe to be the sum of my evidence, and I do not think it will be controverted by many of my Medical brethren.

I heartily congratulate Dr. Waters that he has been enabled to clear himself from such a heavy and grievous charge, not only for his own sake, but also for that of the Profession to which we both belong.

It would give me indeed great pain did I feel that I deserved the censure you have passed on me; because throughout my whole life my chief desire and object has been to uphold the honour, dignity, usefulness, and respectability of the Medical Profession.

I am, &c.

FRANCIS H. RAMSBOTHAM.

ACTION AGAINST A CRITIC.—M. Constantine James, the well-known French writer upon mineral waters, has just brought an action against the editor of the *Gazette des Eaux*, on account of an anonymous letter which appeared in its columns, insinuating that he puffed up the newly-discovered mineral waters at Martigny for pecuniary considerations. One portion of the charge is the term "Hydrologist" being contemptuously applied to the author. The editor was condemned to pay a fine of 100 francs and the expenses.

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REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MARCH 4, 1863.

Dr. OLDHAM, President, in the Chair.

THE following gentlemen were elected as Honorary Fellows of the Society:—Prof. Martin, of Berlin; Dr. Beatty, of Dublin; Dr. Pagan, of Glasgow; Prof. Braun, of Vienna; Prof. Depaul, of Paris; and Prof. Faye, of Christiana.

The following gentlemen were elected as ordinary Fellows of the Society:—J. H. Galton, M.B., Brixton; H. V. Garman, Esq., Bow-road; W. Hanna, Esq., Belfast; R. W. Jenkins, Esq., Philpot-lane; J. W. J. Oswald, Esq., Kensington; Josiah T. Powell, M.D., City-road; John Rowland, M.D., Strata Florida, Lampeter, Cardiganshire; Joseph Rushforth, Oxford-terrace; J. H. Tutin, Esq., Ripon.

The President announced that the volume of Transactions for the past year would be in the hands of the Fellows in a few days.

READY-MADE PLASTERS.

Dr. TILT drew attention to the fact that when a hundred or a hundred and fifty grains of common starch are boiled in an ounce of glycerine, the result is a very stiff glutinous compound, which has no smell, and does not become rancid; and although sticking firmly to the skin, it can be removed and reapplied. Instead of ordering belladonna plaster, Dr. Tilt prescribes three grains of sulphate of atropia to be rubbed down with a few drops of glycerine, then incorporated with an ounce of hard glycerine ointment, and thickly spread by the patient on gutta-percha cloth, or impermeable wash cloth. This can be removed for the morning ablutions, and reapplied after spreading a little more ointment on the same plaster. Morphia and other alkaloids are prescribed in the same way. The samples exhibited by Dr. Tilt were made by Mr. Bullock, of Hanover-street.

Dr. MEADOWS exhibited a specimen of

UTERINE POLYPUS WHICH HAD COMPLICATED LABOUR.

The tumour, which had completely filled the vagina, was about twice the size of the fœtal head. During the labour it was entirely protruded by the descent of the child, but was returned on its expulsion. It again, however, descended, and was removed by ligature two days after delivery. The growth was attached by a long pedicle to the cervix uteri, and weighed when removed nearly four pounds. The patient did well.

A paper by Dr. W. H. BROADBENT was read

ON DISPLACEMENT, ETC., OF THE BLADDER AS A CAUSE OF TEDIOUS LABOUR.

The purport of this communication was to show that, besides the mechanical obstruction which may be presented by the prolapsed and distended bladder to the descent of the head of the child, prolapsus of the bladder, complete or partial, frequently renders the first stage of labour long and painful. The uterine contractions, causing pain in the displaced bladder, it was said, were replaced by spasmodic contractions of the abdominal muscles, which forced down the uterus, but had no effect in dilating its mouth. These were attended with much suffering, of a character very different from the natural labour pains at this stage, which with tactile examination would lead to a recognition of the cause. The measures recommended for the relief of the pain and for expediting the progress of the labour were the supine position, prevention of accumulation of urine by the use of the catheter, and, in severe cases, chloroform. Cases were given in support of these conclusions.

A paper by Dr. CHARLES CLAY was read on

OBSERVATIONS ON OVARIOTOMY, ETC., STATISTICAL AND PRACTICAL; ALSO, A SUCCESSFUL CASE OF EXTIRPATION OF BOTH UTERUS AND OVARIES.

Dr. Clay gave a brief and interesting outline of his experience on this very important branch of surgery. Of 109 peritoneal sections, of which 104 were for ovarian extirpation, 3 for cutting down upon the tumour to establish ulceration where its removal was known to be impracticable, 1 for the Cæsarean operation, and one for the removal of both uterus and ovaries. Of the 104 ovarian cases, 72 recovered, 32 died; all the 3 ulcerative cases recovered; the Cæsarean section lived to the fifteenth day; and, lastly, the case of entire removal of both uterus and ovaries recovered. Of the 32 deaths, 10 died from the immediate consequences of the operation, 10 from inflammation, 10 from prostration, and 2 from hæmorrhage. The great majority of the first and second series were young females, as well as a portion of the third division. Those from prostration were chiefly elderly females. Some other statistical facts were elicited, as well as the following remarks from the author:—Dr. Clay still defends the raised temperature of the room for operation, and attributes much of his success to its influence; is not certain if chloroform has added anything to the successful results, although he values it highly as an agent which it would now be difficult to lay aside, although the first fourteen of his cases were performed before it was discovered, and of which nine recovered; and he still thinks, if a woman could face the difficulty without it, it would be in her favour. The large incision is still practised by him, and deemed far preferable to the smaller opening. Of course, the author wished to be understood that the incision was to be commensurate with the tumour to be extirpated. Dr. Clay gave many reasons for this preference. The distressing vomiting he conceives to be in a great measure owing to the use of chloroform, as he saw but little of it in the first fourteen cases where it was not used. For this troublesome symptom he advises patience until the blood has got rid of its load of carbon, the simplest of drinks, and as little food as possible. Some very well-ascertained facts of critical days were adduced, which would require too much space to dwell upon; suffice it to say, the third, sixth, and ninth were the principal, and the causes of each were pointed out. No particular age seems to be prominent in respect to the success of these cases. Dr. Clay himself stated them to be about equally successful at all ages from sixteen to fifty-seven. Purgatives are not admissible; and he relies on enemas, with ox-gall, etc. This part of the paper was concluded by some interesting remarks on ovariotomy for the last twenty years, and the difficulties the author had to encounter, not the least of which was misrepresentation. The author next gave in detail a new and interesting operation, which he believed to be the first of its kind, successful at least, in this country—namely, the entire extirpation of the uterus and its ovaries through the abdominal walls, which has ended most fortunately, the lady returning to her friends on the thirty-fifth day after the operation, and still continuing well, thus establishing another great fact in reference to abdominal Surgery. The case was that of a fibroid uterus of eleven pounds weight, with the ovaries in an unhealthy condition; and the tumour by its growth had latterly so entirely filled up the cavity of the pelvis as to render the passage of the fæces and urine extremely difficult. The particulars of the case throughout its progress were given. Dr. Clay does not suppose that many uterine cases could be advisedly extirpated, but thinks some of those densely-hard fibroid masses, where the constitution has not been greatly prostrated, might afford a fair prospect of cure under the knife.

Mr. BAKER BROWN prefaced his remarks by warmly thanking Dr. Clay for the very practical and admirable paper just read. Mr. Brown considered it one of the most valuable he had ever heard, and wished it had been brought forward a few weeks earlier, as it was calculated to strengthen the hands of other ovariotomists, and enable them to contend against those who doubted the value of the operation. With regard to the temperature of the room, Mr. Brown stated that he believed that Mr. Lane, than whom no one had been more successful in ovariotomy, disregarded this subject, as did also another gentleman present at the meeting, who had also had great success. For himself, Mr. Brown believed that where the operation was likely to be long, and the viscera long exposed, it was of great importance; but that where the operation was quick, and the viscera were kept back by hot flannels, the question of temperature would not affect the success. As to the long incisions, he believed Mr. Walne followed Dr. Clay; whereas Dr. F. Bird and Mr. Lane had contended for the short incision, and with good results. Mr. Brown always made a small incision first. If it appeared that on tapping the cyst the tumour could be withdrawn, he did not enlarge it; but if there appeared strong adhesions, or the tumour was very multilocular, he found it easy to make the incision larger, and agreed with Dr. Clay that it was advisable to see clearly where the adhesions and difficulties in removing the tumour were situated. At the same time, with the very large

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success of Dr. Clay, it was folly to say that short incisions were preferable to the long. Dr. Clay still preferred the ligature of Indian hemp. Mr. Brown had used it till the invention of the carpenter's callipers as a clamp, which he found more convenient and comfortable. He could not, however, agree with Dr. Clay as to the inadvisability of bleeding. In two or three cases where peritonitis had come on quickly after the operation, he had found venesection most valuable, and attended with success. He always advised hot linseed-meal poultices to be applied over the whole abdomen when there was a chance of peritonitis, believing that they kept hot longer than ordinary fomentations. Mr. Brown's experience as to the frequency of the ovary attacked was contrary to Dr. Clay's. He had examined many hundreds, he might say thousands of cases, but thought that one could not decide which ovary was diseased till an incision was made. His experience, from cases submitted to operation, was that the left ovary was most frequently affected. He agreed with Dr. Clay that age does not make much difference. He was glad to hear that Dr. Clay had come to the conclusion that the question of success did not depend on the operation itself, but on the after-treatment. Mr. Brown believed that in his earlier operations he lost more patients because the after-treatment was not so well understood as now. He had learned from Dr. Clay the valuable practice of never giving the patient anything but the most simple food till asked for. He preferred giving beef-tea and wine, if required, by the rectum for three or four days after the operation. Mr. Brown considered Dr. Clay's testimony valuable as to the great advantage of small over general hospitals for these operations, not on account of the operation itself, but because the nursing, ventilation, and atmosphere were so much better in small special institutions. Mr. Brown had twice removed both ovaries with success. He thought that the question of exploratory incisions had been unfairly treated by the profession. They were made with an honest endeavour to ascertain the truth before risking the patient's life. Mr. Brown had never seen a fatal result follow them, and thought they should be commended and encouraged, not condemned. He was glad to hear Dr. Clay say that in his last operation he had made it a stipulation that it should be left to him to decide whether he should proceed after making an incision. As to opium, Mr. Brown had at one time been as great an advocate for it as Dr. Clay; but believed that it increased the sickness, and he now never gave it unless imperatively called for.

Mr. Spencer Wells said that he must not be supposed to undervalue the very useful paper of Dr. Clay, or to be ungrateful for the lessons which he had taught us all by his able advocacy of ovariotomy, if he (Mr. Wells) ventured to discuss two very important steps of the operation in which his own practice, and the practice in London generally, differed from that of Dr. Clay. Dr. Clay still advocated the long incision; and he still left the tied end of the peduncle and the ligature within the peritoneal cavity. He could boast of a success attending this practice of 70 per cent. of recoveries to operations, and as success was the best criterion in Surgery, it might seem presumptuous to question the wisdom of any operative proceeding practised so successfully. But his (Mr. Wells') own experience had led him so decidedly to prefer the short to the long incision, and to keep the tied end of the pedicle outside rather than to leave it in, that he could not help suspecting that Dr. Clay's great experience in the operation had led him to success in spite of a method which more recent experience had modified or corrected, and which men of less experience could not follow without great danger of failure. After long incisions there was so much more exposure or escape of intestine during the operation, so many more serious symptoms after it, and so comparatively protracted a recovery, even in successful cases, that his (Mr. Wells') own experience had taught him to avoid any greater length of incision than was necessary for the exposure and removal of the cyst or tumour. Every inch in the length of incision appeared to add something to the chances against the patient, and in cases where he had the choice either of making a long incision and removing a tumour entire, or of breaking up a tumour and removing it through a small opening,—even though ovarian fluid might unavoidably escape into the peritoneal cavity and require careful sponging for its removal,—he would prefer this alternative rather than make a very long incision. So, in his experience, those patients in whom it had been necessary to leave the pedicle and ligature within the peritoneal cavity had suffered so much more after the operation, and their recovery had been so much more protracted than others where the peduncle had been kept outside, that he would always prefer to keep it out if he could, and so avoid the danger of absorption of the putrid matter of the strangulated stump, or the peritonitis connected with the effusion of fibrine thrown out to circumscribe the stump and ligature. It seemed probable that the frequent occurrence of peritonitis in Dr. Clay's practice was in some measure due to his manner of treating the pedicle; for in his (Mr. Wells') own practice, peritonitis was a rare accident. Of eighteen fatal cases, it had only had any important share in the fatal result in two; in all the others, shock or exhaustion after the operation, or blood-poisoning, having been the cause of death; while in successful cases he hardly remembered peritonitis in any patient where the pedicle had been kept out. As to the temperature of the room, in his earlier cases he had followed Dr. Clay's practice; but latterly he had found it better simply to have the room kept comfortably—not excessively—warm, and after the patient was in bed to keep a good fire burning and a window open night and day. In the use of opium also he had learnt to avoid all excess. If there was pain or restlessness, it was given in moderate doses, and repeated if necessary; but some patients had recovered without taking a single dose, and others with not more than two or three doses. Sometimes it was given to secure a good night, even if there was no pain. With regard to the removal of uterine tumours by abdominal incision, it was only under the most exceptional circumstances—where the life of the patient was in great danger from hæmorrhage or the effects of pressure—that such an operation as that so successfully performed by Dr. Clay could be justifiable. Pedunculated peritoneal out-growths from the uterus might be removed with moderate risk, and so might in-growths towards the uterine cavity or vagina; but any attempt to enucleate interstitial fibrous tumours of the uterus, either by incision through the abdominal wall, or by incising the cervix *per vaginam*, was attended by such very great risk that nothing but the most urgent necessity would justify the practice. He (Mr. Wells) said this rather as the result of his own observation, than as any conclusion suggested by Dr. Clay's successful case.

Dr. Clay, in reply, expressed his great gratification at the manner in which the paper had been received by the Society. With respect to the details of the operation, he adhered to the principles laid down in the paper. It was remarkable that many of the best recoveries after ovariotomy had taken place in his practice after making the long incision, and where the tumour was large he preferred it. The use of Indian hemp for ligatures he still preferred. With respect to the remarkable case of extirpation of the uterus, he would observe that on his way to town to attend the meeting he had accidentally met the patient who had been the subject of the operation at a railway station, and in perfect health.

EPIDEMIOLOGICAL SOCIETY.

Monday, March 2, 1863.

Dr. Bryson, F.R.S., in the Chair.

The Secretary read a paper, by Deptuty-Inspector Dr. Smart, R.N., on

THE EPIDEMICS OF YELLOW FEVER IN BERMUDA.

It was illustrated with numerous statistical tables, and accompanied with an accurate map of the groups of islands. Without going further back than the close of last century, it appears that the dates of the successive outbreaks of fever there have been 1796, 1812, 1818 and 1819, 1837, 1843, 1853, and 1856. The following are the principal conclusions drawn by Dr. Smart from his extended researches:—1. That in the best recorded yellow fever epidemics of Bermuda there has been generally a coincidence of the same disease on the American coasts. 2. That on such occasions there has been an epidemic constitution, manifested by the prevalence of catarrhal affections in the spring, and of gastric affections in the early summer—these yielding to fever, which, at its climax in the autumn, assumed the type of yellow fever with black vomit in a greater or less proportion of the attacks. 3. That during these epidemic seasons comparative immunity has usually favoured the native population, and those of the European residents dwelling under good sanitary conditions.

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4. That the most intense manifestations of the disease have arisen in crowded barracks and convict hulks, etc., especially when the healthy and sick have been kept together. 5. That inasmuch as in the worst instances recorded it has been found that removal from infected localities has been always followed by an almost complete exemption of those not already infected, by amelioration of the state of the attacked, and lastly by an early extinction of the epidemic character of the fever, it is therefore just to consider the essential causes of the disease to operate, under ordinary circumstances, by material local agencies rather than by those of person. 6. That sanitary measures are the means to be relied on upon the approach of the epidemic constitution (a) in any locality. 7. That, in the event of an epidemic outbreak, the same measures are highly valuable, but the only measure of certain value then is removal from the locality, and, in the case of crowded communities, as in barracks, ships, etc., immediate disperson into wider space of all persons within the range of the noxious local agencies. 8. That, although the direct proof of personal contagion be still wanting, there are ample reasons for concluding that the highest degree of local infection has been generated in the Hospitals, naval, military, and convict, so that the malady has been propagated among the attendants as well as among the sick. 9. That with regard to Hospital arrangements for the treatment of yellow fever, owing to the peculiar predisposition arising from the debility of ill health, yellow fever Hospitals should be distinct and special, and under sanitary cordon; and that, considering the disadvantages of the climate of Bermuda, the minimum of space, even when perfect ventilation can be maintained, should not be less than 1500 cubic feet per man in fever wards. After alluding to the terrible mortality from this fever in several ships of the West India squadron in 1861, during the passage to Halifax, and after their arrival there, Dr. Smart remarks: "I must confess that such results, placed side by side with those of immediate removal of men from infected localities as exhibited in Bermuda experience, have raised a doubt in my mind whether equal losses of life would have been incurred by the immediate removal of the crews from their ships into some suitable quarantine establishment in the West Indies."

Drs. Bryson, Camps, Stratton R.N., and Milroy, and Mr. Marson took part in the discussion of this very elaborate and valuable paper, which had been communicated to the Society by the courtesy of Sir John Liddell, Director-General of the Medical Department of the Navy.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen passed the First Part of the Professional Examination for the Licence of the College on April 8 and 9, 1863:—

John Henry Ashton, St. Bartholomew's Hospital; Edward Brown, St. Bartholomew's Hospital; George Edgelow, St. George's Hospital; Thomas Edgelow, St. George's Hospital; Robert Henry Kinsey, St. Bartholomew's Hospital; Jordan Roche Lynch, St. Mary's Hospital; Charles Durrant Pearless, St. Bartholomew's Hospital; Llewelyn Powell, St. Bartholomew's Hospital; Chauncy Puzey, Guy's Hospital; Thomas Francis Raven, St. Bartholomew's Hospital; Frederick William Richards, St. Bartholomew's Hospital; James Walbridge Snook, St. Bartholomew's Hospital; James Byers Thomas, St. Bartholomew's Hospital; Arthur Cromack Turner, Sheffield; Alexander Waugh, St. Bartholomew's Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a Meeting of the Court of Examiners on the 14th and 15th insts., and, when eligible, will be admitted to the Pass Examination:—

G. T. Hankins, Charles Smith, C. G. Bott, H. T. Broughton, H. G. Howse, G. H. Savage, Edward Shorland, F. T. Tayler, George Paddon, F. W. Humphreys, Thomas Collier, James Milward, J. A. Ball, J. A. Ensor, Joseph Johnson, and T. F. Warren, students of Guy's Hospital; C. D. Pearless, A. S. May, C. T. Dalley, W. G. Y. Lush, S. H. Simpson, W. A. Harvey, G. A. A. Coates, A. C. Reade, T. A. Compton, G. H. Shaw, J. T. Evans, and F. J. Cropp, of St. Bartholomew's Hospital; Thomas Howells, Franklin Gould, A. E. Adamson, S. F. Bignall, E. L. Penn, Frederick Noyes, C. B. Greenfield, E. F. Boult, S. M. W. Wilson, F. J. Burge, and Fares Bradshawe, of King's College; Walter Smith, G. W. Rigden, T. H. Green, H. G. Walker, R. C. Beck, and William Akerman, of University College; C. E. Saunders, Daniel Ilea, and S. S. Stephens, of St. Thomas's Hospital; J. W. Warburton, T. D. Leigh, and J. H. Gornall, of Liverpool; John Carlisle, George Clements, and H. W. Freeman, of the Middlesex Hospital; Gifford Ransford and H. R. Archer, of St. George's Hospital; G. W. Malin and W. N. Hiron, of Birmingham; E. S. Grattan and James Cooke, of Belfast; R. E. Threadgale, C. F. Knight, and F. C. F. Milburn, of Charing-cross Hospital; D. W. Tomlinson and Richard Cresswell, of St. Mary's Hospital; J. B. Ward, Leeds; and H. G. Samuels, Dublin.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, April 9, 1863:—

Edward Harley, King's College; Thomas Carter, Guy's Hospital; Frederick Kelly, London; Thomas Martyn Cann, Virginstown, Devon; William Row, Clapham-road; William Henry Cecil Tessier, London.

The following gentlemen also on the same day passed their First Examination:—

Samuel Duckering, Sheffield; Richard Wheeler Haines, King's College; John Burges Welch, King's College; Francis Henry Burdett, Birmingham.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.—Names of candidates who passed the Major Examination as Pharmaceutical Chemists on April 15:—

Victor Guesdon, London; John Fletcher, Camberwell; Geo. S. Taylor, Harrogate; Purnell Bond, Bristol; William Curtis, Barnstaple; Richard Wadsworth, Preston.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BENNETT, ROBERT, M.D., of Buxton, has been appointed Coroner for the Hundred of High Peak, in the county of Derby.

HACON, EDWARD D., F.R.C.S. Eng., has been appointed Surgeon to the Stamford-hill Dispensary.

HINTON, JAMES, M.R.C.S. Eng., has been elected Surgeon Aurist to Guy's Hospital.

KNIGHT, J. SLADEN, M.D., M.R.C.P. Lond., has been elected Consulting Physician to St. Bartholomew's Hospital at Chatham.

LANGTON, J., M.R.C.S. Eng., has been elected Consulting Surgeon to St. Bartholomew's Hospital at Chatham.

ROBERTS, EDWARD STOKES, M.R.C.S. Eng., has been appointed one of the Honorary Surgeons to the Hull and Sculcoates Dispensary.

SMITH, W. ABBOTT, M.D., M.R.C.P., has been appointed Physician to the Finsbury Dispensary.

DEATHS.

FOWLER, RICHARD, M.D. Edin., at Milford, near Salisbury, on April 13, aged 96.

JONES, MICHAEL T., at Shardlow, near Derby, on March 30, aged 69. In practice prior to 1815.

SCRIBGE, THOMAS L., M.R.C.S. Eng., at Clifton, Bristol, on March 31, aged 83.

THOMSON, JOHN, M.D. Edin., at Lewisham, Kent, on April 1, aged 73, Surgeon R.N.

SPECIALTIES IN TEACHING.—Signor Larghi, well known for his works upon sub-periosteal operations, and on the treatment of disease of bone, has just been appointed Lecturer on Diseases of the Bones in the Turin University.

NATIONAL GALLERY.—Amongst the recent additions to the national collection of pictures is Haydon's "Punch, or May-day," bequeathed to the nation by the late Dr. Darling. The friends of the venerable Physician will well recollect the picture which used to hang in his dining-room.

FIRST LIST OF THE COMMITTEE OF THE ADAMS TESTIMONIAL.—The following, with many other gentlemen, have formed themselves into a committee:—Wm. Bowman, Esq., Lawson Cape, Esq., W. Coulson, Esq., W. H. Covey, Esq., J. E. Erichsen, Esq., Wm. Fergusson, Esq., Joseph Henry Green, Esq., F.R.S., etc., W. W. Gull, M.D., E. Lankester, M.D., Jos. Paget, Esq., Richd. Quain, M.D., W. B. Richardson, M.D., Brown-Séquard, M.D., Spencer Wells, Esq., John B. Walker, Esq., 17, Clifton-gardens, Maida-hill, Hon. Sec.

ST. THOMAS'S HOSPITAL.—There is a vacancy in the Surgical Staff of this institution, occasioned by the resignation on Saturday last of Mr. John Flint South, after a connexion of half a century as pupil and Surgeon at the Hospital, of which charity he is about to be made a life governor, in

(a) This vague and obscure, although classical, phrase is used by Dr. Smart simply to denote a sickly condition of the general health of a community, as indicated by the unusual prevalence and severity of catarrhs, alvine fluxes, etc., for some time prior to the development of malignant fever in the latter part of the summer or beginning of the autumn—the season when all the epidemics of yellow fever have appeared in Bermuda.—Sec. of Epid. Soc.

recognition of his long and valuable services. Mr. South is still a member of the Court of Examiners of the Royal College of Surgeons, where he has twice filled the President's chair.

THE ROYAL SOCIETY.—There are no less than forty-five candidates for the Fellowship of this learned Society, including as many as fourteen members of the Medical Profession, viz., Henry Foster Baxter, M.R.C.S.; William Brinton, M.D., of St. Thomas's Hospital; John Charles Bucknill, M.D.; Thomas Spencer Cobbold, M.D., of the Middlesex Hospital; William Charles Hood, M.D.; William Jenner, M.D., of University College, Physician to the Queen; Edmund Charles Johnson, M.D.; Henry Letheby, M.D., Officer of Health to the City of London; Sir Charles Locock, M.D., Accoucheur to the Queen; Robert McDonnell, M.D.; Frederick William Pavy, M.D.; John George Perry, F.R.C.S.; Charles Bland Radcliffe, M.D.; and Samuel James Augustus Salter, M.B.

DR. PRIESTLEY.—The Profession will be glad to hear that this accomplished Physician has recovered from his late severe and dangerous illness. During his attack, Drs. Jenner and West were unremitting in their attention to him, and we heed scarcely state that on all sides the progress of his illness has been watched with the greatest solicitude by his Professional brethren.

AN EARLY PREGNANCY. — Dr. Curtis has thoroughly examined into the evidence in this case, and comes to the conclusion that the girl, Elizabeth Drayton, became pregnant twenty-four days before she was ten years old, and was delivered of a fine full-grown male child, weighing fully eight pounds, when she was ten years, eight months, and seven days old. The reputed father of the child is said to be about fifteen years of age. The mother menstruated once or twice before conception, was tolerably healthy during gestation, and had rather a lingering but quite natural labour.—*Boston Medical Journal*, February 19.

DISCOVERY OF FOSSIL HUMAN REMAINS.—The French journal *L' Abbeville* contains an account of the discovery, by the well-known French writer, M. Boucher de Perthes, of some fossil remains of a human being. He found in a deposit, known as the "Moulin-Quignon-lèz-Abbeville," a flint implement, accompanied by a human jaw and tooth, all three of the same colour, and, as he believes, undoubtedly fossil. The objects were deposited 4 metres and 52 centimètres from the surface, and close to the chalk. Drawings have been made of them by an able young archæologist, M. Oswald Dimpre.

ACCIDENT TO MR. NEWTON, OF NEWCASTLE. — A deplorable accident has befallen Mr. Wm. Newton, Surgeon, of Newcastle-on-Tyne, and an active member of the Town Council. On Friday afternoon, between four and five o'clock, Mr. Newton had been riding out upon the Town Moor in company with a Mr. James Scott, when the horse upon which the latter was riding took fright, and Mr. Newton's mare sprang after it, and the jerk threw her rider. Mr. Newton fell with his back upon a stone. Assistance was speedily rendered him, and he was removed to the Herd's cottage, where he was attended by Sir John Fife, Dr. Heath, Dr. Hawthorn, and other of his Medical brethren. His condition was so precarious that he was not removed home until ten o'clock at night, when he had to be carried on a stretcher to his residence in Hood-street. Upon an examination it was found that his spine was injured. On Saturday, Mr. Newton was in a very dangerous condition, and it is feared that, if he ever recover, his extremities will be paralysed.

THE MURDERER BURTON. — This man, convicted of murdering a boy at Chatham, was hanged at Maidstone on Saturday last. The *Observer* states that for a long time he exhibited a great deal of bravado, but latterly his spirits gave way, and he expressed sorrow for his crime. He stated that in consequence of having been turned out of the public-house at Chatham he made up his mind to kill the landlady of the house, but he thought he would kill some one else first, and then try to murder the woman afterwards. He then met by accident the deceased lad, but his dying shrieks so frightened him that he gave up his further criminal intention, and wandered about till he could bear it no longer, and then gave himself up to justice. Up to the last moment he continued to express his penitence for the crime which he had committed.

MONMOUTH DISPENSARY.—At a special general meeting of the subscribers, held on Thursday, the 2nd inst., the Rev. E. F. Arney in the chair, it was proposed by the Rev. J. D. Watherston, seconded by Mr. J. Endell Powles, and unanimously resolved, that Mr. Thomas Prosser should be elected one of the Surgeons of the Institution, in the place of the late Mr. Mayou. The Secretary of the Committee was requested, on the motion of Dr. Willis, seconded by the Rev. J. L. Dighton, to write to Mrs. Mayou, expressing how warmly the subscribers sympathise with her in the loss she has sustained in the death of her lamented husband, who had been professionally connected with the Dispensary for upwards of twenty years.

ST. THOMAS'S HOSPITAL.—The *City Press* urges the establishment of convalescent branches to all large Hospitals. Convalescent establishments would receive discharged patients for a definite term; they would provide them with suitable diet, recreation, and employment, and save many a family from final wreck, and many a constitution impaired by a long period of suffering, and the frequently exhaustive effects of remedial treatment from sinking at the very moment when the claim upon the Hospital ceases and the frame is yet unequal to the activities of life. All the great endowed Hospitals have increasing incomes, while of many it may be said with truth, that there is no likelihood of any great increase in the demands upon their ordinary resources. These augmenting revenues might doubtless be well applied in attaching to these institutions homes for convalescents, where charity might render her last aid to the afflicted poor, and make the Hospitals themselves tenfold more beneficial.

ODONTOLOGICAL SOCIETY, APRIL 6, 1863.—A paper, by Mr. Spence Bate, was read on the "Treatment of Inflamed Dental Pulp," in which he advocated that for all practical purposes the conversion of the internal pulp into bone was very doubtful after once an inflammatory action had been set up, and, as a curative treatment, most unsatisfactory. The treatment that he advocated was therefore extirpation of the pulp by instrumental manipulation if possible. If not, then by the means of an escharotic. In order to do this he differed from that which Practitioners advocated, being the minute but important alteration of exchanging a minimum for a maximum dose of arsenious acid, which he introduced into the cavity on a pledget of cotton wool that had been previously dipped into creosote, and hermetically sealed it in with a temporary stopping of gutta-percha. Mr. Bate stated that if this were properly effected the operation was changed from a painful into an almost painless one, and that his experience for the last nine months has been that the fear of alveolar abscess, so much complained of, was *nil*. The paper excited considerable discussion, in which Mr. Coleman, Mr. Tomes, Mr. Keene, and others took part.

THE ETHNOLOGICAL SOCIETY.—A crowded meeting of this Society took place on Tuesday, the attraction being a paper "On the Antiquity of Man," by Mr. J. Crawfurd, the President. The author objected to the recent work of Sir Charles Lyell, in respect to certain branches of the subject on which he had bestowed special attention. He stated at once his own conviction that the presence of man on the earth had an antiquity far beyond the usual estimate, and that there was no question as to his having been the contemporary of the fossil elephants, lions, and rhinoceroses. He opposed Sir C. Lyell on the points of the unity of the human race and the Aryan theory of language, and the origin by transmutation of man from the apes. On the first point Mr. Crawfurd concludes that there is no shadow of evidence for the unity of the human races, and none for any having undergone any appreciable change of form. If 1000, or 4000, or 10,000, or 100,000 years, supposing the last to be the age of the skeletons of the Belgian race contemporary with the Mammoth, have yielded no differences from the present European type, it is, he believes, reasonable to consider that multiplying any of these sums by a million of years would yield nothing but the same cipher. On the second point, he said that Sir Charles's object, following the philosophers of Germany, would seem to be to reduce all languages to a small number of primordial ones, in the same manner as the authors of the theory of transmutation of species would reduce all the species to a few monads. If there were any truth in the Aryan theory thus advocated, it would, Mr. Crawfurd says, of necessity follow that there would be no language at all in Western Asia or Europe, ancient or modern, and that Sanskrit, Greek,

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Latin, with all the modern languages, would be reduced to the rank of mere dialects, or subdivisions of one primordial tongue—the airy and fabulous Aryan, the mere creature of Teutonic imagination. On the third point, Mr. Crawfurd confessedly took only a popular view. He considered that man was marked by a superiority of intellect, by having the power of speech and the capability of framing languages, and that although monkeys have an outward and even a structural resemblance to man beyond all other animals, it was nothing more than a mere resemblance, and that why nature had bestowed upon them this similarity was a mystery beyond our understanding. In the animated discussion which followed, Sir Charles Lyell, Sir Roderick Murchison, Professor Busk, Mr. James Wyatt, of Bedford, Dr. Collier, Professor Macdonald, and Mr. Mackie took part. It was stated by Sir Charles Lyell that, by a letter he had received this day, he had heard that M. B. de Perthes had found a human jaw in the flint-bearing beds of Abbeville; but, on the other hand, it was said that Mr. Prestwich had seen the specimen, and was not convinced of its genuineness. Nothing certain seemed to be known about this relic.

EPIDEMIOLOGICAL SOCIETY.—At the annual meeting of this Society, held on the 6th inst., the following office-bearers were elected for the ensuing year:—*President*—Benjn. Guy Babington, M.D., F.R.S. *Vice-Presidents*—His Excellency the Earl of Carlisle, K.G.; Earl of Shaftesbury, K.G.; the Right Hon. W. Cowper, M.P.; Dr. W. Acland, M.D., F.R.S., Regius Professor of Medicine in Univ. Oxford; Alex. Bryson, M.D., F.R.S., R.N., Inspector-General of Fleets and Hospitals; Edwin Chadwick, Esq., C.B.; James Copland, M.D., F.R.S.; William Farr, M.D., F.R.S.; J. Brown Gibson, M.D., C.B., Director-General Army Medical Department; R. D. Grainger, Esq., F.R.S.; Sir Charles Hastings, M.D., D.C.L.; William Jenner, M.D., Physician to the Queen, etc.; Sir John Liddell, M.D., F.R.S., C.B., Director-General Navy Medical Department; Sir J. Ranald Martin, C.B., Physician to the Council of India; Alex. Nisbett, M.D., R.N., Inspector-General of Fleets and Hospitals; John Simon, Esq., F.R.S., Medical Officer of the Privy Council; Sir Andrew Smith, M.D., K.C.B; Thomas Watson, M.D., F.R.S., President of the Royal College of Physicians. *Treasurer*—Dr. Camps. *Secretaries*—Gavin Milroy, M.D.; J. N. Radcliffe, Esq. *Foreign and Colonial Secretaries*—Belgium and France, Dr. Walter Lewis; Germany and Russia, Dr. Herman Weber and Dr. Swaine; Sweden, Norway, and Denmark, Dr. Gordon Latham, F.R.S.; Portugal and the Brazils, Dr. Bryson, R.N.; Egypt and Syria, Dr. Camps; East Indies, Dr. James Bird; West Indies and North America, Dr. Milroy. *Other Members of Council*—Dr. Aldis; F. G. Burger, Esq.; Dr. Chowne; Dr. Dickson, R.N.; Dr. Greenhow; Colonel Hough; Ernest Hart, Esq.; C. F. J. Lord, Esq.; J. F. Marson, Esq.; Dr. Morehead; Dr. Murchison; Dr. Odling; Dr. Richardson; Dr. Sanderson; Dr. Seaton; Dr. Haward.

WESTMINSTER.—PREVALENCE OF SMALL-POX AT PIMLICO.—REFUSAL OF A MOTHER TO HAVE HER CHILD BURIED.—Dr. Aldis, who is the Officer of Health appointed for St. George's, Hanover-square, applied to the police magistrate at Westminster, with respect to the interment of a child three years of age, who had died of small-pox, and was at 12, Spring-gardens, Pimlico, in a small back room, occupied by its father and mother and three other children. He stated that there are not only twenty-six souls in this six-roomed house, but it is situated in a very crowded locality, in which the small-pox is very prevalent among the humbler classes. Under these circumstances it was essential that this child should be buried at once. Efforts had been made to effect this, but in vain. Mr. Badderly, overseer of the parish, informed him that although the father of the child was anxious that the child should be removed and buried, the mother positively refused to allow it. Mr. Badderly sent Osborn, who had charge of the funerals of the parish, to take away the child. He placed it in a coffin for that purpose, when the mother took it out again, and restored it to its cradle or cot, and several Irish persons of the neighbourhood having collected, intimidated him by their threats, and he felt compelled to retire. Dr. Aldis subsequently went with Mr. Grant, and tried to persuade the mother to let the child be removed, but she refused, although her husband pressed the removal. He added that it was of great importance that the child should be immediately interred. Mr. Selfe was of opinion that the father had the power to order the removal of the child, which was, as Dr. Aldis had said, highly necessary, and he thought that there could be no impropriety in the police accompanying the parish officer to see that there was no breach of the peace upon the removal of the child. [If Dr. Aldis had but carried out the provisions of the Nuisances Removal Act for England, 1855, Section 12, and taken out a summons against the owner for having his premises in such a state as to be a nuisance and injurious to health, the difficulty might have been got over more quickly.]

NUMEROUS TAPPINGS.—Dr. Paolo relates a case in which during the period of ten years and eight months paracentesis abdominis was repeated 255 times, the amount of fluid discharged being calculated at 3,111 litres, or about 685 gallons. He cites numerous cases to prove that this is the most remarkable of its kind on record.—*Omodeis Annali*, vol. clxxxi. p. 275.

A COMMON CAUSE OF BALDNESS.—A writer in the *Boston Medical Journal* suggests that the compression, by means of the hat, of the veins which return the blood from the scalp is a common cause of baldness. He refers, in proof of this, to the much greater proportionate number of persons exhibiting baldness among the class who wear hats, compared with the lower orders who do so more rarely. Again, if we compress the frontal vein of a bald-headed person moderately with the finger, the scalp becomes speedily swollen and turgid; and, on inquiry, we shall find that he experiences an uncomfortable sense of fulness and constriction about the head whenever he wears a hat, especially in hot weather. It is true the hat does not induce baldness in all its wearers, those most liable to it being men of soft and pliable tissues, with large, superficial, and easily compressed veins. A large proportion of them have a long occipito-frontal compared with the bi-temporal diameter of the head—favouring the compression of the frontal and occipital veins.

BOOKS RECEIVED.

The Dublin Quarterly Journal of Medical Science, No. LXIX., February, 1863. Dublin: Fannin and Co.

** Contains a note of Professor Haughton's papers on Diabetes Mellitus.

The British and Foreign Medico-Chirurgical Review, No. LXII., April, 1863. London: Churchill and Sons.

** A good number, but with less than there should be of the *foreign* element.

A Clinical Report on Cancer of the Female Sexual Organs. By Thomas Hawkes Tanner, M.D., F.L.S. London: Renshaw. 1863. Pp. 60. (Reprinted from the London Medical Review.)

** A highly creditable monograph, and well worthy of being read and "bound" by any one who is collecting facts or statistics of cancer. A case is mentioned incidentally, in which a patient with chronic mammary tumour was operated on for cancer by that horribly cruel American method which was brought into vogue by Dr. Fell.

A Case in which a Disease like Measles arose from an unusual cause, with some Brief Remarks. By Henry Kennedy, A.B., M.B., etc. From the Dublin Quar. Journ. Med. Sc., February, 1863.

** A short paper, but very suggestive. The cause was the inhalation of mouldy linseed powder; and Dr. Kennedy collects together a variety of information showing the power of minute fungi to produce diseases analogous to measles.

A Report upon some of the Colonial Medicinal Contributions to the International Exhibition, 1862. By Charles Hunter, late House-Surgeon to St. George's Hospital. London: Churchill and Sons. Pp. 43.

** A short account of an investigation into the properties of foreign drugs, undertaken at the instance of Miss Burdett Coutts. The *Costeve Spicrum*, from Trinidad, seems to promise febrifuge virtues worthy of further research.

On the Convulsive Diseases of Infants. By Thomas Ballard, M.D. London: Churchill and Sons. 1863. Pp. 34.

** Dr. T. Ballard believes as vigorously as ever to his own special opinion that "fruitless suckling" is the true source of convulsions, idiocy, etc. What would happen to anyone who tried to suck the logic out of Dr. Ballard's book?

The Australian Medical Journal, No. 29, January, 1863. Melbourne: Wilson and Co.

** One writer traces much of the diarrhœa of the colony to intemperance in the use of effervescing drinks for quenching thirst.

Menton: Essai Climatologique sur ses Différentes Regiones. Par le Dr. Jacques-Francois Farina, Docteur en Médicine, etc. Paris: Baillière. 1862. Pamphlet. Pp. 72.

** A readable essay on the climate and topography of Menton, for the benefit of phthisical persons who are in search of a winter residence.

A Dictionary of Chemistry and the Allied Branches of other Sciences, founded on that of the late Dr. Ure. By Henry Watts, B.A., F.C.S., assisted by eminent contributors. Part I Aldehyde—Ammoniacal Salts. Part II Ammonium—Arsenic. To be completed in 16 parts at 5s. each. London: Longmans. 1863. Pp. 193-384.

** Some of the best chemists in the world are engaged on this Dic-

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tionary, which is indispensable to the Professional chemist. The article on Arsenic is remarkably clear and good.

Observations on some of the Causes of Infanticide. By George Greaves, M.R.C.S., Consulting Surgeon Chorlton Union Hospital, Lecturer on Midwifery, etc. Read before the Members of the Manchester Statistical Society. Manchester: Cane and Lever. 1863. Pamphlet. Pp. 26.

*** The real cause of infanticide is illicit connexion and vice generally. Whoever will control these, will save the lives of infants. As for legal enactments, or "institutions specially devoted to the reception of that class of women," etc., etc., you may as well make laws for the winds. Mr. Greaves, we are sorry to see, spoils his well-meant pamphlet by joining in the foolish hubbub against wet-nursing, and thinks that "no man has the right to diminish, by ever so little, the chances of life of another infant in order to add to those of his own." An argument which may be carried further than Mr. Greaves seems to see.

Montpellier Médical: Journal Mensuel de Médicine, Rédigé par MM. Bérard, Lordat, etc. 6me année. February, 1863. Tome X., No. 2. Montpellier: Boehm; Paris: Asselin.

*** Contains a rare combination of thoughtful, scholarly, and practical articles. The article on Pyrétologie, Dr. Girbal, deserves perusal.

The War Office List and Civil Directory for the British Army, January, 1863. First publication. Compiled from official and other documents, under permission of the Secretary of State for War, by Denham Robinson, of the War Office. Price 6s. London: Harrison. 1863.

*** A remarkably useful and well-arranged book; much to be commended for its fulness of information and facility of reference. It contains a full list of Medical Officers of the Army according to the date of their appointments; an analysis of public accounts connected with the Army, and reference to dates of all Minutes, Warrants, and Debates in Parliament concerning the War Office, the Medical, and Ordnance and Educational Departments.

Essai sur la Nature et le Traitement du Cholera. Par Adolphe Rodrigues-Barraut, D.M. Edin. Maurice. 1863.

*** An interesting and well written essay. The writer is a thorough believer in the *portability* of cholera; he denies premonitory diarrhœa, and trusts to large doses of belladonna in the treatment.

The Englishwoman's Journal, March, 1863. London: Published at the Office of the Englishwoman's Journal Company, 19, Langham-place, Regent-street, and by W. Kent and Co., Paternoster-row.

*** This number contains an article on Fever in its Social Aspects, from which its gentle readers may extract a good deal of useful information as to the prevention and management of fevers.

Twelfth Annual Report of the Wilts County Asylum, Devizes, for the Year 1862.

*** This Asylum is under the able management of Dr. Thurnam, the well known ethnologist. A case mentioned in his Report shows the extreme difficulty of diagnosing criminal insanity. A man was admitted from the Salisbury gaol under a warrant of the Secretary of State, having been "found insane before trial" on a charge of "burglary." Dr. Thurnam had a strong suspicion that he was feigning, and soon after the alleged lunatic managed to effect his escape, exhibiting in accomplishing his object great cunning and ingenuity.

Richmond District Lunatic Asylum, Dublin. Report of the Resident Medical Superintendent for the Year 1862. Dublin: Joseph Dollard. 1863.

*** Dr. Lalor, the Resident Medical Superintendent, has tried the Turkish bath in thirteen cases of melancholia or dementia. Some slight improvement followed in four of the patients. He concludes that the bath proved harmless, but not curative.

The Seventh Annual Report of the state of the United Lunatic Asylum for the County and Borough of Nottingham, and the Fifty-second of the Original Institution, formerly the General Lunatic Asylum. 1862. Nottingham: Shaw and Sons. 1863.

*** Dr. Stiff, the Superintendent, in his Report notes that the number of admissions has not been raised by the poverty resulting from the depression in the cotton manufactures. The distress which existed in Coventry and its neighbourhood in 1860 and 1861 was not accompanied by any corresponding increase in mental disorders.

The Forty-seventh Annual Report of the Manchester Eye Hospital. Manchester. 1863.

*** Mr. J. Windsor, F.L.S., after forty-three years' service in the Hospital, has retired, accepting the honorary post of Consulting Surgeon.

The Fifteenth Annual Report of the Manchester Medico-Ethical Association. Manchester: W. Hutchinson. 1863.

*** The Report states that this Association was the first attempt to organise a society which should bend itself to the practical illustration of the principles and theories contained in Dr. Percival's "Medical Ethics." During the past year the Association have appointed a sub-committee to watch the operations of the Medical Act, and have petitioned Parliament on the inefficiency of its provisions for suppressing illegal practice.

Registration of Births and Deaths in Ireland. From the British and Foreign Medico-Chirurgical Review, April, 1863.

*** An able criticism on the provisions and antecedents of Sir R. Peel's Bill. We thoroughly agree with the following:—

"A provision for the payment of a small fee for every Medical certificate, properly filled up, of the proximate cause or manner of death—adding, if possible, the causes or antecedents of the fatal illness—would have been a greater boon to the whole Profession than the registration shillings to be appropriated by the dispensary Surgeons only; and, what is of greater moment, it would have immensely increased the scientific value of the mortuary returns. The local boards might then have been left at liberty to appoint a humbler class of persons, like the majority of English registrars—*e.g.*, schoolmasters or good scriveners; and the measure would have been perfected by a scientific machinery for local supervision."

The Fourth Annual Report of the Sussex County Lunatic Asylum, Haywards Heath. 1862.

*** Dr. C. L. Robertson, the superintendent of this asylum, has lately published in the Journal of Mental Science a paper entitled "English Patients in Foreign Asylums." The cheapness of the French and Belgian Maison de Santé is an inducement which has led to the exportation of many lunatics. Although Dr. Robertson's paper seems to have been suggested by incidents in "Lady Audley's Secret" and "Buried Alive," it is highly probable that evils exist in the system of foreign lunacy treatment which might be lessened by a system of visitation of English patients, to be arranged by negotiation through the Foreign Office. Dr. Robertson, however, states no facts.

Annual Report of the Dorset County Lunatic Asylum.

*** The Medical Superintendent, Mr. J. G. Symes, in his report advocates the establishment of "Middle Class Asylums" where patients could be received at from 15s. to 21s. a week. Were these more common, it would check the practice of consigning English lunatics to the tender mercies of Belgian and French proprietors.

Heroes, Philosophers, and Courtiers of the time of Louis XVI. In Two Volumes. Hurst and Blackett. 1863.

*** We are told that these volumes are written by the author of the "Secret History of the Court of France," a work whose title-page bore the name of Dr. Challice; but, although they treat on one of the most momentous passages in history, the light sketchy and somewhat desultory style, the fertility of illustrative anecdotes, and the exuberance of details of persons and manners give countenance to the suspicion that the sagacious Physician of Southwark must be indebted to Mrs. Challice for the greater part of the composition. The subject of the work is the influence exerted by the chief actors in the American Revolution, and the Liberal party generally—Voltaire, Rousseau, Lafayette, and Franklin—in accelerating the French Revolution. The author describes "how superstition and charlatanism arose in proportion as religion and loyalty declined in France;" and shows how the same persons who disbelieved the Christian faith could trust in Cagliostro, Mesmer, and other professors of sham science.

"To the excited view of France, in 1778, natural science beyond her ken was miraculous. The wonders of electricity paved the way equally for Dr. Mesmer and for Dr. Franklin, and the abuses of the Schools of Medicine in France had paved the way for any pretension by which the ills that flesh is heir to might be mitigated.

"Men of science, and charlatans who aped them, flocked now to France, there to try their experiments and their fortunes. As chief of these celebrities, we must here give place to Dr. Anthony Mesmer. Mesmer was forty-four years old when he appeared in Paris; he was of a noble and imposing presence and demeanour. He was welcomed in Paris, just as the Royal Faculty of Medicine there was experimentalising on electricity. Mesmer professed to be possessed of a secret which should lay bare all the mechanism, and reveal all the mysteries, of nature; which should operate upon bodies animate and inanimate; which should prolong life, if not annihilate death altogether; and which should subdue the will of another to your own. He declared that this great secret was a principle unique, and, at the same time, simple and sublime; also, that it was a universal principle.

"Vienna had cast out Mesmer, because the people of that city had declared that without they saw they would not believe, and what they did see did not convince them. Paris, tottering in its ancient faith to Cross and Crown, was prepared to cling to anything; but Mesmer had grown wary by his Austrian experience. Although the people of Paris were ready to hail him as a prophet, especially when the death of Voltaire made them eager for a fresh draught of excitement, Mesmer fortified himself by gaining over one of the Faculty of Paris, Dr. Deslon by name, whom he initiated into the mysteries of Animal Magnetism, just as the Faculty was straining every nerve to change probabilities into facts. Facts came thick and fast —at all events, to the excited view of the multitude. The sick were cured; old men dreamed dreams, and young men and maidens saw visions. Dr. Mesmer looked and spoke like one inspired. Enthusiasm is contagious, and Mesmerism spread like an epidemic through all classes and conditions of men in France, just as sympathy for American liberty was spreading. The old Duc de Richelieu had, years before, placed himself under the treatment of the Count de St. Germain, by whose magic it had been said that the gallant duke had been restored to fresh strength, youth, and beauty. The Count de St. Germain had applied raw veal to the duke's body, thereby drawing from it the poisonous effects of time. But raw veal was superseded now. Even the golden elixir of life, which the Count de St. Germain was said to possess, was thrown into the shade by the marvels of Mesmerism. Count de Maurepas, the King's first minister, who, as Madame du Deffand said, 'laughed at everything,' seriously considered Mesmerism. De Maurepas was a sceptic generally, but his hope of living beyond the allotted term of man's life was the parent of his belief in the power of Mesmer to enable him to do so.

"Confident of his power over de Maurepas, Mesmer presented that cabinet minister with a memorial, written by his own hand, in which he prayed the King not only to have the truth of animal magnetism tested, and placed by proofs beyond all doubt, but to endow him with a certain château and estate, which he designated, as a reward for his discovery; threatening, moreover, that in case of the King's refusal of his demands, he would forthwith leave France and her sick to take care of themselves.

"The Cabinet of Versailles condescended to answer Mesmer's memorial by sending the Baron de Breteuil to him to offer, as a substitute for his demand, an income of 20,000 livres, and an annual douceur of 10,000 francs, that he might establish a clinical magnetism, and for training in his system three persons chosen by Government—with a further promise of increased royal favour should his discovery prove permanently beneficial. Upon receiving these proposals, Mesmer took offence, or pretended to do so, and withdrew from Paris to Spa. The people of Paris were in despair, and the will of the people of Paris had begun to rule the throne of France.

"Deslon, Mesmer's initiated disciple, continued to practise animal magnetism in Paris. Mesmer hearing of this, and jealous of Deslon his pupil, declared from Spa that Deslon was an impostor. Many of Mesmer's patients had flocked after him to Spa. One of these, a M. Bergasse, proposed that a subscription should be raised for Mesmer (*'de cent actions à cent louis chacune'*) which subscription soon accumulated such wealth to Mesmer, that in defiance, as it seemed, of Versailles, he returned in fresh glory to Paris, and opened a hall of treatment there, to which hall multitudes flocked, looking upon the prophet now in something also of the light of a martyr to royal tyranny.

"Courtiers, unable to resist the tide of excitement which seemed to have gathered fresh strength from the momentary check, also showed themselves there. Scandal proclaimed that the Hall of Treatment was

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not a school of virtue. Owing to this rumour, it was decreed by his Majesty that Dr. Franklin, one of the most scientific moralists in the kingdom, should, with other learned commissioners, examine and inquire into the truths of Mesmerism. Experiments were made at Passy, at the house of Dr. Franklin there. The commissioners (the learned Bailly was one of them), submitted to be experimented upon by Dr. Mesmer—with more or less success. Franklin, looking on, determined to oppose the power of his will to that of Mesmer. Franklin's theory was, that Mesmerism was mainly due to the imagination of the person acted upon. The failure of the experiment upon himself confirmed his theory.

"Dr. Mesmer was powerless against Dr. Franklin; and the latter quietly crushed the occult pretensions of the former, coolly declaring animal magnetism to be 'mainly due to the effect of the patient's excited imagination; to imitation in numerous assemblies; and to the singular facility with which nervous affections propagate themselves, as in the common contagion of tears or laughter.' Of course Mesmer had still his warm defenders. His cause was advocated by some amongst learned men, and the people still continued to crowd after him; but, after Franklin's decree, being no longer in hope that his former claims would be acceded to by the Court at Versailles, he soon afterwards took himself and some of his disciples off to Germany, not forgetting to carry with him the money which had been subscribed for him in France "(a).

It would be difficult to give a more just description of the patrons of Mesmerism and its allied folly, Homœopathy, than is given here by Dr. Challice—the old debauchees, the ignorant seekers after the miraculous, and the enemies of Rational Faith.

A Clinical Memoir on Certain Diseases of the Eye and Ear consequent on Inherited Syphilis. By Jonathan Hutchinson, F.R.C.S. London: John Churchill and Sons. 1863.

Introductory Address on the Study of Anthropology, delivered before the Anthropological Society of London, February 24, 1863, by James Hunt, Ph.D., F.S.A., F.R.S.L., President. London: Trübner. 1863.

Annual Report of the Bourton-on-the-Water and Cotswold Village Hospital, January, 1863.

Clinical Memoirs on Diseases of Women. By Alfred H. McClintock, M.D., F.R.C.S. Dublin: Fannin and Co.

The Fifteenth Annual Report of the Somerset County Pauper Lunatic Asylum. 1862.

Remarks on all the Human Entozoa. By T. Spencer Cobbold, M.D., F.L.S.

English Patients in Foreign Asylums. By C. L. Robertson, M.B. Cantab.

The Seventh Annual Report of the United Lunatic Asylum, Nottingham. 1863.

The Forty-seventh Annual Report of the Manchester Eye Hospital. Manchester. 1863.

The Popular Science Review, April, 1863. London: Hardwicke.

Pharmaceutical Journal for April, 1863. London: John Churchill and Sons.

Hints on the Treatment of Strangulated Hernia. By John O'Reilly, M.D.

Transactions of the Obstetrical Society of London, Vol. IV. London: Longman and Co.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

In the common intercourse of society, when a man complains of the conduct of attorneys, barristers, clergymen, or any other class, he is by no means considered to condemn every individual, but solely those who are guilty of the practices referred to. Mr. Orridge need not therefore take umbrage at observations intended solely for obscure individuals, guilty of specific bad practices.

We advise such of our readers as desire to make themselves acquainted with the full particulars of the case of *Bromwich v. Waters*, and to form their own judgment on any points in question, whether as regards the plaintiff, the defendant, or the witnesses, to order the *Chester Record* of April 11 and 18. We particularly refer to the evidence of Dr. Waters himself. Nothing can be more satisfactory to the Medical Profession than the tone maintained by the able conductors of the *Chester Chronicle*, and *Chester Courant*, and *Record*. The whole community is benefited when the public press is in firm, conscientious, and intelligent hands.

The Life of a Statesman.—To compensate for a queer temper, Nature gave to Sir James Graham a splendid faculty of working. In this power of work he and Sir Robert Peel were the admiration of each other, and of all who knew them. When Sir Philip Crampton, on one occasion, found Sir Robert Peel not looking over well, he ventured to suggest that the Premier did not allow himself sufficient time for rest and relaxation. "Do you think so?" was Peel's reply; "why, what I do in the way of work is nothing to what Graham does." Graham not only overworked himself, but, in order to preserve his mental vigour, underfed himself. His breakfast consisted of a cup of tea and a biscuit; he took no luncheon, and he did not dine till eight o'clock. All the day and much of the night he spent in the Home Office or in the House of Commons. He went little into society; when he did go, he returned home early, that he might give two or three hours to his papers before retiring to rest. He read everything relating to his department—every report in print or manuscript, together with the evidence on which it was founded. All new books and pamphlets he likewise attacked which had to do with his duties; and they might be found on his table with the margins well marked.—*Times.*

(a) *L'Encyclopédie*, tome iv., p. 95.

Dr. T. B. Peacock and Dr. Meadows write to complain that they have been treated with discourtesy because we did not publish *in extenso* their reports on the charge of plagiarism brought by Dr. Mayne against Dr. Fowler. We have no doubt that Drs. Peacock and Meadows did a public service to the Profession in investigating so injurious a charge, and that their report was most laboriously accurate, impartial, and satisfactory. Nevertheless, in the discharge of our duties, we decided that the substance of the report would not possess the slightest interest to our readers, and that it was of no use to revive the history of charges which ought never to have been made, and had better be forgotten. We believe that the whole Profession are satisfied with their decision, and want to hear no more of the matter.

Expulsion of a Foundation Scholar from the Royal Medical Benevolent College, Epsom.

We have received from Dr. Charles Taylor, of 4, Bethel-place, Camberwell, a letter stating a case of what he considers great injustice towards one of the Foundation Scholars of the Royal Medical Benevolent College, Epsom. Dr. Taylor states that—

"About two weeks before last Christmas holidays, one of the masters, the Rev. Mr. Hackman, who had been backward with his class, desired the boys to prepare what they considered an undue amount of Euclid. To this they demurred, and among them was H. W. Collicott." A *fracas* followed, which our correspondent thus describes: "The master lost his temper, and resented this, striking the boy several times, and pulling his hair (by the custom of the school none except the head master are allowed to use personal chastisement); the boy, in self-defence, raised his arms, which was construed by the master into a show of fighting. This passed off, the boy being permitted to join in the school Christmas amusements, and to continue his daily tasks, nothing more being said to him, nor was any notice sent to his mother of the alleged offence.

"On the morning of December 16, he was ordered to be ready to accompany the masters to London; and on the same day a letter was forwarded by post from the Secretary, requesting his mother to meet them in Soho-square at four p.m. At this time the boy's mother was from home on her daily task of teaching music, having a family of six children still depending upon her exertions. After the receipt of the letter, the Secretary called, and very blandly inquired if they had a bed for the boy, thus showing the case was prejudiced. In the absence of the mother, the boy's elder brother was sent for from the City. He attended, having no knowledge of the charge against his brother, and therefore unprepared to meet it.

"During the investigation, the master admitted he was so out of temper that he could not say what he did; the boy's statement was that he, with others, remonstrated, and only defended himself against the master's violent attack. When questioned by one of the Educational Committee as to the attitude he assumed, he raised his arms in one of self-defence, which the gentleman wrongly considered an attitude of fighting. The boy's brother was now requested to withdraw him, or he would be dismissed; having no authority from his mother, he declined doing so, but, upon being pressed, was ultimately compelled. The mother and friends of the boy, considering that the case was prejudiced, and that if due notice had been given it would have been fairly met, objected to this termination. One member of the Educational Committee stated the boy had been at the school long enough; but as during his scholarship he had been an invalid for upwards of one year, and on one occasion was at home for some months, his friends considered it to his interest that he should remain the time allowed by the rules of the school.

"The boy's brother-in-law, Major Edmund Campbell, called with the boy on Mr. Propert, who remarked on the want of gratitude displayed; and asked was this a return for all the trouble and expense he had incurred? the boy had been there long enough; and that if the boy had not been at the school so long, it would have been different. Subsequently, a meeting of the council was held, and also an adjourned meeting, and mutual explanations were given, Major Campbell, who appeared for the boy, not being able to refer to all the subjects in dispute, as no official account of the offence had been forwarded. The head master's statement was a recapitulation of petty schoolboy offences; he admitted the assault by Mr. Hackman, and also that he had chastised other boys on various occasions, although contrary to the established rule of the school, the junior masters not having authority to chastise the boys; that he (Dr. Thornton) had never admonished the boy on the occasion, or required him to apologise; stated vaguely that the boy had been guilty of various acts of insubordination, and that he had written separately to his mother on the subject, but that he had no private document referring to such acts of insubordination. The boy's mother denies ever having received such letter, or any other than the usual terminal reports. An extract from a recent note of Dr. Thornton's says, 'It is just possible I might be mistaken in making allusion to H. W. Collicott's discourteous manner and want of obedience.'

"I enclose these reports for nearly the last two years, which, signed by the head master, Mr. Hackman, and others, are unusually good, and certainly disprove any repeated acts of insubordination. Besides the school reports, I enclose two letters bearing testimony to the boy's character for five years,—1st. From the Rev. Mr. Richmond, under whom the boy was for three years; 2ndly. From the Rev. Mr. Pentreath, under whose care the boy was after Mr. Richmond, and has been conjointly with the Rev. Mr. Hackman for the last two years.

"The Council finally supported the decision of the Educational Committee at the expense of justice, and dismissed the boy. The boy's friends leave you and the Profession generally to judge of the justice of the case. They feel assured if the President and the Visitor of the College caused an impartial inquiry to be made and judged by impartial persons, the result would be the withdrawal of such a grave charge, and its consequent punishment against the boy, the establishment of his character, and the condemnation of the Head Master and the Rev. Mr. Hackman for, to say the least, great want of judgment in this matter.

"I am, &c.

"Charles Taylor, M.D., etc.

"4, Bethel-place, Camberwell, April 13."

We would be the last to countenance insubordination or rebellion in a public school, but we must confess that the case which has thus been brought before our notice appears to have been most harshly dealt with. We have received and returned to our correspondent Collicott's reports

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for the years 1861 and 1862, signed by the master of his form, and by the head master. We extract their written judgment of the boy's progress and conduct during the Easter term of 1862, as a specimen of the opinion they entertained of the lad, on whom for a single act of insubordination, the authorities of the school have inflicted the most serious punishment of expulsion, a punishment the effects of which may probably tell on the lad's whole future career:—"Divinity, very good; Classics, he has worked *hard* throughout the term, and has given me much satisfaction; History and English, particularly good; French, better; German, good; Arithmetic and Mathematics, slow; Drawing, fair; Writing, good; Diligence and Progress highly commendable; Conduct, highly satisfactory."—Signed, Frederick R. Pentreath, M.A., Master of the Form. Countersigned, R. Thornton, D.D., Head Master. This is a fair specimen of these reports. The lad's conduct is certified as being "very good;" "excellent;" "good;" "very good," and "highly satisfactory" during five successive terms. It is to be remembered that Colliott was a Foundation Scholar and fatherless; to such a boy the Committee should be more than ordinarily lenient. Deprived of a father's discipline at home, such a lad is apt to acquire unruly habits; he is sent to school for the very purpose of being disciplined, not only in mind but in temper; in obtaining his election as a Foundation Scholar the subscribers who supported him doubtless held that purpose. In our great public schools expulsion is never resorted to, except as a punishment of moral delinquency. Who ever heard of a boy being expelled from Eton or Westminster for an act of boyish insubordination, which under such circumstances would be probably almost involuntary? It is impossible that any school can succeed if such is the notion the authorities have formed of government and responsibility.

THE APOTHECARIES' HALL OF IRELAND.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In noticing a letter which appears in the last week's number of the *Medical Times and Gazette*, with the heading "Apothecaries' Hall," I have to state that the legal opinion therein quoted, having been given under erroneous representation, is of no value whatever.

I am, &c. C. H. LEET, M.D.

The Apothecaries' Hall of Ireland, Dublin, April 14.

MEDICAL AGENTS—CASE OF WEBB *v.* MACKENZIE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Your anxiety to protect the Medical Profession from attempts at extortion, had you to make no other remark in your last week's number, which render it desirable for me to address you. I think it only due to Mr. Orridge and Mr. Pearce (the manager of the Bowmer agency) to state that, from the time commenced, they afforded me every assistance, and did all they could to vindicate the honour of their client. Both these gentlemen, not without considerable inconvenience to themselves, attended at Kingston to give evidence as regards myself, though, as the case turned out, my counsel did not think it necessary to call them.

I am, &c. MORELL MACKENZIE, M.D. Lond.

George-street, Hanover-square, April 14.

CONSULTATION IN FORCEPS CASES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your last Number, a writer attributes to me the dictum that "the forceps should never be used except in consultation." This is opposed to my teaching and practice. The opinion expressed by me on the trial alluded to by the writer, bore simply upon a special case, that case being that a gentleman on being engaged to attend a patient who had previously undergone instrumental labours, undertook to call in the aid of one of two Practitioners, who were specified by name, in the event of instruments being required. Whether or no such a contract were actually made is not important. That was the hypothesis upon which my answer was founded; and I believe the answer of your editorial commencis on the case was to the same effect as my answer.

I am, &c.

13, Finsbury-square, April 14. ROBERT BARNES, M.D.

LATEST NEWS OF GARIBALDI'S WOUND.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—As considerable doubt certainly have lately arisen, with much talk in professional circles and amongst the public as to Garibaldi's wound, it might be useful to state that what was explained by the "underlined," as the principal fact in a previous letter in your well-informed Journal, was substantially correct: that Mr. Partridge was not permitted to examine the wound—hence the imperfectness of any opinion founded on mere opinions of others. The question is not yet by fragments of dead bone or other foreign body it is supposed still keep up irritation. Letters from Caprera in a morning paper say that Mr. Ferguson is expected, as he has already been twice, but he has not yet been healed; but Mr. Partridge tells me that a very full account of the case is now about to be published. Let us remember the advice of the other "weekly" was that amongst other things the knee was the "perfect cure" for Garibaldi! and thank the old moral of the fable of the "hare and the tortoise," viz., slow and sure wins the race. I am, &c.

April 10. PERCIVAL PARGRATE.

P.S. A Yankee Surgeon, after much observation of the London Hospitals, says:—"If a Brodie should advise excision of joints for acute synovitis, or a Ferguson propose division of the gluteus longus as a means of facilitating union in staphylorraphy," it would be noticed with great irony in the *Lancet* and other journals. But Garibaldi's case has had no attention directed to it, nor was amputation above the knee the perfect cure it was supposed.

ACCOUNT OF AN EPIDEMIC RESEMBLING CHOLERA AT DONAGHADEE, COUNTY DOWN.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—During the past three months several of the inhabitants of this town have been attacked with an epidemic resembling Asiatic cholera, more especially those who have lately come to reside here. The cause or causes of this curious complaint appearing at this time of the year do not seem to be very clear, but it is probable that it is owing to the very severe gales of wind (principally from a north-easterly direction) which have been prevalent for the last two or three months, and to which this town is exposed, as also to the sudden changes of weather from wet to dry. The patients that have been attacked by this disease complained of nothing in particular save a slight indisposition a day or so before the bowels became affected. The nature of the discharge might at first have led one astray, as it appeared to arise more from a disordered state of the stomach, with a general bilious system, than a warning that a more serious disease had seized the patient, and in a few days a slightly mucous discharge showed clearly the nature of the malady. The pulse 100 to 120 in the minute. Tongue brown; fauces parched; appetite bad; and tenesmus present. The treatment which was found to succeed best was a combination of stimulating tonics with sedatives. Such as the following gave decided benefit:—℞ Acetatis plumbi, gr. iii.; camphoræ, gr. xii.; pulveris opii, gr. vi.; pulveris capsici, gr. iii.; ad omnem pilulam, ter in die. Divide in pilulas ii. Sumat unam ter in die, with a tablespoonful of brandy in new milk thrice daily. In one severe case the patient was so much exhausted that one-made of chicken broth, etc., had to be given. After the most urgent symptoms subsided, quinine mixture, with wine and out-door exercise, were found to be of benefit. I am, &c.

H. S. PURDON.

ELECTRICITY IN DIPHTHERIAL NERVE AFFECTIONS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your Number of April 4, you give a short account of Dr. Greenhow's paper on "Diphtherial Nerve Affections," read before the Royal Medical and Chirurgical Society. In treating of such serious lesions, I felt surprised that neither Dr. Greenhow nor any gentleman taking part in the discussion mentioned electricity among the remedies suitable for such cases, having in my own practice found it of all remedial measures the most powerful and certain in the severe forms of paralysis consequent upon diphtheria. I trust you will give me a nook in your pages to supply what I consider a grave omission, as regards that part of your report bearing upon the treatment of diphtherial paralysis, whether of the nerves of sensation or motion.

I am satisfied that much time is lost in treating such cases with tonics, generous diet, quinine, steel, strychnia; these are all very well, and ought to be employed, but do not let us exclude the most direct and powerful nerve tonic we possess—the galvanic battery; moreover, its employment will not interfere with any other medical treatment that may be had recourse to. I have used it now in several apparently hopeless cases, which had resisted all kinds of treatment, and which, in my opinion, must have terminated fatally but for its successful employment.

I am, &c. A. S. MYRTLE, M.D.

Harrogate, April 14.

RENNET WINE.—"COAGULATION OF MILK" TEST.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—As the above remedy was, through the medium of your Journal, in last July brought extensively to the notice of the Profession, and now appears to be coming into pretty general use, I wish, through the same medium, to remind those who prescribed it of the simple but satisfactory method of testing its quality which I then proposed. Any one can apply the test thus:—Place a small cup containing milk in a vessel of hot water until the milk becomes blood-warm. Then add a teaspoonful of the rennet wine, and, if the preparation be genuine, the milk will in two or three minutes become as solid as blancmange. I have seen lately some spurious compounds sold under the name of rennet wine, having no coagulating property, and therefore worthless. I would, also, beg to remind those who prepare the remedy that the best strong-bodied sherry should be used. If made with a weak, inferior wine, it will not keep sound very long in the approaching warm weather. I find, also, that it is fortunately difficult in quite sufficient. The wine, then, after being tested, may be strained off, and bottled for use, and fresh wine added as long as it will bear the test. Allow me to add that I have no pecuniary interest whatever in the matter, and should be glad to hear of any improvement on my method, merely promising that any good solution of the gastric juice of the calf will solidify the milk, while acids will coagulate it into curdled whey. I consider this distinctive property of great value. I am, &c.

Lesson-street, Dublin, April 13. GEORGE ELLIS.

INTRA-CAPSULAR FRACTURE OF CERVIX FEMORIS, WITH SUPPOSED OSSIFIC UNION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A case in many respects similar to that of Mr. Mason's, will not, I trust, be unacceptable, differing in treatment, however, and in the much longer period of subsequent repose.

The patient was a poor woman, 84 years old, active, and, with the exception of rheumatism, very healthy. The approach to her bedroom was by means of a ladder. I can hardly imagine a more polished, and slippery from long use; she lost her footing one day in descending, falling on the hip, and lay on the floor insensible until her friends discovered her. When I saw her, she was in bed, lying on her back, the injured limb drawn up, and the foot everted, returning to this position after extension, which produced much pain; being fat, there was some difficulty in mounting the limb. I caused the attendant to rotate and extend the thigh, when there was unmistakable crepitus felt by the hand placed over the trochanter, and the application of the ear was corroborative of the same. Thus satisfied, and bearing in mind the general previous health of the woman, I determined to give her the chance of rest, and hoped, notwithstanding her years, that she might again get up. She resided at a very long distance from my house, so, taking the necessary materials at hand, I encased the limb in a stiff starch splint, covering the prominences with tow; she was confined to her bed fourteen weeks; had no bad sores (although they might have been expected from the incontinence of urine), and made a good recovery, going about with the aid of a stick for a twelvemonth or more, when she sank under an attack of acute pneumphigus, with subsequent bronchitis. She bore the starch bandagement well for four weeks, when she complained of severe and constant pains in the thigh, partly, as I judged, rheumatic, and partly muscular; she got up at first with the aid of a crutch, and the help of somebody's support; the crutch was made out of a discarded sweeping brush, and the weight of the limb was gradually taken off by a stout sling, extending from the napes of the neck to the foot. The shortening did not exceed one inch and a-half.

I recommend the starch splints, well surrounded with bandages brought round the trunk and opposite thigh, as a simple contrivance, and worthy the trial in such cases—more especially of my former colleagues, the ill-

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paid and overworked Union Medical officers. The result in both Mr. Mason's case and mine is encouraging. I am, &c.

HENRY USSHER, M.B., Surgeon.

Wandsworth Provident Dispensary, April 13.

ON THE PREVENTION OF LACERATION IN FORCEPS CASES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In the discussion upon Mr. I. Baker Brown's paper on Vesico-vaginal Fistula, read at the meeting of the Obstetrical Society of London on February 4, and reported in the Number of your Journal for April 4, Dr. Oldham expressed his opinion "that the more frequent employment of instruments would result in the laceration of the structures at the floor of the pelvis, particularly the laceration through the sphincter of the rectum," etc. This opinion, which is shared by a large number of Practitioners, causes a great tendency to delay in the use of the forceps, and even to their entire avoidance in cases where they are indicated.

The means which I have been in the habit of adopting in all forceps cases, for a long series of years, obviate, I think, all danger of lacerating the perineum, except to a very slight extent in primiparæ. When the forceps have been applied, and the head of the child has been brought down sufficiently low on the perineum that the forefinger of the Accoucheur introduced into the rectum can reach, for instance, in occipito-anterior presentations, beyond the frontal eminence, the instrument should be withdrawn, or, if that be not convenient, all traction should be discontinued, and the finger, still retained in the rectum, should be used after the manner of the vectis, pressure being made with it, first on the space between the frontal eminences and the root of the nose, and afterwards on the upper jaw, and perhaps, if necessary, on the chin, as these parts successively come within reach. By this means the head is made to rotate in the axis of the outlet, and, being directed forwards under the pubes, its pressure on the perineum is greatly relieved.

I have adopted the above plan not only in a large number of forceps cases, but also in hundreds of instances of ordinary labour, with the effect of greatly expediting delivery during the last and most painful stage, and of protecting the perineum to an extent which the usual method of supporting it cannot accomplish. In no case have I found any inconvenience or injury to arise from the pressure of the finger upon the recto-vaginal septum. I am, &c.

Birkenhead, April 11. CHARLES RICKETTS, M.D.

REMUNERATION OF MEDICAL MEN BY INSURANCE OFFICES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The question of Life Insurance Office fees is one that demands, in my opinion, particular attention on the part of the Profession. The remuneration is becoming gradually cut down to an absurdly low figure. One office offers the munificent sum of half-a-crown for an examination and report. Generally it may be said that a principle of graduation is adopted, the fees being proportioned to the sums insured. But it is to be observed that this principle is only made use of for the purpose of lowering the fees for the advantage of the office. It seems but equable, if the referees consent to accept these low fees on the small insurances, that the scale should be extended to the larger sums insured in a corresponding increasing ratio. I for one should be sorry to hamper those small insurances which the thrifty labouring classes are likely to effect, by exacting higher fees than can be well afforded in such cases; but I think that, if Medical men, acting in a liberal spirit, acquiesce in these diminished fees, the offices ought to meet them in a like liberal spirit. With these views I have lately drawn up a letter addressed to the Secretary of the United Kingdom Provident Institution, an office which has at least two agents in this town, and has appointed most, if not all, of the resident Practitioners as its referees. The scale of fees of this office is as follows:—Under £200, 5s.; £200, and under £500, 10s.; £500 and upwards, £1. Here the scale stops, and, however much the sum insured, the fee of the Medical examiner is never more than one pound. The letter in question represented the insufficiency of this remuneration, and conveyed a refusal to act any longer on the same terms. It also contained the following conditions, representing the terms on which the signers are willing to act, not only for the United Kingdom Provident Institution, but for all other insurance offices:—

"*Conditions.*

"1. The minimum fee for which we will make reports to those offices which adopt fixed fees, is £1 for each case.

"2. In the case of those offices which adopt a fluctuating scale of fees, commencing below £1, the minimum rate of remuneration for which we will make reports is, for each case, 5s. per cent. on the sum proposed to be insured, and we will not examine or report for any such offices unless the scale is adapted and made applicable to all insurances, whether large or small, at the same rate per cent. for the higher as for the lower amounts.

"3. We will not under any circumstances whatever make a report for a smaller fee than 5s.

"4. We require to be furnished by any society for which we may be called on to act with a plain written or printed statement of the mode and amount of remuneration usually given to its Medical referees.

"5. We will not furnish reports to offices which require the candidates for insurance to pay the fees of the Medical examiners.

"6. We will not on any consideration furnish reports to offices which do not remunerate the Medical examiners in compliance with the foregoing conditions."

The letter was signed, with one exception, by all the Medical Practitioners in this town, who pledged themselves therein to abide by the above conditions in their future dealings with all Life Insurance Societies. At the same time each one was left at liberty to demand higher terms for his services if he should choose to do so.

I cannot but think if other towns and districts would band together in the same way, that a stop would soon be put to the shameful cheapening of the services of Medical men at present practised by the insurance offices. It is by no means necessary that we should be unanimous in order to effect this object. If the highminded and honourable will combine to resist the extortion, the office of insurance referee will soon be delegated to the wolves and jackals of the Profession—those who are willing and ready at every turn to undersell their brethren. It is clear that in this case the offices would be far from having the best and most reliable advice to depend on. In short, it can hardly be doubted that they would have as their Medical advisers the winnowed chaff—the very scum and dregs of the Profession. It will, then, be for them to decide whether they have what they want. It is for us to say now whether they shall have sterling goods at the prices of a "cheap Jack" in a fair.

I am, &c. G. F. BODINGTON, F.R.C.S. Eng.

Middlesborough, Yorkshire, April 14.

COMMUNICATIONS have been received from—

CHESTER; Dr. COCKLE; Dr. SYMONDS; Mr. A. LEITH ADAMS; Mr. F. H. PURDON; Dr. C. RICKETTS; HARPOCRATES; Mr. HOLMES; Dr. STIFF; INQUIRER; Dr. RAMSBOTHAM; Mr. HAYNES WALTON; Dr. MURCHISON; Dr. RICHARDSON; Dr. T. J. COBBOLD; Mr. J. S. GAMGEE; Mr. CHARLES VASEY; Mr. J. NEWSHAM; Dr DEVENISH; Mr. W. FREEMAN; Dr. ALDIS; Mr. C. ORTON; ROYAL COLLEGE OF PHYSICIANS, LONDON; Mr. FURNEAUX JORDAN; Dr. J. SLADEN KNIGHT; Dr. HENRY USSHER; Dr. CHARLES TAYLOR; Dr. GEORGE ELLIS; THE ROYAL INSTITUTION; Mr. C. CARTER BLAKE; APOTHECARIES' HALL; Dr. C. H. LEET; Mr. J. FOSTER GRAY; Dr. A. S. MYRTLE; Mr. R. H. MEADE; Dr. MORELL MACKENZIE; Mr. J. N. TERRY; Mr. G. F. BODINGTON; Dr. RUSTOMJEE BYRAMJEE; Mr. J. A. PEARSON; Dr. GUISAN; Dr. ROBERT BARNES; Dr. T. B. PEACOCK; Dr. ALFRED MEADOWS; PHARMACEUTICAL SOCIETY; MEDICAL SOCIETY OF LONDON; Dr. W. A. SMITH; Dr. ROBERT BENNETT.

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 11, 1863.

BIRTHS.

Births of Boys, 1131; Girls, 1049; Total, 2180.
Average of 10 corresponding weeks, 1853-62, 1795·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	793	817	1610
Average of the ten years 1853-62	624·0	579·5	1203·5
Average corrected to increased population..	..	..	1324
Deaths of people above 90	..	..	10

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	9	31	5	1	2	4	4
North ..	618,210	18	6	29	7	16	9	1
Central ..	378,058	9	3	8	4	5	4	2
East	571,158	21	3	26	6	9	15	4
South ..	773,175	12	26	17	1	31	13	3
Total.. ..	2,803,989	68	69	85	19	63	45	14

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer ..	29·556 in.
Mean temperature ..	49·5
Highest point of thermometer ..	65·3
Lowest point of thermometer ..	34·8
Mean dew-point temperature ..	45·3
General direction of wind ..	S.W.
Whole amount of rain in the week ..	0·19 in.

APPOINTMENTS FOR THE WEEK.

April 18. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's 2 p.m.; Charing-cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Max Müller, "On the Science of Language."

20. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Dr. George Johnson, "On the Laryngoscope."

21. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 8 p.m. Dr. Julius Schvarcz, F.G.S., "On the Permanence of Type." C. S. Wake, Esq., F.A.S.L., "On the Relations of Man to the Lower Animals."

ROYAL INSTITUTION, 3 p.m. Professor Marshall, "On Animal Mechanics."

22. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

HUNTERIAN SOCIETY, 8 p.m. Dr. Herbert Davies, "On a Case of Aneurism of the Arteria Innominata."

23. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Prof. D. T. Ansted, F.R.S., "On the Relations of Geology with Allied Sciences."

24. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Alex. S. Herschel, Esq., "On Luminous Meteors."

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CAUTION.—For the convenience and safety of prescribing Chlorodyne, in combination with other ingredients, so as to avoid decomposition (a result known to have taken place) through the use of SECRET COMPOUNDS, Mr. TOWLE begs to call the attention of the Profession to the following component parts in his Preparation :—

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"INVENTED AND DISCOVERED IN 1844. BY RICHARD FREEMAN."

(*Extract from* Affidavit made before S. C. WARD, Esq., Chancery Record Office, Chancery-lane, London, June 16th, 1862.)

The Inventor begs to thank the Medical Profession for the liberal support he receives from them, and to assure those who have not yet tried his Chlorodyne that it is superior to any other maker's, being more certain and more lasting in its effects; and the low price which he charges for it allows the poorest sufferer to enjoy its extraordinary beneficial influence. The immense demand for it by the Profession is a convincing proof that they find it a most valuable therapeutical agent. The following are a few out of many voluntary Medical Testimonials :—

From W. VESALIUS PETTIGREW, M.D., Hon. F.R.C.S. Eng., formerly Lecturer upon Anatomy and Physiology at the St. George's School of Medicine.

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From H. J. O'DONNELL, M.R.C.S.E. and L.M., &c., &c., Albert-terrace, London-road, S.

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From F. W. HOOPER, M.D., M.R.C.S. Eng., &c., &c., Medical Officer, Christ Church District, Camberwell.

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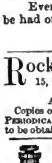

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"THE ONLY GOOD SAUCE,"

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The MEDICINAL PEPSINE, or POUDRE NUTRIMENTATIVE, in which the Pepsine, mixed with starch, is reduced to the dry state, as introduced by Dr. Corvisart, of Paris, is still prepared according to the original process, its administration in this form being sometimes found advantageous.

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Magnetic Solution of Phosphate of Iron,

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Vide "Lancet," November 29, 1861, page 534.

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Extract from THE LANCET, November 1, 1862.

"Mr. Masters' case deserves the most careful study of the Surgeon. It is the only one in which we find a complete series of artificial limbs, and the pieces exhibited are not only remarkable for the most exquisite finish, but are replete with evidences of great ingenuity and original thought. It is in every respect the most remarkable collection of artificial limbs in the Exhibition."

Extract from the MEDICAL TIMES AND GAZETTE, September 6, 1862.

"It is my intention now to allude to the contents of some of the cases of the manufacturers of artificial limbs; and, first, to those exhibited by Mr. Masters. All the appliances shown by this maker are remarkable for the ingenuity displayed in their contrivance, and for the very great superiority of their manufacture; indeed, in the latter respect, I am inclined to think that they are the best specimens of the kind in the whole Exhibition. It is difficult to imagine that the manufacture of artificial limbs can be carried much further towards perfection than it has been by Mr. Masters

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ORIGINAL LECTURES.

PROFESSOR HUXLEY'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

Lecture V.

(Being the Fourth of Six Lectures on Classification, and on the Characters of the Principal Groups of the Animal Kingdom.)

In the rapid survey of the animal kingdom with which we have been hitherto occupied, I have, for reasons which will be obvious by-and-bye, taken group by group, and considered each separately upon its own merits, without attempting to say anything at all of the characteristics of the larger divisions into which these classes may be arranged. That is a point to which I shall return on a future occasion.

But with those animals which are called "vertebrated" such a course as that which has been pursued hitherto would involve a great and unprofitable expenditure of time and much repetition, because the five classes of animals which pass under this name, the classes *Pisces*, *Amphibia*, *Reptilia*, *Aves*, and *Mammalia*, are obviously united and bound together by many common characteristics, and are well known to be so bound together. I shall commence the present lecture, therefore, by enumerating the most important of those structural peculiarities which these five groups exhibit in common.

In the animals to which our attention has hitherto been confined, the external or integumentary and parietal portion of the blastoderm never becomes developed into more than a single saccular or tubular investment, which incloses all the viscera. So that if we make a transverse section of any one of these animals endowed with a sufficiently high organisation to possess a nervous system and a heart, that section may be represented diagrammatically as in Fig. 1 (I), where

Fig. 1.

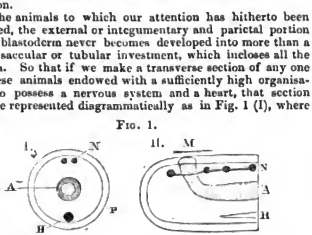

Fig. 1.—Diagrams representing generalised sections of one of the higher Invertebrates (I. II.), and of a Vertebrate (III. IV.); I. III. transverse, II. IV. longitudinal section. A, alimentary canal; H, heart; P, parietes of the body; P', parietes of the neural canal; N, nervous centres of Invertebrate; N¹, sympathetic, and N², cerebro-spinal centres of Vertebrate; th, notochord; M, mouth.

P represents the parietes or wall of the body, A the alimentary canal, H the heart, and N the nervous centres. It will be observed that the alimentary canal is in the middle, the principal centres of the nervous system upon one side of it, and the heart upon the other. In none of these animals, again, would you discover in the embryonic state any partition formed by the original external parietes of the body between the nervous centres and the alimentary canal.

But in the five vertebrate classes, the parietal portion of the blastoderm always becomes raised up upon each side of the middle line into a ridge, so that a long groove is formed between the parallel ridges; and the margins of these, eventually uniting with one another, constitute a second tube parallel with the first, by a modification of the inner walls of which the vertebrate cerebro-spinal nervous centres are developed; so that after any vertebrated animal has passed through the very earliest stages of its development, it is not a single, but a double tube, and the two tubes are separated by a partition which was primitively a part of the external parietes of the body, and which lies between the cerebro-spinal nervous centres and the alimentary canal. Hence, a transverse section of any vertebrated animal may be represented diagrammatically by Fig. 1 (III), where for the most part the letters have the same signification as in the foregoing case, but where (P') denotes the second, or cerebro-spinal tube. The visceral tube (P) contains, as in the case of the invertebrate animal, the alimentary canal, the heart, and certain nervous centres, belonging to the so-called sympathetic system, and the two latter are situated upon opposite sides of the former; so that the cerebro-spinal tube appears to be a super-addition,—a something not represented in the invertebrate series. The formation of the cerebro-spinal tube of vertebrates, in the manner which I have described to you, is a well-established fact; nor do I entertain any doubt that the cerebro-spinal centres, viz., the brain and the spinal cord of vertebrates are the result of a modification of that serous layer of the germ which is continuous elsewhere with the epidermis. Two years ago, I took some pains to verify the remarkable discoveries of Remak in relation to this point, and, so far as the chick is concerned, at any rate, his statements appeared to me to be fully borne out. But, as Von Baer long ago suggested, it is a necessary result of these facts that there can be no comparison between the cerebro-spinal nervous centres of the *Vertebrata* and the ganglionated nervous centres of the *Invertebrata*, and the homologues of the latter must be sought elsewhere, probably in the sympathetic.

Doubtless in close connection with this profound difference between the chief nervous centres of the vertebrate and the invertebrate is another remarkable structural contrast. In all the higher invertebrates, with a well-developed nervous system, the latter is perforated by the gullet, so that the mouth is situated upon the same side of the body as the principal masses of the nervous system, and that some of the ganglia of the latter lie in front of, and others behind the œsophagus. A longitudinal vertical section of such an animal therefore may be represented by Fig. 1 (II).

A similar section of a vertebrated animal shows, on the contrary, the chief centre of the nervous system imperforate by the œsophagus; the latter turning away from it and opening upon the opposite side of the body (Fig. 1, IV).

Another structure sharply distinctive of the vertebrate classes is the "chorda dorsalis" or "notochord," an organ of which no trace has yet been discovered in any of the invertebrates, though it invariably exists, in early embryonic life, at least, in every vertebrate. Before the cerebro-spinal canal is complete, in fact, the substance of the centre of its floor, beneath the primitive median line of the embryo, becomes differentiated into a rod-like cellular structure which tapers to both its extremities, and in a histological sense remains comparatively stationary while the adjacent embryonic tissues are undergoing the most rapid and varied metamorphoses.

To these great differences in their early condition between vertebrates and invertebrates many others might be added. In all *Vertebrata* that part of the wall of the body which lies at the sides of, and immediately behind the mouth, exhibits a series of thickenings parallel with one another and transverse to the axis of the body, which may be five, or more, in number, and are termed the visceral arches. The interspaces between these arches becoming thinner and thinner, arc at length perforated by corresponding clefts, which place the cavity of the pharynx in free communication with the exterior. Nothing corresponding with these arches and clefts is known in the invertebrata.

A vertebrated animal may be devoid of articulated limbs, and it never possesses more than two pair. These limbs always have an internal skeleton, to which the muscles moving the limbs are attached. Whenever an invertebrate animal possesses articulated limbs, the skeleton to which the muscles are attached is external, and is connected with an external body skeleton.

When an invertebrated animal possesses organs of mastication, these are either hard productions of the alimentary mucous membrane, or are modified limbs. In the latter case there may be many pairs of them—numerous *Crustacea*, for example, have eight pairs of limbs devoted to this function. In no vertebrated animal, on the other hand, are limbs so modified and functionally applied, the jaws being always parts of the cephalic parietes specially metamorphosed, and totally

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distinct from the limbs. All vertebrated animals, finally, possess a distinct vascular system, containing blood with suspended corpuscles of one kind, or of two, or even three, distinct kinds. In all, save one, there is a single valvular heart—the vessels of the exception, *Amphioxus*, possessing numerous contractile dilatations. All vertebrates possess a hepatic portal system, the blood of the alimentary canal never being all returned directly to the heart by the ordinary veins, but being more or less largely collected into a trunk which ramifies through and supplies the liver.

These are the most important characters by which the vertebrate classes are distinguished, as a whole, from the other classes of the animal kingdom; and you will observe that their number and importance go a long way to justify the step taken by Lamarck when he divided the animal kingdom into the two primary subdivisions of *Vertebrata* and *Invertebrata*.

If we seek now to construct definitions of the first two classes of the vertebrata, *Pisces* and *Amphibia*, we shall meet with some difficulties, arising partly from the wide variations observable in the structure of fishes, and partly from the close affinity which exists between these and *Amphibia*.

No fish exhibits any trace of that temporary appendage of the embryo of the higher vertebrates which is termed an amnion, nor can any fish be said to possess an allantois, though the urinary bladder of fishes may possibly be a rudiment of that structure. The posterior visceral clefts and arches (a) of fishes persist throughout life, and are usually more numerous than in other vertebrates, and upon, or in connexion with, them are developed villi, or lamellæ, which subserve the respiratory function.

Median fins, formed by prolongations of the integument, supported by one or other kind of skeleton, are very characteristic of fishes, and it is questionable if any fish exists altogether devoid of the system of median fin-rays and their supports, which have been termed inter-spinous bones and cartilages. On the other hand, no vertebrate animal, other than a fish, is known to possess them.

When the limbs, or pectoral and ventral fins, are developed in fish they always exhibit a more or less complete fringe of fin-rays. No amphibian is known to possess such rays in its lateral appendages, but there is some reason to believe that the extinct *Ichthyosaurus* may have been provided with them.

In most fishes the nasal sacs do not communicate directly with the cavity of the mouth, but the *Myxinoids* and *Lepidosiren* are exceptions to this rule.

The blood-corpuscles of fishes are always nucleated, and are commonly red, but by a singular exception those of *Amphioxus* (the Lancelet, which is an exception to most rules of piscine organisation,) are colourless.

Almost all fishes have the heart divided into two auricles and one ventricle; but *Amphioxus*, as I have previously stated, is devoid of any special heart, being provided instead with a number of contractile, vascular dilatations; while *Lepidosiren* possesses two auricles, and at the same time is provided with lungs.

It is useless therefore to appeal to the olfactory organ, the blood, the heart, or the respiratory organs, for characters at once universally applicable to, and diagnostic of, fishes.

The *Amphibia* (or Batrachians, Salamandroids, *Cœciliæ*, and Labyrinthodents) resemble fishes, and differ from all other vertebrates in the entire absence of the amnion, and the questionable character of the supposed rudiment of the allantois. They resemble fishes yet again, and differ from all other vertebrates in possessing branchiæ developed from the visceral arches during a longer or shorter period.

None are known to be provided with median fins supported by fin-rays, and their limbs are never fringed with fin-rays.

Furthermore, in all *Amphibia* which possess limbs, the skeleton of these limbs is divisible into parts which obviously correspond with those found in the higher vertebrates. That is to say, in the fore limbs there are cartilages or bones answering in their essential character and arrangement to the humerus, radius and ulna, carpus, metacarpus, and phalanges; and in the hind limb to the femur, tibia and fibula, tarsus, metatarsus, and phalanges of the higher vertebrates. This is the case in no fish; for, whether fishes possess parts corresponding with, *e.g.*, the humerus, radius and ulna, etc., or not, certain it is that the elements of their limb skeletons are very differently disposed from the arrangement in *Amphibia* and in higher vertebrates.

In all *Amphibia* the skull articulates with the spinal column by two condyles, and the basi-occipital remains unossified. Furthermore, the cranial peduncle or suspensorium, to which the lower jaw is articulated, gives attachment to the hyoidean apparatus.

These last are characters by which the *Amphibia* are sharply distinguished from the higher vertebrates.

There is a striking contrast between the close affinity of the fish and the amphibian and the wide separation of the *Amphibia* from the succeeding classes, all of which possess, in the embryonic state, a well-developed amnion and allantois, the latter almost always taking on, directly or indirectly, a respiratory function.

The amnion is a sac filled with fluid which envelopes and shelters the embryo during its slow assumption of the condition in which it is competent to breathe and receive food from without. The mode of its formation is shown in the accompanying figures of the early stages of development of the common fowl. Fig. 2, A, represents the first step in the differentiation of the embryo from the central portion of the blastoderm—that thin membranous cellular expansion which lies on the surface of the yelk where we see the cicatricula, or "tread:" a well-defined, though shallow, straight

Fig. 2.

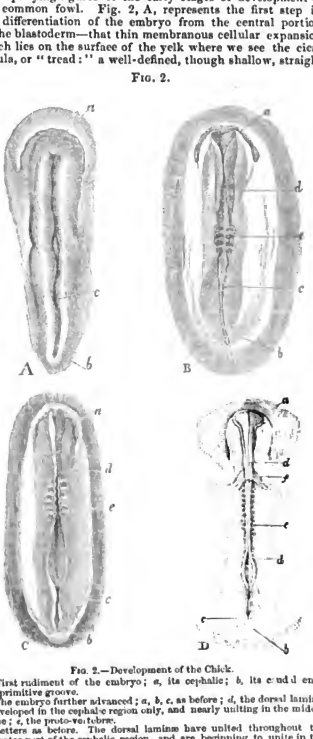

Fig. 2.—Development of the Chick.

A. First rudiment of the embryo; *a*, its cephalic; *b*, its caudal end; *c*, primitive groove.
B. The embryo further advanced; *a*, *b*, *c*, as before; *d*, the dorsal laminæ developed in the cephalic region only, and nearly uniting in the middle line; *e*, the proto-vertebræ.
C. Letters as before. The dorsal laminæ have united throughout the greater part of the cephalic region, and are beginning to unite in the anterior spinal region.
D. Embryo further advanced (second day), the dorsal laminæ having united throughout nearly their whole length. The proto-vertebræ have increased in number, and the omphalo-mesenteric veins, *f*, are visible

(a) The relation of the perforated pharynx of *Amphioxus* to the visceral arches and clefts is not known.

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FIG. 2.

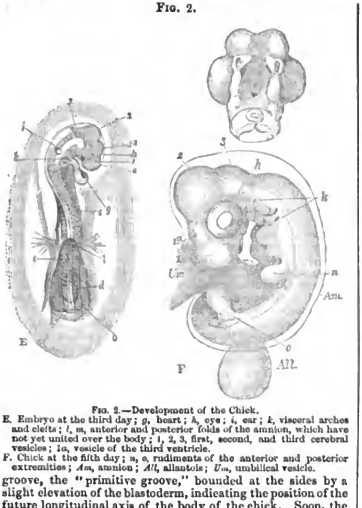

FIG. 2.—Development of the Chick.
E. Embryo at the third day; *g*, heart; *h*, eye; *i*, ear; *k*, visceral arches and clefts; *l*, *m*, anterior and posterior folds of the amnion, which have not yet united over the body; 1, 2, 3, first, second, and third cerebral vesicles; 1*a*, vesicle of the third ventricle.
F. Chick at the fifth day; *n*, *o*, rudiments of the anterior and posterior extremities; *Am*, amnion; *Al?*, allantois; *Um*, umbilical vesicle.

groove, the "primitive groove," bounded at the sides by a slight elevation of the blastoderm, indicating the position of the future longitudinal axis of the body of the chick. Soon, the lateral boundaries of this groove, in what will become the anterior region of the body, grow up into plates—the dorsal laminæ—(Fig. 2, B.); and these dorsal laminæ at length uniting inclose the future cerebro-spinal cavity. (Fig. 2, C, D) The blastoderm beyond the region at which the dorsal laminæ are developed grows downwards to form the ventral laminæ, and where the margins of these pass into the general blastoderm, the outer serous or epidermic layer rises up into a fold, which encircles the whole embryo, and the anterior and posterior parts of this fold growing more rapidly than the lateral portion, form a kind of hood for the cephalic and caudal ends of the body respectively. (Fig. 2, E.) The margins of the hoods and of their lateral continuations at length meet over the middle line of the body, and there coalesce, so that the body is covered for a while by a double sac, the inner layer of which is formed by that wall of the fold of the serous layer which is inferior, or nearest to the body of the embryo; while the outer layer is formed by that wall which is superior, or furthest from the body of the embryo. The outer layer eventually disappears as a distinct structure, while the inner remains as the amnion. From the mode of formation which has been described, it results that the amnion is a shut sac enveloping the body of the embryo, and continuous on the ventral side of the body with the integument of a region which eventually becomes the umbilicus.

The allantois is developed much later than the amnion, neither from the serous nor from the mucous (or epidermic and epithelial) layers of the germ, but from that intermediate stratum whence the bones, muscles, and vessels are evolved. It arises, as a solid mass, from the under part of the body of the embryo, behind the primitive intestinal cavity and enlarging, becomes a vesicle, which rapidly increases in size, envelopes the whole embryo, and, being abundantly supplied with arterial vessels from the aorta, serves as the great instrument of respiration during fœtal life; the porosity of the egg-shell allowing the allantoic blood to exchange its excess of carbonic acid for oxygen by osmosis.

The amnion and the external part of the allantois are thrown off at birth.

That which has just been stated respecting the development and characters of the amnion and allantois of the chick is true not only of all birds, but of all reptilia.

ORIGINAL COMMUNICATIONS.

NOTES ON LABOURS.

By CHARLES DAVID DOIG, Surgeon.

LARGE statistics on Surgical practice supply information that is not to be got from the investigation of a few cases. The data thus obtained owe their value to the care and accuracy with which the observations have been taken, as well as to numerical quantity.

Labours form a topic of Obstetric Pathology which has been in no small degree elucidated by numerical inquiry. The annual Medical report of Guy's Hospital [J. C. Steele, M.D.,] contains a special account of labours, of which the following is a summary, during the years 1854, 1856, 1861:—

"The patients are attended by the pupils of the Hospital, under the immediate superintendence of the two Obstetricians. Two of the senior pupils are in constant residence for two months at a time to keep the records and to attend to cases of urgency when the others are engaged, as well as to direct the junior pupils in cases of doubt or difficulty. The records of this department of the Hospital have always been carefully kept, and the small rate of mortality attending its operations is a sufficient criterion of its administrative success. The charity is entirely confined to the south side of the river, and embraces a densely-populated neighbourhood of considerable extent. Taking the Hospital as a centre, its radius extends two miles in every direction—from Lambeth-walk on the west to Rotherhithe on the east, while the High-street, Borough, forms the central line, and subdivides the area into two nearly equal parts."

The total number of labours that occurred during the three years was 5254, of which there were—During the year 1854, 1738; during 1856, 2011; during 1861, 1505.

				Single.	Twin.	Triplet.
Of 1755 births during 1854, there were				1721	17	
,, 2028	,,	1856	,,	1994	17	
,, 1527	,,	1861	,,	1485	18	2
5310				5200	52	2

It is shown that single births are largely preponderant, that twins happen once in about 101 deliveries, while triplets occur only so often as one in 2627 deliveries.

Births.	Alive.	M.	F.	Still-born.	M.	F.	Abortions.	Monsters
Of the 1755	1680	869	811	66	36	30	8	1
,, 2028	1932	1019	913	96	57	39	..	..
,, 1527	1476	753	723	51	27	24	..	..
5310	5088	2641	2447	213	120	93	8	1

It thus appears that while a larger number of males are born than females, the number of still-births among the males is greater than among the females, being, in the former, 1 in nearly 23; in the latter, 1 in 27; the total still-births, excluding abortions and monsters, being nearly 1 in 25.

Presentations in 5310 Births.

Normal.	Abnormal.	Breech.	Arm.	Funis.	Face.	Footling.	Transverse.	Placental.
1707	48	20	6	2	3	15	2	..
1964	64	23	10	3	6	20	..	2
1474	53	24	4	4	8	11	1	1
5145	165	67	20	9	17	46	3	3

Abnormal presentations occurred once in each 32 labours; breech being nearly 1 in 79; arm, 1 in 265; funis, 1 in 590; face, 1 in 312; footling, 1 in nearly 115; transverse, 1 in 1770 cases; placental, 1 in 1770 labours.

Of the 5254 women in labour, 19 died, and the mortality was due to the following causes:—

1. Exhaustion from hæmorrhage 3
2. Laceration of cervix uteri, and rupture of uterus (1) 2
3. Metritis 1
4. Phthisis pulmonalis 1
5. Peritonitis, and puerperal peritonitis (2) . . 3
6. Fever 1
7. Cholera 1
8. Pneumonia complicated by erysipelas . . . 1
9. Convulsions 3
10. Bright's disease 1
11. Acute rheumatism 1
12. Uræmia 1

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Of the 5254 women delivered, there were in their

1st confinement	810	11th confinement	72
2nd "	872	12th "	43
3rd "	789	13th "	23
4th "	687	14th "	13
5th "	546	15th "	5
6th "	455	16th "	3
7th "	360	18th "	1
8th "	257	19th "	1
9th "	185	20th "	1
10th "	130	22nd "	1

MARRIAGES OF CONSANGUINITY.(a)

By GILBERT W. CHILD, M.D. Oxon., M.R.C.P.,
Physician to the Radcliffe Infirmary, Oxford.

Two very opposite views have been maintained recently by different physiologists as to the effect of what is called close-breeding amongst domestic animals, or consanguineous marriage among the human race. One party, and the more popular of the two, has maintained that such unions are unnatural, contrary, that is, to some unknown law of nature; and that they entail degeneracy upon their offspring by way of natural consequence, and independently of the ordinary laws of inheritance. Amongst the supporters of this view may be enumerated Dr. Bemiss, of Louisville, Dr. Devay, of Lyons, and M. Boudin; and, if I may judge by the conclusion of his recent work on the "Fertilisation of Orchids," Mr. Darwin, among English physiologists, inclines to the same view. Others, again, believe that no such law of nature exists, and that, on the other hand, where ill effects are observed to follow upon the unions in question, they do so by ordinary inheritance only. This is, if I mistake not, the view of Von Baer, of Dr. Elliotson, of Dr. Davy, and several recent French writers to whom I shall presently have to refer.

My object in the present paper will be to examine shortly the facts and arguments which form the evidence for each view, to adduce some few fresh observations which I have been able to collect, and finally endeavour to show to which side the balance of evidence inclines. The case will, I hope, prove to be somewhat clearer than it is supposed to be.

In April, 1861, I published a paper in the *Medico-Chirurgical Review*, the conclusions of which were strongly in favour of the latter of these two opinions. Very shortly after this there appeared (in the *Comptes-Rendus* for June 16) a summary of some investigations of M. Boudin, which has been since very widely circulated in this country, wherein he shows (a) that the number of deaf-mutes born of marriages between blood relations in France is four times what it ought to be, as compared with the proportion which such marriages bear to the total number of marriages, and (b) further states that the phenomenon cannot be one of ordinary inheritance, inasmuch as deaf and dumb parents, unless related in blood, are not found to have deaf and dumb children. Since the appearance of this memoir a great deal of interest has been manifested in the subject both here and in France.

This question has been investigated to a considerable extent by both the methods which are applicable to it, viz., that of observation and statistical report in the case of the human race, and that of direct and most extensive experiment in the case of the lower animals. I expect to be able to show (1) that of these two methods the former is that upon which the first of the two views I have mentioned is almost exclusively based, but that it is liable to several sources of error, and that even the evidence which it has afforded is conflicting. (2) That the latter method alone is capable of affording results either scientific or satisfactory, and that these results are entirely inconsistent with the view to which I refer.

To begin with the former.

1. The principal charges brought against the marriages of blood-relations are that they are apt to produce sterility, idiocy, insanity, deaf-mutism, deformity, and scrofula. There is to my mind an *à priori* difficulty in believing that one and the same cause can produce results so diverse that several of them seem to have no relation to one another; but of this I will not speak further at present. It will be unnecessary to compare the various sets of statistics which I have met with at any great length, and to do so would prolong this communication to an inconvenient extent, but I will refer such of my readers as are interested in the subject, and wish to check my statements, to sets of statistics by Dr. Bemiss and Dr. Howe in the *Journal of Psychological Medicine* for April, 1857, by Dr. Devay, in his work on "Hygiène des Familles," second edition, and to M. Boudin's memoir above referred to. They will find, as I have done, that in each of the four some one form of disease or defect greatly predominates, and in each case a totally different form, but all—as we are asked to believe—the result of the same cause. Thus, to compare them as nearly as I can in four particulars: Dr. Bemiss gives amongst the offspring of 34 marriages, 23 cases of scrofula, 4 idiots, 2 deformed, and none deaf and dumb. Dr. Howe, in the offspring of 17 marriages, 12 scrofulous, 1 deaf, none deformed, and 44 idiots. Dr. Devay, among the produce of 121 marriages, finds 1 deaf-mute, no idiots, and 27 deformed persons, he says nothing of scrofula, but supports from other sources exactly the view on the subject of deaf-mutism subsequently confirmed by M. Boudin. Again, sterility is a marked feature of the marriages enumerated by Dr. Devay, while those collected by Drs. Bemiss and Howe considerably exceed the average in fertility. The impression produced on my mind by statistical results such as these, is that by a similar process it would be equally easy to support the proposition that the intermarriages of persons having blue eyes or black hair was contrary to the laws of nature, and accordingly I was not surprised at meeting with a paper in the *Lancet* for July 5, 1862, by Mr. Anderson Smith, wherein he shows that results considerably worse than those above given have followed in forty cases of intermarriage between natives of different European countries, the statistics of which cases he has collected.

The application of the statistical method to matters of this kind is, in fact, attended with very great difficulties. There are, no doubt, a vast number of points connected with pathology and Medicine, as with most other subjects, to the elucidation of which statistics have already contributed enormously, and will contribute still more. No better instance of this fact could be given than is to be found in such investigations as those of Louis into the frequency of the deposit of tubercle in one lung rather than the other, or in one portion of the lung in preference to other parts; or again in the lung as compared with other organs of the body. In such matters, provided only a sufficient number of cases be examined, and reasonable care be exercised in the examination, statistics are no doubt a most valuable source of knowledge. Even in some cases where human agency is concerned, the same may be true, as in Mr. Buckle's celebrated instance of the regularity existing in the number of letters put into the post every year without addresses; but I cannot believe that the rule holds good where human interests and prejudices are largely concerned, unless it can be shown that these are equally involved on both sides of the account. Thus, to take the instance before us, M. Boudin states expressly that in very few cases were the parents of the deaf-mutes themselves deaf and dumb. Now, if his inquiries extended no further than the parents, he is certainly not justified in the conclusion which he draws that therefore the phenomenon is not hereditary. In so arguing he entirely leaves out of the account the phenomena of atavism, as it is called, and other well-known but apparently irregular vagaries of admittedly hereditary diseases. If, on the other hand, M. Boudin did carry his investigations beyond the immediate parents, I have no hesitation in saying from my own experience, corroborated, as I doubt not it will be by that of any one who has ever tried to extract a family history from a patient, that it must have been simply impossible, in the great majority of the cases, to obtain anything like reliable information. Poor persons are, as a rule, too ignorant, or unintelligent, or suspicious. Well-to-do persons commonly guard a family secret with the most irritable jealousy, and are, moreover, themselves not seldom kept in ignorance by their parents.

The details of M. Boudin's statistics have not yet been published, or at least had not been a few weeks ago, and therefore are not open to criticism; but even if they are exposed to no other source of fallacy, the two which I have now mentioned would go far to invalidate his conclusions. It is worthy of remark, moreover, that, taking M. Boudin's report as it stands, in only one case of deaf-mutism out of every four was consanguinity on the part of the parents found to have existed. He is therefore, I think, hardly justified in assigning one out of a large and complicated group of antecedents

(a) Read before the British Association for the Advancement of Science at Cambridge, October, 1862.

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as the cause of a phenomenon which is itself absent in the great majority of cases in which the phenomenon in question occurs.

While upon this part of the subject, I may further point out that the supporters of the opinion which I am now combating do not seem to have allowed their fair weight to some other of the known facts of ordinary inheritance, such as the comparative rapidity and certainty with which a particular point of external conformation is perpetuated by close-breeding, as in several well-known breeds of sheep; and the curious fact that even acquired defects are found to be inherited. Perhaps the most familiar instances of this are the well-known cases in which a mare with curbs, and a stallion with blindness acquired late in life, have been found to produce offspring presenting the same defects almost, if not quite, congenitally. The following short paragraph, which I quote from Mr. Youatt's well-known work on the horse, is almost conclusive on these points. As regards that animal he says, p. 317: —"There is scarcely a disease by which either of the parents is affected that the foal does not often inherit, or at least occasionally show a predisposition to it. Even the consequences of ill-usage or hard-work will descend to the progeny. There has been proof upon proof that blindness, roaring, thick wind, broken wind, spavins, curbs, ringbones, and founder have been bequeathed to their offspring both by the sire and the dam. It should likewise be recollected that although these blemishes may not appear in the immediate progeny, they frequently do in the next, or even (some) more distant generation."

If these remarks can at all be extended to the human race, they will at once show how much more is to be attributed to ordinary inheritance than we are apt to suppose, and at the same time demonstrate the utter impossibility of getting at such truths by collecting family histories.

It is to be remembered, too, that the diseases laid to the account of consanguinity in the parents are for the most part such as are not thoroughly understood—that is to say, we are not acquainted with all their antecedents; and it appears to me not impossible that just as chorea and rheumatism have been found to occur so often in different members of the same family that it is impossible to regard their relation as one of mere coincidence, and yet it has been but recently remarked so; upon further investigation a similar relation may be found to exist between deaf-mutism in the child and some totally dissimilar malady in the parent. If all these considerations be allowed their fair value, I think they will go far to explain the authentic cases in which ill effects have been found to follow from the marriage of blood-relations, without driving us to the extreme measure of extemporising a new law of nature which such unions infringe.

II. I pass on to consider the evidence derived from experiments upon the breeding of animals, and here again I will not occupy the time of the section by entering into detail which may be found in abundance elsewhere, but will simply say that the records of the Herd-book and the Stud-book prove incontestably that many pure-bred the very finest horses and horned cattle to be found in England during the last hundred years have been bred with a degree of closeness incomparably greater than is possible in the human race. In proof of this, I need only refer to the facts mentioned in a memoir by M. Sanson, to be found in the *Comptes-Rendus* of July 21, to those given in my paper already referred to, and to another very valuable memoir, by M. Beaudouin, in the *Comptes-Rendus* of August 5. In this paper, M. Beaudouin gives an account of a flock of Merino sheep which he has himself bred in-and-in for two-and-twenty years with perfectly satisfactory results, neither the health nor the fertility of the animals having suffered in the slightest degree. To give one more instance, in one of the cases which I have quoted from the Herd-book the same animal is shown to have served as the sire of four successive generations.

In point of fact, the evidence derived from the breeding of animals against the hypothesis that mere consanguinity in the parents has an injurious effect upon their offspring, is so unambiguous and so much more conclusive than is that obtained from observations upon mankind in its favour, that unless we are prepared to believe that the physiology of reproduction in the human race proceeds upon laws altogether different from those by which that function is governed throughout the entire animal and vegetable kingdoms, it might be fairly supposed to settle the question against that hypothesis. At the same time, certain objections have been alleged against the admissibility of such evidence which it is necessary to meet before any case can be rested upon it. Thus:—

(1.) The following suggestion has recently been made with special reference to M. Boudin's investigations, viz., that there is a kind of special provision of Providence to prevent close breeding in the human race, and hence deaf-mutism is its appropriate punishment, inasmuch as man is the speaking animal. I shall presently have to relate a case affecting one kind of domestic animal, viz., a cat, which will bear upon this point. Meanwhile, two answers may be made, viz., (a) that deaf dumbness means, as a rule, congenital deafness, and such a defect is almost as serious where it exists in the lower animals as in man. (b) That, as I have shown elsewhere, the Mosaic law gave strong, though indirect inducements to the marriage of blood relations, and that such marriages did prevail of old among the Jews is easily proved by passages in their history. The whole story of the book of Tobit turns upon a case of the kind.

(2.) It has been contended both by Dr. Devay, and more recently by M Gourdon (*Comptes-Rendus*, August 11) that our carefully bred domestic animals are artificially modified for particular purposes by man, and are therefore physiologically monstrosities, and not to be set up as standards of perfection in their several races. This objection places the matter upon an entirely false issue. To be valid it should show, not that the form of the animal's body is modified, which everyone knew before, but that the healthy discharge of its animal functions is injuriously interfered with. This, as far as I know, has not yet been proved, and even if it were, it would remain a question whether the degeneracy so shown to exist was the result of close breeding itself, or of an artificial mode of existence continued through several generations. On the other hand, in the case of horses at any rate, we have direct proof that the reverse is the case; for it is notorious that no horse bears fatigue so well or recovers from its effects so soon as a thoroughbred one; yet I may state, on the authority of the well-known writer on sporting subjects—Stonehenge—that almost all our blood horses are bred in and-in.—("The Horse in the Stable and Field," p. 139.)

(3.) A third objection is of a different kind, and is adduced by M. Beaudouin in the paper previously referred to. It is this, viz., that the same kind of careful selection, which is always employed by successful breeders of animals, is not, and cannot be so used in the case of human beings; and hence, as he believes, the difference in the results which follow in the two cases. There is, no doubt, much weight in this objection, but it is obvious that it proceeds upon the hypothesis that the ordinary laws of inheritance govern close-bred animals equally with others,—the precise view which I am supporting, and which Dr. Devay and M. Boudin expressly repudiate. Moreover, it is obvious to remark that selection is just as much and just as little applicable to consanguineous marriages among mankind as to any marriages at all.

I will now proceed to illustrate the foregoing remarks by relating a few observations most kindly sent me by Dr. Davy, and made by himself, which tell strongly in favour of the view I have been supporting, and also the case of a breed of cats which has come under my own notice, and is somewhat remarkable in itself; and will then shortly state the conclusions to which my examination of this question has led me.

"There are some facts," says Dr. Davy, "which lead me to think, that if animals coming together to breed are quite healthy, free from any taint of disease, that their offspring will be healthy.

"In small isolated societies there must be much breeding in-and-in, unless special precautions be taken to prevent it. I shall mention a few instances in which, I believe, no precautions of the kind have been attended to.

Some forty years ago I visited the secluded little dale, Glenfinlass, in the highlands of Perthshire, and I there learned that, with one exception, there was no instance in the memory of man of a Stuart marrying out of the glen. The few families, I believe, were healthy. At the house we were entertained, our hostess was remarkable for beauty, and was above the average size of women. They lead a pastoral life, milk forming a good part of their diet. In the Scottish islands and isles, in many of which the inhabitants are few in number, and having little intercourse with the mainland, there the same kind of marriage must often occur. Yet the people are supposed to be, and I believe are, nowise degenerate. We are told on good authority that pulmonary consumption is comparatively rare amongst them. In Cornwall there are small fishing villages so situated, so in a manner isolated, that marrying of blood relations must be common, such villages

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as Mousehole and Newlyn, in the Mount's Bay; yet these people bear no marks of degeneracy, but the contrary; they are remarkable for their good looks, and I believe good health, to which the active habits of both sexes, and their fish diet, may greatly conduce, and their living so much in the open air.

"In the Mediterranean there are many similar examples of small isolated societies, amongst whom there appears to be the enjoyment of more than ordinary health and freedom from hereditary disease. They occur in the Lipari Islands, in the islands or rather islets belonging to the Ionian Islands, such as Fanno, Marquisi, Vido, Cerigo. As well as I could judge when I visited these spots, their inhabitants were peculiarly favoured as to health and as to good constitutions.

"The population of Stromboli, one of the largest of the Lipari, amounted when I was there some thirty-five years ago to about 1500. There was not a Medical man or a lawyer in the island. Agriculture was the main occupation of the inhabitants—the culture of the vine. No man there was idle, and all seemed in easy circumstances favourable to health. One of the most considerable of them told me that the only precaution he took to keep himself in health was to change his shirt after working in his vineyard.

"In the island of Fanno, towards the entrance of the Adriatic, the inhabitants lead much the same kind of life, and are I believe equally healthy and as personable in their appearance. As to size, theirs is not less than the average; they are singularly contrasted with their cattle, a small breed, smaller by far than that of the neighbouring Corfu, or of Italy, or the Calabrian coast, yet of delicate make and very active. This peculiarity as to size may be owing—such was my conjecture on the spot—to a scanty pasturage and purity of blood, and, in relation to health and form, goodness of climate, and wholesomeness of food, though scanty. I have given an account, in the *Proceedings of the Zoological Society*, of a goat that belonged to me while in the West Indies that had four fine kids, the genitor of which was the offspring of the mother, and about four months old. As soon as the mother required the male, the kid was ready for the generative act. She had before given birth to two kids, one of which was the male in question.

"It is, as we all know, related in Genesis that the offspring of Lot's daughters—boys—became the progenitors of important tribes. The principle, if I may use the expression, that seems to me most in accordance with facts is that, if there be vigour and health, and no taint of blood, the offspring of parents, however nearly allied, neednot be degenerate."

The observations upon the cats to which I have alluded above are shortly as follows:—A white cat in my possession had a litter of kittens in 1860, the sire of which I had every reason to believe was a large black cat, a frequent visitor to my garden. One of the kittens which I kept upon growing up turned out to have two odd eyes—one of which was blue—and to be stone-deaf. This fact attracted my attention, because it occurred just at the time that I had been reading Mr. Darwin's work on the "Origin of Species," wherein he mentions, as a curious instance of correlation of growth, the invariable coincidence in cats of blue eyes and deafness. I set myself, therefore, to investigate the history of this cat which I had received as a kitten from a college stable. I found, on inquiry, that her immediate parent was also white, and had been brought from another part of the town, nearly half a-mile distant. The gentleman from whose house this ancestress of my white kitten was procured being an acquaintance, I went to him, and found that he had possessed for some years this family of white cats, and that he had noticed every now and then an individual with one blue eye, but never any with both blue. None of these had been known to be deaf with the exception of one which he had given as a kitten to a relation at a distance. The lady to whom this belonged supposed it to have become deaf by accident, but this I think hardly likely. The gentleman to whom I refer has at this time a white cat with one blue eye, which is certainly not deaf. There are two points in this case which are worthy of remark as bearing on my present subject; viz.—1. The reappearance of a marked peculiarity after two generations, and almost certainly two distinct crosses. 2. That that peculiarity should be one so intimately connected with congenital deafness, by which also it was accompanied in the case which came under my own observation.

Finally, the following conclusions seem to me to be warranted by the facts and arguments which I have now laid before the Association:—

1. That statistical evidence from observation on mankind is especially inapplicable to questions of this kind.

2. That the evidence in favour of the theory that close-breeding is contrary to a law of nature is in the highest degree unsatisfactory.

3. That there is positive evidence from the results of recorded observations upon animals that no such law affects them, *i.e.*, that where other causes of degeneracy are absent any degree of close-breeding may exist without producing ill effects, and therefore

4. Unless we are prepared to believe in two distinct physiologies, the same must be true of the human race.

5. It will remain an interesting question how far similar reasoning will be found to affect the views put forward by Darwin in his recent work on the "Fertilisation of Orchids," and in reference to this I will venture to call the attention of all who are interested in the subject to the recent experiments of Mr. Hallet upon the cultivation of wheat.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

GUY'S HOSPITAL.

SUCCESSFUL CASE OF OVARIOTOMY.

(Under the care of Dr. OLDHAM and Mr. THOMAS BRYANT.)

[From notes by Mr. G. P. WILKS, M.A., Clinical Clerk.]

ANN G., aged 25, a single woman, came up from Swansea, and was admitted into Guy's Hospital in February, 1863, with an ovarian tumour apparently growing from the left side. She menstruated for the first time at the age of 19, but the catamenia were always irregular. Fifteen months previous to her admission, they stopped altogether, and did not reappear for one year; since that date they have been scanty and irregular.

The tumour was first observed four years ago; it then appeared in her left side, and caused her some pain; it gradually grew till November last, when she was admitted into the Swansea Infirmary, and was there tapped, ten quarts of fluid being drawn off. She was much relieved for a time, but the cyst gradually refilled, and when admitted into Guy's, scarcely two months after the operation, the tumour was as large as it was before.

When admitted, she was apparently in good health. She was of a fresh colour, and had all the external appearances of a healthy woman. It appeared, however, that she had been the subject of several bronchitic attacks, one or two having been of a severe nature. The abdomen was large and flaccid, measuring thirty-six inches in circumference. Fluctuation was very distinct, and the tumour apparently was composed of only one cyst. The vagina and uterus appeared healthy, and were quite free from abnormal pelvic attachments, and the case promised well for an operation.

On March 20, Mr. Bryant performed ovariotomy in the presence of Drs. Oldham and Hicks, and Mr. Cooper Foster, who kindly assisted. The operation was undertaken in a private room, and only such students were admitted as were required to assist, or who were acting as dressers and clerks to the case. The operation was a very simple one. An incision about five inches long having been made and the cyst tapped, the tumour readily passed from the abdominal cavity; a piece of omentum, which was firmly adherent, was ligatured in two places and divided, the clamp fixing the narrow pedicle. The edges of the wound were then brought together with wire sutures, and water dressing applied to the wound.

Some slight vomiting followed the operation, which was attributed to the chloroform, and in the evening she began to cough. Tea and milk were ordered for her, with a little effervescing mixture.

March 21, 9 a.m.—Had passed a quiet night, although she had not slept much. The abdomen was flaccid, and quite free from pain; tongue and skin moist; pulse 100; cough still troublesome, evidently bronchitic. Small doses of morphia were given every six hours.

23rd.—Abdomen as comfortable as it could be. Cough still very bad, and expectoration profuse; respiration

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wheezing, and pulse quick—120; skin moist. Has passed a little flatus without difficulty. Urine quite clear. Beef-tea ordered and brandy.

24th.—Cough improved, and expectoration less; pulse stronger, 105; tongue moist; perspiration profuse; abdomen quite comfortable, and to all appearances the wound has healed. Wine ℥vj. ordered, and plenty of nourishment. Continue medicine.

25th.—Going on well; removed the superficial sutures, wound having evidently healed.

27th.—Deep sutures removed.

28th.—Cough improving, but still troublesome.

29th.—A careful examination of the chest was made, when old bronchial mischief was detected.

From this time there is nothing of importance to relate, the bronchitic mischief alone causing anxiety, and although she is not quite well, she is gradually improving; but as far as the operation is concerned, she may be looked upon as convalescent.

There is one point of interest in this case which demands notice, and that was shown by the interesting fact that the rapid repair in the abdominal wound was not for one moment interrupted although a bronchitic attack of a severe nature was present from the first; indeed, the wound may be said to have healed by primary union.

UNIVERSITY COLLEGE HOSPITAL.

MALIGNANT TUMOUR IN THE NECK—STRICTURE OF ŒSOPHAGUS—APHONIA—PERFORATION OF THE ŒSOPHAGEAL (?) ARTERY—AND DEATH FROM HÆMORRHAGE.

(Under the care of Dr. HARLEY.)

History.—David B., aged 40, a lamp-maker, came under Dr. Harley's care at University College Hospital in the middle of February. He stated that, notwithstanding having lived a very irregular life, he had enjoyed good health until the last five months, when he began to suffer from difficulty in swallowing, loss of voice, cough, and pain in the lower part of the neck, extending down the right arm. Latterly, all these symptoms had become aggravated, and in addition they had, during the last month, been associated with spitting of blood.

On examining the patient's neck, there was nothing remarkable to be observed externally. The thyroid was well developed, but not abnormally so. The larynx was mobile, and no hardness or unusual swelling was anywhere apparent. On pressing the thyroid backwards a slight fulness was perceptible, and the patient complained of pain in the region of the brachial plexus, the pain extending up the neck and down the arm. On examining the chest by means of percussion, no dulness was found except over a small space in the right sterno-clavicular region. At this point a peculiar tracheal murmur, like what one could imagine would arise from a constriction of the trachea, or from air passing suddenly from a smaller into a larger space, was also distinguishable. The respirations were 19 in the minute. Over the dull area, the heart sounds, as well as the vocal resonance, were very distinct. In the cardiac region, on the other hand, the heart sounds were more than usually feeble, though otherwise normal. Pulse 84, and equal at both wrists. The pupils of both eyes were of similar diameter, thereby showing there was no marked pressure on the cervical sympathetic, although it was evident from the loss of voice that the recurrent laryngeal nerves were affected. As the man complained of great difficulty in swallowing, a bougie of half an inch in diameter was passed down the œsophagus; it met with an insurmountable obstruction, however, at a distance of six inches from the teeth; whereas a bougie of a-quarter of an inch in diameter was readily passed into the stomach. There was no enlargement or tenderness of any of the cervical or axillary glands. The symptoms above described gradually got worse, especially the spitting of blood, which soon became almost constant. Sometimes pure blood was brought up, on which occasions it was generally fluid, and of a florid colour. The usual thing, however, was for the blood to be mixed with the sputa. The patient stated that he occasionally brought up, without any exertion, portions of coagulated blood, especially after lying on the left side. He slept more easily on the right side.

Although it was perfectly evident that the stricture of the œsophagus, pressure on the trachea, on the brachial plexus, and on the recurrent laryngeal nerves, were all due to the same cause, namely, the presence of a tumour, the true nature of the growth remained a mystery. The first idea was that it might be cancerous, but against that supposition was the absence of any cancerous cachexia, enlargement of lymphatic glands, and emaciation, together with the patient's statement that all his symptoms supervened suddenly. The next idea was that it might be aneurismal, but here again the signs were almost all negative, so the question remained unanswered till the post-mortem solved the difficulty.

The patient was one night suddenly seized with a fit of coughing, and almost immediately expired. After death it was ascertained from his friends that the history he gave of his illness was not perfectly correct, for instead of his having become suddenly ill about five months previous to his coming to the Hospital, it appeared that he had been ailing for upwards of a year, and that his symptoms had supervened gradually. This information of course strengthened the former and weakened the latter theory regarding the nature of the case.

On examining the neck, a tumour, the size of a duck's egg, was found lying to the right, and partially between the trachea and œsophagus, immediately behind, and a little to the right of the upper margin of the sternum. The section of the tumour was of a pale, somewhat dirty white colour, and with the microscope it was found to be composed in greater part of encephaloid cancer in an early stage of development. Some portions of the tumour were of a scirrhus hardness, and contained numerous caudate scirrhus cells. There was an ulcerated opening into the œsophagus, and perforation of one of the œsophageal (?) arteries had taken place, from which there had been great and fatal hæmorrhage. The stomach was found half full of coagulated blood. The tumour seemed to have originated in one of the lower cervical glands.

ST. BARTHOLOMEW'S HOSPITAL.

ENDOCARDITIS—HEMIPLEGIA—GANGRENE OF THE TOES—AMPUTATION—RECURRENCE OF ULCERATION IN THE STUMP—A SECOND AND THIRD OPERATION.

(Under the care of Mr. LAWRENCE.)

About two months ago, Mr. Lawrence amputated below the leg on account of intractable ulceration of an old stump. Some years ago, the patient, who was of robust build, was admitted under the care of Dr. Hue for pericarditis and endocarditis. Mortification of the toes of the right foot setting in, he was transferred to the care of Mr. Lawrence. He was then apparently not far from death, his pulse was not perceptible, and it appeared, Mr. Lawrence said, as if the supply of blood to the whole body was being cut off. It seemed, he said, as if the patient had been sent to his ward to die. Indeed, his Colleague a few days after called at the ward to inquire on what day he died, but found him not only alive, but better. Being a man of good constitution, he gradually recovered, but he lost the toes of the right foot, and the surface granulated so tediously, and was so unhealthy, that Mr. Coote, having charge of the case in the summer session, removed the anterior part of the foot. The man got well, but, on using the foot, the ulceration recurred in the sole, so that Mr. Coote amputated above the ankle. So long as the man kept quiet, the stump remained healthy, but on trying to use it, it again ulcerated. The patient was most anxious that another operation should be done. Mr. Lawrence therefore amputated below the knee.

The following note of this case was made at the time when the patient was under Dr. Hue's care; unfortunately it is very imperfect:—

A man, aged 22, was admitted under the care of Dr. Hue March 10, 1863. He was hemiplegic on the left side, and there was a blowing, systolic murmur to be heard over the base of the heart. He said that six months ago he had had "inflammation of the lungs," and that this affection lasted six weeks. A few days before admission he became hemiplegic. The attack was attended by loss of consciousness for a moment only.

In a few weeks he regained power in the leg, but did not recover it in the arm.

Three months later, gangrene of the great toe came on, which soon extended to the other toes.

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The patient had no doubt after endocarditis, embolism of one of the cerebral arteries, probably, as is usually the case, of the middle cerebral. As this artery supplies the anterior and middle lobes of the brain and the corpus striatum, the sudden cutting off of the supply of blood to these parts produces paralysis on the opposite side of the body. The principle is the same when hemiplegia follows surgical ligature of the carotid. In the same way the gangrene of the toes, and the subsequent intractable ulcerations of the stump after removal of the foot, were due, no doubt, to similar occlusion of some large artery of the left leg. Ulceration will occur in paralysed limbs where there is no occlusion of their arteries, as for instance in infantile paralysis; but it does not often occur in the ordinary motor paralysis of hemiplegia in adults. This patient then had ulceration of the leg, not because it was paralysed, but because its supply of blood was cut off by obstruction of the arteries of the limb. In fact, the gangrene came on three months after the patient had recovered the use of the leg.

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Medical Times and Gazette.

SATURDAY, APRIL 25.

VACCINATION, AND SOMETHING MORE.

There is a story told of a Dutch colony, planted in days gone by on the other side of the Atlantic, which suffered grievously from the attacks of mosquitoes. The colonists were at their wits' end for means of defence. Some plastered themselves with salves, some used veils and other kind of armour, whilst, as it was observed that those who were much bitten became after a time exempt from the attacks of the little pests, some persons gravely advised newcomers to get bitten as much as possible, so as to purchase future exemption at the risk of a little immediate suffering. At last, however, a new governor came, and drained the swamps, filled up ditches, and cultivated the ground properly, and the mosquitoes were seen no more. This story may illustrate the double set of measures necessary for getting rid of small-pox.

In the first place, there is the protective virtue of vaccination. Is this used to the fullest extent, and in the best manner available? Certainly not. Laws for enforcing it are systematically evaded. The machinery of registration devised for ascertaining the amount of protection enjoyed by the population is utterly neglected. The functionaries employed are miserably paid by the public. Private patients are equally stingy and improvident. The Practitioner, instead of taking the lymph direct from a healthy arm, and transferring it at once to the patient, saves a little trouble and expense by charging "points," or "tubes," or "glasses," and so runs the risk of absolute failure, or of decomposition of the lymph, and irritable vesicles. All the thousand "charges" of lymph which certain institutions boast of sending out every year are but so many evidences of bad organisation, parsimonious patients, ill-paid Practitioners, and slovenly vaccination. Vaccination, then, has not had fair play.

But even in cases in which it has been skilfully performed and carefully repeated, vaccination is not an absolute protective. In a vast majority of instances it saves the sufferer from loss of life and loss of eyesight, as well as from serious disfigurement. Yet it does not actually protect from the possibility of small-pox in a slight degree. We have no right to complain of this, because *absolute* protection, like all other things absolute, has no place in this terrestrial creation. So we must accept the fact, as we do all the other facts of nature, and get the best lesson we can from it.

The nature of small-pox, and of the other diseases of its class, can as yet be only guessed at. It is certain that the material cause of the disease, whatever it be, has periods in which it is dormant, followed by others of sudden and intense activity. In this it follows the example, not of inorganic, but of organised existences. There are seasons in which there are no partridges, no flies, mackerel, cucumbers, mushrooms, and the like; and other seasons in which they are exuberantly abundant. Hence the theory that small-pox, with its allied diseases, is excited by some minute organised body. How this theory is confirmed by the known facts of diphtheria and *charbon*, and by the singular cases collected by Dr. Kennedy in his late paper on a disease resembling measles, is obvious. Dr. Kennedy shows that a *musty* substance, *i.e.*, one impregnated with minute fungi, will produce a quasi-zymotic disease. The French, like ourselves, are driven by the facts of these diseases to seek for them a source extrinsic to the human body. At a meeting of the *Société Médicale des Hôpitaux de Paris*, most of the speakers concurred in the opinion that the sudden and simultaneous origin of measles and scarlatina in different and distant parts of a country prove some other mode of origin and propagation than mere infection from the sick to the healthy. Nothing is more probable than that minute organisms, lurking in some of the numerous hiding and breeding places so abundantly provided for them, acquire from time to time, with favourable conditions of heat and dampness, power of propagating themselves in great abundance, and so producing an epidemic fit of the appropriate disease.

We were once talking with an eminent Hospital Surgeon in the country, who was showing us over a gaol of which he had the Medical charge. We inquired about the health of the inmates. "Healthy," he said, "of course they are healthy. They have air, food, and exercise calculated to keep them well, and there is nothing here to breed illness. *There is no waste organic matter here.* The walls are of brick, often limewashed; the floors of stone; the corridors of iron; not a flea can harbour itself about the well-washed bodies or clothes of the prisoners, so where is a source of disease to lurk? *We have no flies here.* Sometimes a stray one enters at one of our open windows; but he always goes out again directly, and, as he buzzes away, seems plainly to say 'There is nothing for me here!'"

Can this be said of most houses? Are there no nooks in which minute organisms can lurk and propagate? Think even of the common house fly. Every one of them was once a maggot, and must have had some organic matter to feed on; then it was a crysalis, and must have had a safe dormitory till it could burst forth in its last and busiest stage as a fly. But where these could lie hid, there myriads of fever-breeding fungi could do so likewise.

Be it observed that an indefinite, though very intelligible relation has been constantly observed between insects and pestilence. The Hebrew poet says, "He spake the word, and there came all manner of flies and lice in all their quarters;" and this was just before the destruction of the first-born. The late Dr. Knox and other observers spoke of the appearance of strange insects in cholera times. Mosquitoes, marshes, and agues always go together. In fact, wherever the conditions which are known to breed or foster zymotic disease exist, there minute animal and vegetable organisms are known to flourish likewise.

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Again, think of what is involved in *dampness*. "This room has a very damp smell," is often said; but what is it that smells? Not wet merely; that has no smell; but the simultaneous existence of organic matter which is rotting, and of fungous growths which are feeding upon it. Hence the smell. But these damp smells, which we know will produce coryza, may accompany fungous growths of any sort.

If, then, we wish to do our best to exterminate small-pox, we must not confine our efforts to merely rendering our population invulnerable,—a thing in which we are sure to be defeated by the order of nature and by human negligence, which we suppose is part of the order of nature. We must concurrently attack and exterminate the seeds of the disease in their hiding-places. Have we no old, well-worn clothes put by in closets; old, dirty carpets, curtains, bedding; old, dirty wall-papers; old rotten floors; interstices between floors and ceilings filled with the dust and vermin of generations; old cellars with old hampers, boxes, and forgotten rubbish; basements, vaults, and musty, neglected corners, out of the way of sun and wind, where pestilence germs can flourish undisturbed? If we have, let us get them all swept out and purified, before we sit down and groan over the inefficacy of vaccination, or bewail that inexorable law of Providence which rouses us up and goads us into activity and cleanliness by visitations of pestilence.

THE WEEK.

GOOD NEWS FOR FEMALE PHYSICIANS.

At the Sorbonne, on Saturday last, a young lady (Mademoiselle Emma Chenu) passed a brilliant examination, and was admitted to the degree of Bachelor of Sciences. This is the first instance of a woman being allowed to take honours in the University of Paris. The example was set at Lyons a short time ago. Mademoiselle Chenu was warmly congratulated by M. Milne Edwards, who was in the chair at her examination, and loudly cheered by the crowd of students.

THE CASE OF RUSSELL *v.* ADAMS.

We print in another column a correspondence between Mr. Adams and Mr. Propert, which will tell its own tale. We are glad to say that the committee, which we spoke of last week, is increasing in numbers and importance. Its first effect will be to give Mr. Adams an efficient moral support. It is fortunate for our Profession that men of independence and character will neither combine to protect and whitewash a "black sheep," nor yet allow an innocent man to be made the victim of an open attack or of underhand insinuations. As to the substantial operations of the committee, there is time for consideration as to the best form they should take. Mr. Adams' friends think that in consequence of his courage in resisting an attempt at extortion, he ought to be reimbursed in the amount paid for legal expenses. We make no doubt that the subscription will be general and ample. Members of our Profession as they contribute may reflect that it may be their turn next, and may look upon their subscription as a kind of payment for mutual insurance.

GENERAL RE-VACCINATION.

The Medical Officers of Health are moving the authorities of the various London parishes to cause a general re-vaccination of the population, and to erect or provide temporary Hospitals for the reception of persons affected with small-pox. Of the expediency of the latter measure there can be no doubt. Every small-pox patient who is allowed to remain in the crowded habitations of the working-classes becomes a source of infection to all around him. The re-vaccination, too, is highly to be commended, provided it be effected by fresh lymph, taken from a healthy arm, and not by the "points" or "charges," which are the means of so much disappointment and deception. But, in order that re-vaccination should be something more than a mockery, every adult and child before the operation should be compelled to take a warm bath, and to have his clothes well purified. Most poor people carry about with them on their skins and wearing apparel enough organic matter to be the germs of a dozen diseases.

HOW TO SPEND A GUINEA USEFULLY.

There are many benevolent persons who think nothing of an "annual guinea," and are ready to present that sum to almost any institution on behalf of which they may be canvassed. If we were asked in what way such a sum, or ten times the amount could be most usefully spent, with the greatest amount of good, the smallest amount of abuse, we should say, Go to the nearest "Public Bath," buy a guinea's worth of tickets for second-class warm baths or swimming baths, and give them away to the children of the nearest school. One guinea will purchase 140 such tickets, and will give 140 children the unwonted luxury of a clean skin; it may even lay the foundation of habits of cleanliness which may last through life.

PARLIAMENTARY.

Mr. Gladstone's financial scheme has put every one in a good humour. The twopence in the pound off the income-tax and the reduction on tea are so undeniably pleasant, that the public seem generally content to wait and hope that from his next budget the financial enchanter may produce a relief of precarious incomes and a readjustment of the sugar duties. The subject of the utilisation of sewage was brought before the House of Commons by Dr. Brady on Friday night.

"He called attention to the reports of the Royal Commission appointed to inquire into the best mode of utilising the sewage of towns and applying it to beneficial and profitable uses, and to the inexpediency of granting any further public money for the use of the Commission. In an argument of considerable length he maintained that large sums were wasted by the neglect of town sewage; that the fertilising properties of this sewage, applied to the land, largely increased its productive qualities, and consequently its value; and that the opposition to its use was traceable to the interested motives of those who were connected with the supply of artificial manures. He joined issue, he said, with the report of the Royal Commissioners, the result of whose inquiries was unfavourable to the employment of town sewage for general farming purposes. He contended that the conclusions of the Commissioners were incorrect, and that it was inexpedient to prolong a Commission which had so ill fulfilled the objects of its appointment.

"Mr. K. Seymer, as one of the Royal Commissioners, in reply to Dr. Brady, observed that the Commission had been originally appointed to inquire into the best mode of getting rid of the sewage, and that there existed a great fallacy as to the quality of town sewage in this country, which was largely diluted with water, the residuum being proved to be of little value. He referred to the evidence taken by the Commissioners, from which he drew conclusions materially varying from Dr. Brady's. If the House, he said, thought a stop should be put to the proceedings of the Commission, let it be so; but the sum now in hand would be sufficient to complete its experiments.

"Mr. Cowper observed that, as there were differences of opinion upon this subject, this was a reason, not for putting an end to the Commission, but for further inquiry.

"After some remarks by Mr. Paget, Mr. Ayrton, and Sir J. Shelley, the subject was allowed to drop."

It may be remarked that Mr. Seymer's argument derived from the dilution of the sewage only affords a reason for that separation of the sewage proper from the rainfall which has been lately advocated in this Journal.

"On Tuesday, Mr. Roebuck gave notice that when the Chancellor of the Exchequer brought forward his proposal relating to the income-tax, he would move a resolution declaring that in the opinion of the House the tax imposed on precarious incomes should be lower than that imposed on permanent incomes."

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In reference to the importation of cattle diseases,

"Mr. Griffith asked the Vice-President of the Privy Council whether he had any objection to lay upon the table of the House the report of the commissioner sent by Government in the course of last autumn to the Continent to inquire into the existence of sheep and cattle contagious or infectious diseases in foreign countries, and into the liability of their introduction into this country.

"Mr. Bruce, in the absence of his right hon. friend, said that the report, which was a very long one, was now under the consideration of the department, and if it were found suitable for official publication it would be printed in the appendix of the usual annual report of the Medical officer.

"Mr Griffith asked when that document was likely to appear.

"Mr. Bruce.—Very shortly; at any rate in a few weeks."

THE HEALTH OF THE UNITED STATES ARMY.

Typhus and typhoid fever are very prevalent in the United States army, and in the civil and military hospitals. The *American Medical Times* states that in many instances the fever seems to be purely typhus, and very contagious. Two of the Medical officers, of the resident staff of Bellevue Hospital, fell victims to it in one week. Hospital gangrene, also, is said to prevail. Its ravages at the General Hospital, Annapolis, have led the Surgeon-General of the United States Army to appoint a Commission of Investigation. The reports, for the year ending June, 1862, however, of the Actuary to the Sanitary Commission and of Assistant-Surgeon Woodward, show that, although the mortality had up to that period been high, it had been less than that of the British army in time of war. At least this is the conclusion arrived at in the journal above quoted. It may be observed that the data for calculation cannot be very accurately ascertained, inasmuch as the actuary, Mr. Elliott, states the general mortality of the army at 53·2 per 1000, whilst Assistant-Surgeon Woodward places it at 65 per 1000. According to Mr. Elliott, 44·6 deaths were from disease, and 8·6 from wounds received in action. The English loss during the Peninsular war is said to have been 165 per 1000, of which 113 were from disease and accident, and 52 from wounds in action. In the Crimean war the death-rate of our army was 232 per 1000. In the Mexican war the mortality of the American army was 118 per 1000. The writer of the article we are quoting observes:—"It is apparent that the general mortality of the United States Army forces is comparatively very small. The ratio of mortality from diseases and wounds is, as usual, markedly in favour of the former. The mortality from diseases was five-sixths for the men, and two-thirds for the officers. In the Crimean war seven-eighths of the mortality of the British troops were from diseases. The differences of the causes of deaths among officers and privates is noticeable. The liability of the private to die of disease is double that of the officer, while his liability to die of wounds is only one-third as great." We confess, however, to grave doubts on the subject of American statistics.

POST-GLACIAL OR PRE-GLACIAL MAN?

The advocates of man's extreme antiquity are just now in a perilous position. The state of the contending parties is closely similar to that of the French revolutionists in 1795. The "Reign of Terror" has passed away; the anarchists have recently suffered a severe check; and the "Committee of Public Safety" which sound geologists have established, once more reasserts its power to check the hypotheses of the special pleader, or refute the attacks which may be made upon the groundwork of inductive geological science. Our excitement consequent upon the publication of Sir Charles Lyell's work has been subordinated to the dictates of our sober judgment; and we are once more at liberty to accept or to reject any fact which may be satisfactorily brought before us.

Some attention has recently been paid in the public daily journals to the fen deposits of the eastern and midland counties of England. We regret this procedure exceedingly, as we consider that it may mislead the public to an extent much to be deprecated. Our knowledge of the fen deposits is even more full and complete than our cognizance of any other stratum in England, and we shall not allude to the question further here than to declare our conviction that no examination of the fen deposits will ever throw any light on the origin and antiquity of man, for the satisfactory and sufficient reason that we have evidence of man's existence in beds long anterior in date to the fen deposits. The annexed diagram will perhaps exhibit the true state of the question to our readers, it being distinctly understood that examples of the more characteristic beds only are shown:—

RECENT.	Peat. Fen deposits. River beds. Pileworks of Switzerland. Shell-mounds (Kjökkenmöddings) of Denmark, with possibly coeval tumuli containing human bones. Nile and Mississippi deltas. Ohio mounds. Elevated strata of the centre of Scotland.		Man, evidences of his bones and works.
POST-PLIOCENE.	Natchez deposits. Hoxne gravels. Bedfordshire gravels. Low } level gravels. High } Somme valley.	*Cave Deposits.* Neanderthal? Massat. Maccagnone. Aurignac. Brixham. Wookey Hole. Kent's Hole. Mewslade? Arcy-sur-Yonne. Engis. etc., etc.	
	GLACIAL DRIFT (Boulder Clay).		
NEWER PLIOCENE.	*Pre-glacial* deposits, Grays, Thurrock, and Ilford. "Forest-bed."		
	NORWICH CRAG.		
OLDER PLIOCENE.	RED CRAG.		
	CORALLINE CRAG.		

As we are fully aware of the fact that no new light on the question will be thrown by an examination of the fen deposits, we regret exceedingly that so little attention has been paid in the recent controversy to the evidences of human remains and human works of art from river-beds, of undoubted historical antiquity. Such remains have been derived from the beds of the rivers Blackwater and Nore, in Ireland; from Muskham, Battersea, and Eastham in England. They are frequently associated with stone implements (with the surfaces ground), appertaining to the "stone," in contradistinction to the "Drift" period. They are probably not nearly so ancient as the shell-mounds of Denmark; some of them may, however, be equivalent to the Swiss *Pfahlbauten* (of which so many inaccurate descriptions have recently been promulgated).

While, however, these comparatively recent beds afford to English geologists some interest, our attention has been sud-

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denly called to the far more ancient Somme valley deposits, from whence the veteran Boucher de Perthes has recently derived a human jaw, respecting which some zoologists have ventured to express very decided opinions. It has been alleged that this jaw differs in its anatomical conformation from that in the existing races of Western Europe, and Dr. Carpenter goes so far as to say that no one "who carefully examines the undisturbed condition of that bed can entertain a doubt that the bone in question is *a true fossil*, dating back to the time of its original deposition." Geologists, however, of that cautious stamp to which Mr. Prestwich and Mr. Alfred Tylor belong, have expressed a contrary opinion. The latter high authority regrets that the patriarch of primæval archæology, Boucher de Perthes, should have been so grossly deceived by the workmen in the quarry at Moulin - Quignon. While the mineral character of the jaw in question is so totally dissimilar from that of the other bones from the Somme valley gravel, and the most able tertiary geologists express the strongest doubts as to its genuineness, associated as it was with forged flint implements, we are perfectly willing to consign it to what has been called "the limbo of all hasty blunders." We are aware that one of England's greatest palæontologists, himself an illustrious member of the Medical Profession, has pronounced the jaw to indicate an individual of the Papuan race; but we are also aware of the inaccuracy of the drawing which is now going the round of scientific *coteries*. A similar case of error of observation amused the Ethnological Society a fortnight ago, when a gentleman laid on the table a human jaw from the coprolitic (?) deposits of Suffolk, alleged to be contemporary with the *ichthyosauri*, which he stated were abundant in that formation, and exhibiting marked anatomical peculiarities. On comparing this abnormal jaw with the homologous organ in the whole human race in general, and an individual named Jenkins, who was executed by the Californian Vigilance Committee, in particular, the discoverer of this unique anthropolite was led to consider it to be an irrefragable evidence of that which he termed an "anterior man." Professor Busk, on the other hand, thought the bone to be that of an old woman who had lost her front teeth, and did not assign to it any great antiquity. We are cordially disposed to concur in this opinion, and are willing to relegate both Dr. Carpenter's and Dr. Collier's jaws to the same niche in the temple of science. Impressed with the conviction that the premature deductions which have been recently made do not deserve our serious consideration, we must not, on the other hand, forget that the "cuckoo cry," which has been so often repeated, that human bones have never been found in veritable drift deposits, is scarcely warranted by the facts. The president of the Geological Society, in 1861, told us of the cavern near Arcy, in the Department de l'Aube, in which are three distinct beds of drift, the lowest of which M. Vibraye considers to be an undisturbed mass of materials washed into the cavern by the same force which spread the pleistocene drift characterised by the remains of the mammoth, tichorhine rhinoceros, the cave bear, and cave hyena. In this lowest bed M. de Vibraye found a human jaw containing two of its teeth. This formation Sir Chas. Lyell compares with the "diluvium gris" of Paris. The conditions of deposit in the Arcy cave are wholly different from those of such cave deposits as Engis or Brixham, and the objections of the convulsionist, applied to the ordinary cave deposits, are here totally inapplicable. Some attention of late has been paid to the "forest bed" of Norfolk, which immediately overlies the Norwich crag, and underlies the drift deposits in the same locality. Why this stratum especially should be selected for popular attention we are not aware, as our knowledge on the subject is actually the same as it was thirty years ago. Although it may be deemed, to use Burton's expression, "a subject popular, and therefore to be avoided," we are free to admit that the bed contains many objects of interest. This is the bed, be it remembered, in which Professor Heer discovered among the cones of the fossil spruce-trees of the Norfolk forest a few which had only the axia remaining, the peripheral portion having, according to his interpretation, been gnawed off by the squirrels of the newer pliocene. We are not aware whether our British botanists have universally corroborated this opinion of Prof. Heer, and we should be very glad to elicit some authoritative opinion on this question, and once more bring it within the limits of accurate scientific discussion. These forest and lignite beds, on the testimony of Dr. Falconer, besides containing the remains of the mammoth (*E. primigenius*) also contain more frequent evidences of the *Elephas meridionalis* and the *Elephas antiquus*, *Rhinoceros etruscus*, and *Hippopotamus major*. No evidence of the *Elephas primigenius* has, however, been derived from the Norwich or from the Suffolk crag. Speculators on the extreme antiquity of man have hinted that we may yet find bones of man in the forest-bed, contemporary with *Elephas meridionalis*. This evidence of "preglacial" man, however, has not yet been discovered; and, until we have some material evidence, speculation must be silent. Should, peradventure, man be found in such a deposit, we fully coincide with Sir Charles Lyell, that the discovery "would carry back the antiquity of man to a distance of time probably more than twice as great as that which separates our era from that of the most ancient of the tool-bearing gravels yet discovered in Picardy, or elsewhere." Discovery of man's remains in such a stratum would give the stamp of inductive truth to the bold speculation propounded by Prof. Waitz, of Marburg, that the period of man's existence on this earth cannot be less than 35,000 years in duration, and that possibly he may have appeared as long ago as 9,000,000 of years. We hope our readers will not underestimate the period of probable duration of time which has elapsed since the age when the *Elephas meridionalis* and *Rhinoceros etruscus* wedged their way through the thick forests of spruce pines and Scotch firs that spread their foliage in Norfolk in the pliocene period. Without, however, wishing to hypothetically assume the future discovery of man in the forest bed, we must remember that we have already obtained his remains from the drift, and that the period which has elapsed since the deposition of that stratum has been computed by Sir C. Lyell at 188,000 years, and by a writer in the *Natural History Review* of this month at 224,000 years. Allowing the lower estimate to be correct, we should be led to infer, in the words of the last-named writer, that "the antiquity of man is 188,000 years + x, the unknown element being in all probability the greater of the two."

CATTLE DISEASE IN RELATION TO PUBLIC HEALTH.

On Saturday last, at the meeting of the Metropolitan Association of the Officers of Health, Mr. Gamgee, of Edinburgh, read a paper on a subject of very great importance, "Disease of Animals in Relation to Public Health and Prosperity." Mr. Gamgee considered the sale of diseased meat as it affected the health of stock, the health of the people, and the wealth of the dealer. It was, he argued, to be put down on all these grounds. In speaking on the first, there was, he said, practically little difficulty with indigenous diseases, as the amount of stock destroyed by them was limited, and besides they were greatly under control by proper hygienic measures. But with imported disease it was different. "A cargo of Dutch or German beasts arrives from Rotterdam or Hamburg. The whole stock is only fit for slaughter, and it enters our ports with signs of the foot and mouth disease. These animals are exposed with British stock in our markets, grazed in our fields, and soon show signs of pleuro-pneumonia. We kill them out, but our stock has been seized; the diseased continue to be slaughtered, but are also permitted to travel on roads, in railway-trucks, in steamers, and to be handled by butchers in the public markets amongst animals for store purposes, and dairy cows that

are to supply our children with milk. These animals in their turn become affected, and the number increases in geometrical proportion." He considered that the energetic measures adopted in the epidemic of small-pox in sheep in Wiltshire had prevented that disease from spreading "throughout the length and breadth of the land." But with cattle it was very difficult to persuade the farmer to make an early sacrifice in order to get rid of a contagious disease. It seemed to him a reckless extravagance to bury or turn to manure the carcass of a diseased animal which it was possible to sell at an auction of live stock or at market. Thus: "The farmer's practice now is to generate disease and sell diseased stock." Again: "Rather than spend £5 in professional advice, he would lose £500 by disease." Mr. Gamgee did not think that Veterinary Surgeons could do much when the disease was raging; but a vigorous and talented body of men ought "to prevent damage, to smother flames, and attend to the property in the neighbourhood." To prevent contagion, and not to drug individual cases of the disease, should be the Surgeon's object. He insisted very strongly on the contagious nature of the foot and mouth disease, and of pleuro-pneumonia. In support of this view he had recently obtained a large mass of evidence in replies to a circular he had sent out to 300 Veterinary Surgeons. The fact that these diseases rarely appear in breeding districts, but affected the neighbourhoods of markets and lines of traffic, showed that this opinion was correct. In speaking of the effect of the sale of diseased meat on the health of the community, Mr. Gamgee first alluded to the diseases of the pig. It was well known, he said, "that it is not only the irritating tapeworm that we derive from the pig, it is the prostrating and destructive trichina, which penetrates our muscles and kills. Probably there are many more cases of trichina disease than of tapeworm, and the day is not far distant when the number of well-recorded cases of death due to trichina in man will convince every one that the meat-shops, slaughter-houses, and bacon-factories must be looked after to stop the sale of dangerous bacon just as much as we require to analyse for the adulteration of groceries."

"I am, however, quite convinced that the tens of thousands of carcases of diseased animals sold in all large towns are stealing life from human beings when and where we least expect it. It is asserted by many at home and abroad that the flesh of cattle affected with pleuro-pneumonia is wholesome. I hope the day will soon arrive when we need scarcely discuss such a question in England, and, if Government wishes, this can be attained; but, as the disease is here, I must say that last year my opinion became confirmed that the flesh of cattle affected with pleuro-pneumonia when eaten by man induces boils and carbuncles to an incredible extent. My observations have been made in three establishments. One where 1500 men are known to be supplied, fraudulently of course, with little else than diseased meat; another where several hundred soldiers are in the same position; and a third where about seventy individuals fed, too often to my knowledge, on the flesh of cattle affected with pleuro-pneumonia, have been seized occasionally with vomiting, diarrhœa, abdominal pains, etc., and have traced such accidents to the meat, to such an extent, that many refused to eat it."

He spoke also, and adduced examples, of the injury produced by eating the flesh of animals which had died of "splenic apoplexy," "parturition fever," and "foot and mouth" disease. Mr. Gamgee next referred to the loss to the town dairyman, to the breeder of cattle, and to the community. Dealers, he said, have looked on him as their worst enemy, whereas they would, he had little doubt, find in time that he was their best friend, as he was sure that free trade in live stock, without due regard to the prevention of contagious diseases, "had been the curse of this stock-producing country since 1842." It was a great mistake to suppose, as some argued, that the poor gained anything even in the amount of food. It was much higher in price since the importation of foreign stock, and, at the same time, of foreign contagious diseases.

"Beef, in 1841, sold at from 3s. 8d. to 5s. the stone. It now sells at from 5s. 4d. to 8s. 10d.; and when you consider that the amount consumed in the United Kingdom is estimated at 80,000,000 stones, if we take the increase in price during the last twenty-two years, in round numbers, at 2s. 6d. a stone, the meat-consuming public is paying £10,000,000 more now for the same amount of meat than it did in 1841."

He considered that this injury to the public health and waste of the national resources might be put a stop to with certainty, not by the action of individuals, but by sound legislation on the subject of the importation of diseased cattle. The present systems of inspecting imported cattle and of inspecting markets were extremely inefficient. The paper advocated the appointment of a Government Inspector, who, while making rules for the control of the trade in foreign stock, and for the stricter supervision of markets, might become the centre towards which information should converge, and from whose experience advice for the whole country might proceed. The paper excited very great interest. In the discussion which followed, Mr. Edward Holland, M.P., pointed out the defects in the present laws relating to disease in cattle, and showed that this was an opportune time for an amendment in the law, as the present Act of Parliament on the subject expires in August next. Mr. Field thought that imported cattle should be inspected before they were landed. Mr. Chadwick adverted to the origin of the disease abroad. The cattle, he said, were kept in ill-ventilated, over-crowded sheds, and in the unhealthiest conditions on board ship. These conditions had great influence on the spread of the disease. And again, with regard to small-pox in the human subject, Mr. Chadwick called attention to the fact that this disease prevailed in just the same localities that generate typhus and other contagious diseases. Dr. Sanderson thought that the severity of the eruptive diseases might be increased by filth, but he protested against its being assigned as their cause. He asked for information as to the pathology of pleuro-pneumonia. Dr. Gibbon said that in London the inspector might go to the slaughter-houses and see the viscera of the animals killed, but in other districts they could only inspect the meat when exposed for sale. Dr. Aldis spoke of the practice of inoculation in pleuro-pneumonia. It was, he considered, a barbarous practice. Mr. Gamgee then made some observations in reply. He did not think that either the foot and mouth disease, or the pleuro-pneumonia was generated from bad sanitary conditions. Animals died from pleuro-pneumonia just as much in pastures as in town dairies. It spread from contagion alone. He considered that all cattle from infected districts should be slaughtered, as it was impossible at first to tell which animals were diseased and which were not. In reply to Dr. Sanderson's query, he said that pleuro-pneumonia was a specific fever of the ox tribe, with exudation in the lungs. A Veterinary Surgeon could, by the stethoscope, recognise the disease a fortnight before the dairyman could. Epizootic aphtha (foot and mouth disease) was more like diphtheria, and he believed the statement made by Dr. Starke, of Edinburgh, was correct, that the so-called diphtheria in children is really epizootic aphtha, caught from the milk of cows affected with that disease. He did not think that quarantine was of any use, as in pleuro-pneumonia the stage of incubation was about forty days, nor did he recommend inoculation, as it was cheaper to keep the disease from our doors. Still inoculation was to a very great extent preventive, and, until the disease was excluded from England, it might be practised with advantage.

THE CULTURE OF FISH.

At the Royal Institution on Friday, the 17th instant, Mr. Frank Buckland gave an admirable lecture, "On the Artificial Incubation of Fish." The Duke of Northumberland presided.

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The speaker, who made no pretence to eloquence, did not fail to instruct and amuse a crowded audience by his clear, often humorous descriptions, enthusiastic manner, and plain, easy, unaffected diction. On the table in front of Mr. Buckland were shown a variety of boxes of different kinds, but all of the simplest forms, in which on a bed of clean gravel, and beneath a shallow stream of water, the eggs of trout, salmon, perch, etc., in various stages of development, were being hatched. He began by considering the eggs. Fish are the most productive of all living creatures. A good fowl will lay 120 eggs in a year; but he had found by experiment that a salmon or trout produces 1000 eggs to every pound of its weight. It follows that a salmon of from 15 to 30 lbs. would contain from 15,000 to 30,000 eggs; a trout of 1 lb., 1008 eggs. A turbot of 8 lbs. has been found to contain 385,200 eggs; a roach of ¾ lb., 48,000; a mackerel of 1 lb., 86,220; a brill of 4 lbs., 239,755; a sole of lb., 134,466; a perch of ½ lb., 20,592; a herring, 19,840; a Jack of 4¼ lbs., 42,840; and a cod of 15 lbs., the enormous number of 4,872,000 eggs. And yet we have to pay from half a guinea to a guinea for a turbot. Any one would think that with this fecundity we have only to let them alone, and fish would cultivate themselves; but this is not the case. We find that only one in every thousand of trout becomes a fish. A fish at the time of spawning seeks out a convenient place in which to deposit her eggs, and covers them over with earth or gravel. Will these 15,000 or 30,000 eggs then become fish? If so, why should salmon be from 1s. 6d. to 2s. per lb.? The salmon seeks shallow water because nature teaches her that shallow waters are the best for the hatching her eggs. The salmon-leaps are one kind of difficulty she meets. These we help her over by means of ladders, or an arrangement of alternate stages. The fish soon find out the water staircase, and flock to the spot, in preference to attempting the passage elsewhere. Again, we have to provide against accidents at the time of spawning, perhaps a flood on the one hand, which would wash the eggs away, or a drought on the other, which would be equally destructive. Again, the fish will eat their own eggs. Trout and salmon do so. Five hundred eggs have been found in the maw of a trout, and afterwards hatched. Among insects, we may count as enemies water-shrimps, the larva of the dragon fly and of the May fly. Some birds, the water-ousel and the dabchick, had been accused of robbery of the spawn-but the lecturer had proved them innocent. They came to feed on the insects, and, so far from being destroyed, should therefore rather be preserved. A bird that did a vast deal of mischief in the way of devouring spawn was the swan. He was a great poacher. The common house rat, too, would get at the spawn and eat it. And then there were the human poachers, who would catch the parent fish, and send the "old soldiers," *i.e.*, the spent, scabby, diseased fish to France, where they found a ready market. When a salmon had gone through all these perils, to the age of fourteen months, it went to sea, and there on the margin of the salt water it met with a fresh host of voracious enemies, of whom the most destructive was the angler fish. He feared there was no safeguard against these depredations. But we might materially increase the number of those that left the river by guarding against the former causes of loss, by hatching the spawn themselves, by the removal of nets and other obstructions which hindered the ascent of the fish, and by seeing that the water was not unnecessarily poisoned by the refuse from manufactories. For the first purpose the only plan was to make an artificial nest either out of doors or indoors. All that was required was a common box for outdoor hatching, or for indoors an earthenware basin fitted with a series of glass tubes, or a series of zinc boxes, a slight layer of gravel that had been boiled to free it from the insects that might otherwise hurt the spawn, a shallow stream, and a continuous current. The temperature of the water should be from 40° to 45°; and when the spawn was in it must be let alone. There was a great art in letting things alone; and if the spawn was not let alone it was sure to die. Thirty to thirty-five days were sufficient to develope the eggs, and the fish broke through the eggs with very large eyes to enable them to see their enemies and keep out of their way, with no mouths when they first emerged, but with a large umbilical sack or bag attached to their bodies, which contained the albumen of the egg, and which was gradually absorbed into the body of the fish, until it grew big enough to have a mouth to feed itself. This would be in eight or ten days. They had all heard of Mr. Youle's efforts to introduce salmon into Australia, and in the course of the experiments on the best way of preserving fish spawn they had kept the eggs on a block of ice for ninety days, and the eggs were still alive. Another batch had been thus kept for fifty-nine days, and were still as good and as much alive as on the day the fish laid them in the water. It was a most important discovery in what he might justly call the science of artificial incubation, for it showed that by taking such precautions the salmon spawn might be transmitted to Australia safely, and they meant to do it. For comparatively shorter distances—as in the case of some spawn of grayling and some trout he had received that very evening from France and Switzerland—it was only necessary to put the fresh spawn in bottles, and carefully pack the bottles in boxes of damp moss. For the rest, to hatch them, all that was wanted was a box of cleaned gravel, an equal temperature, and a stream of running water from an inch to an inch and a-half deep. As to the mode of treatment of the newly-hatched fish, they might be first kept in a pond and fed with liver. The French people fed them with frogs. They will eat almost anything. In France the system of hatching fish-spawn had been carried on most extensively by the Government, and with enormously beneficial results. They had there hatched no less than 6,000,000 eggs, and re-stocked thousands of acres of their rivers. The Thames Angling Preservation Society wished to stock the Thames, and had placed boxes at Hampton, and Mr. Ponder, who had been one of the first to lead the way in this admirable scheme, had this year turned out into the Thames many thousands of salmon. Some people said that they would never get these fish back. That might be true or not, and he hoped not, but at all events it was worth trying; and it, at least, was certain that they would never get them back if they did not first put them in. They could put the young fish into the river at the rate of four for a penny, and Mr. Ponder would altogether turn nearly 70,000 fish of different kinds into the Thames this year. Looking at it only with a view to money profit, the system of artificial hatching would prove largely remunerative to lake and river owners. The annual value of the salmon imported from Ireland was no less than £330,000, and from Scotland as much as £500,000. All England only produced salmon to the value of £30,000 a-year, and Yorkshire was so poor in this noble fish that he was told all the rivers in that large county only furnished to the value of £128 per annum. It was therefore no mere scientific plaything that was proposed to the owners of these fisheries, but a source of money value to them, which he was sure they would be only too glad to avail themselves of when the immense advantages of the system were pointed out to them. During the course of the lecture, the progress of the fish in its various stages of development in the egg up to an age of four or five days was most fully illustrated by means of a microscope and the electric light, which threw the image of the objects magnified on a white canvas screen suspended for the purpose. Some of these illustrations were exceedingly interesting, every movement in the ova being distinctly visible; and, in the case of the young fish, its rapid breathing, and even circulation of the blood over the umbilical sac and downwards towards the tail, could be detected. The activity of these formidable young monsters—for so they appeared when magnified—on their approaching or touching each other, created a great deal of amusement, and added not a little to the difficulty of keeping them in the field of view at all

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THE CASE OF DR. EDWARD WATERS, OF CHESTER.

MEETING OF MEMBERS OF THE LIVERPOOL MEDICAL INSTITUTION.

A special general meeting of the members of this Institution was held on Monday evening, April 20th, "To take into consideration the best mode of expressing sympathy with Dr. Edward Waters, of Chester, in reference to a late trial which has taken place in that city."

Dr. Voss presided, and the following gentlemen were present:—Dr. Chalmers, Dr. Grinsdale, Dr. Skinner, Dr. Imlach, Dr. H. Taylor, Dr. Petrie, Dr. M'Naught, Dr. Gee, Dr. A. T. H. Waters, Dr. Thompson, Dr. Graham, Dr. M'Intyre, Dr. Shearer, Dr. Dickinson, Dr. Stopford, Mr. Desmond, Mr. Denton, Mr. Irvine, Mr. Steele, Mr. Marsh, Mr. Hakes, Mr. Bickersteth, Mr. Lowndes, Mr. C. B. Wilson, Mr. M'Cheene, Mr. Martin, Mr. Parkes, Mr. Pennington, Mr. Swift, Mr. Stubbs, Mr. Halton, Mr. Manifold, Mr. Dawson, Mr. Oxley, Mr. Danson.

The Hon. Secretary (Dr. A. Stookes), then read letters of apology from several gentlemen who were unable to attend the meeting.

The Chairman read some observations which he had prepared relative to the case of Dr. Waters.

Dr. M'Naught moved the first resolution:—"That this meeting desires to express their hearty congratulations to Dr. Edward Waters, of Chester, on the result of a recent trial in that city, which leaves his character unsullied after sustaining attacks which have seldom been equalled for persevering malignity." I have great pleasure, Dr. M'Naught said, in bringing before you the resolution placed in my hands by the Council. It is a resolution, I am convinced, which will meet with perfect unanimity here, and be approved of abroad by every right-minded man; whether in or out of the profession. It is to offer our congratulations to Dr. Edward Waters, upon the happy issue of his late trial at Chester. (Applause.) Most of you, I dare say all of you, have read the evidence, the pleadings of counsel on both sides, the judge's charge, and it is scarcely necessary for me to express an opinion as to the malignancy of that prosecution, or rather I should say persecution. (Applause.) That any one, and especially a man of Dr. Waters' high social and professional position, should be exposed to such base calumny in the exercise of pure Samaritan-like benevolence, and upon such wicked and worthless testimony, is really and truly deplorable. It makes one shrink with indignation to think that a virtuous, kind-hearted man should be brought before the public to defend himself against so virulent, clumsy, and vile a conspiracy—(applause)—against his honour and reputation. But, gentlemen, what was Dr. Waters' case yesterday, may be yours to-morrow, and some of us, perhaps, might not possess either the moral courage or pecuniary resources necessary for the establishment of an insulted character, as he fought for and effected. I say, therefore, he richly deserves the congratulations of the whole Profession for his energetic and manly conduct in resisting all attempts at a compromise. In fighting his own battle, gentlemen, he has also been fighting ours—(applause)—and after such an *exposé*, and such a triumphant verdict, it is to be hoped that credulous elderly vestals will not be so ready to place implicit faith in the cunningly-devised tales of hysterical, lascivious girls. We all know what hysteria is, and if lawyers were as well acquainted with the deception practised, and the ingenuity often exhibited on points of immorality in some cases of that protean malady, they would be less disposed to undertake such cases as that of Bromwich versus Waters. (Applause.) I shall only touch upon the sympathy generally felt for the distressing ordeal Dr. Waters has undergone. Supported even by the conscientious feeling of innocence, it is a terrible thing for a pure mind to be dragged before the public upon so gross and wicked a charge. With these few remarks, I beg to submit the resolution. (Loud applause.)

Mr. Bickersteth: It affords me much pleasure to second the resolution, and I do so with peculiar satisfaction, because I think that Dr. Waters is entitled to the unqualified gratitude of the profession for the manly and courageous way in which he has boldly met the vile charges with which he has been assailed. It is well known that long before the trial took place offers of compromise were made to Dr. Waters, and not only made but urgently pressed upon him. Few men could have resisted the desire to avoid such a trial; but Dr. Waters, conscious of his moral rectitude, declined to submit to any compromise after the aspersions that had been made upon his character, and determined to have the whole truth brought to the light of day. When I think of the nature of the charge against Dr. Waters, and of the absurd evidence upon which it was attempted to substantiate that charge, I ask myself, and I ask you, which of us might not any day find ourselves in a similar position, if unfortunately we should happen to have been consulted by some designing woman? (Hear, hear.) In private practice we are frequently called upon to make secret and private examinations when entirely alone with our patient. The presence of a third party on such occasions is often offensive to the feelings of a woman. It may be politic to propose that a friend should attend; yet I confess that I think it is generally unnecessary. It would often not only be cruel to the patient, but derogatory to our position, as confidential advisers, to insist upon the presence of a third party. Our position is indeed a dangerous one, but it is rendered doubly dangerous when, as in the late trial, we find members of our own Profession (one of whom does not hesitate to state that he felt convinced the case against the Doctor must fail as there was no evidence to support the charge) who do not hesitate to undertake a journey to Chester to propound opinions peculiarly their own, and upon the correctness of which alone it was possible to convict Dr. Waters. (Applause.)

The resolution was then put, and carried unanimously.

Mr. Steele moved the second resolution, as follows:—"That this meeting feel called upon in the interest of the Profession to record a solemn and energetic protest against Medical witnesses, to the great injury of their brethren, assuming the functions of advocates, and volunteering opinions when they are only required to testify to facts,—a practice deplorably frequent, and which has reached its culminating point of impropriety at the hands of Drs. Lee and Ramsbotham in the case of Bromwich v. Waters." Mr. Steele said that however painful and disagreeable it might be to pass censure and condemnation upon the conduct of Medical men of eminence and reputation, it was their imperative duty to come forward on this occasion in support of the resolution which he had read—a resolution which he hoped would obtain the cordial and unanimous approbation of the meeting. The resolution was not directed so much against the gentlemen named personally as against the objectionable practice of which their recent conduct had formed so graphic an illustration, namely, the practice of Medical witnesses assuming the functions of advocates, and volunteering evidence when they were only required to testify to facts. He need not detain the meeting by showing that this course had been adopted by the Medical witnesses for the prosecution in the case of Bromwich v. Waters. That the practice was deplorably frequent must be pretty evident to most of those who were acquainted with the numerous cases which had lately occurred in the law courts, where charges had been brought against members of the Medical Profession which had proved to be unfounded, but in which there appeared to be no difficulty in inducing Medical men to come forward on the part of the prosecution, and give evidence in such a way as to produce a prejudiced and unjust impression upon the judge and the jury, who could not be supposed to understand all the intricacies and delicacies of Medical questions. Whoever had read the verbatim report of the recent trial at Chester must have arrived at the conclusion that Dr. Waters had not only escaped from an atrocious and abominable charge attempted to be made against him—a charge described by the judge as nothing less than one of rape—but that he had also shown by his conduct, which had also undergone the most searching investigation before a legal tribunal, that he had acted throughout as a Physician of the purest possible motives, and with the kindest consideration for his patient. Notwithstanding, however, the triumphant result of the trial, there was a time during the ordeal when his case was placed in the most imminent peril. And how, from, and by whom? By the Medical evidence that was offered on the part of the prosecution. The learned judge told the jury that if they believed the evidence of Drs. Lee and Ramsbotham that the treatment was improper, it would "enormously corroborate" the case against Dr. Waters. Now, when they considered the consequences which would have resulted from an adverse verdict, they could not but think that had not Dr. Simpson been able

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to contradict the evidence of these Medical witnesses, Drs. Lee and Ramsbotham would not have had so fortunate an escape from a result which would have filled the rest of their lives with self-accusation and remorse, from the consciousness of their having been the main instruments in consigning an innocent and an honourable man to infamy and ruin. In order to illustrate more clearly the character of the evidence of Drs. Lee and Ramsbotham, Mr. Steele pointed out that, under all circumstances, when the propriety or impropriety of Medical treatment was canvassed by Medical men, it had been hitherto deemed contrary to Medical etiquette, and injurious to the interest both of Medical men and patients, to give an opinion upon a case which had been under the care of another Medical man, without the presence of that Medical man himself. Even if they differed from the treatment which had been adopted, and thought it wrong, they would hesitate to condemn it until, at all events, they had held an interview with him, and had heard his own description and explanation of the case at the time he attended it, and also the reasons for employing his treatment. This was the straightforward line of conduct which, from time immemorial, had guided all right-minded men in their dealing with their patients. If, therefore, this was their incumbent duty on a matter which merely involved a question of Medical etiquette, what should they say when the consequences ensuing upon the violation of this rule were absolute social death to the party implicated? (Hear, hear.) Then, with regard to the way in which this Medical evidence was brought forward. It was by the merest accident in the world that Dr. Waters became aware that Medical experts were to be called to give evidence against him. Shortly before the trial, it appeared that the prosecution desired to have a commission to go to the continent to take the evidence of a Medical man there who had had Mary Whalley under his treatment at Malvern; and in consequence of this the solicitor for Dr. Waters obtained information that it was probable that other Medical men would be called. When the evidence taken by commission was shown to Dr. Waters by his solicitor, he said, and very properly,—"Why, this is the most arrant nonsense ever put upon paper." His solicitor replied,—"Never mind, it is the opinion of a Medical man—an opinion which is thought of great value by some persons, and therefore it must be answered." Then it was that Dr. Waters considered it necessary to submit this evidence to Professor Simpson, of Edinburgh, who gave him a hint that some eminent Medical men in London would be called against him, though Dr. Waters was very hard to convince that it would be so. It was at this time that the guess was made that Dr. Lee was likely to be called, because it appeared that he was in the habit of meeting in consultation with Dr. Gully, of Malvern. They all knew, however, that these gentlemen came down, and they also knew the extraordinary grounds upon which they based their opinions. He (Mr. Steele) need not dwell upon these opinions to show the animosity to Dr. Waters, but he could not refrain from saying that he had heard, upon very excellent authority, that Dr. Ramsbotham himself did not hesitate to aid the counsel in cross-examination, and that Dr. Lee was handing a speculum round the court, evidently with the intention of prejudicing the case against Dr. Waters. Surely, after this it was not too much to say that improprieties of the kind mentioned in the resolution had "culminated at the hands of Drs. Lee and Ramsbotham. (Hear, hear, and applause.) Dr. Ramsbotham had made some sort of explanation and apology in the public journals, and had told them that if he had heard Dr. Waters' version of the story before he gave his evidence, there would have been very little difference of opinion between them. Well, now, did not this show how completely Dr. Ramsbotham had forgotten that excellent rule, to which he (Mr. Steele) had alluded; for had he adopted that rule he would never have placed himself in that highly reprehensible light in which he now stood, and which had called upon them to enter their protest against the practice which he and Dr. Lee, by their presence at the trial, had sanctioned and approved. In conclusion, Mr. Steele pointed out the importance of adopting a resolution which, while asserting the entire innocence of Dr. Waters, would at the same time afford protection to younger members of the Profession, in the event of their being assailed in a similar manner.

Dr. Dickenson seconded the resolution, observing that Drs. Lee and Ramsbotham had shown great want of judgment and proper Professional feeling, and with regard to Dr. Taylor, though his name had not yet been mentioned, it would be unfair to pass him by. He was not called upon to give evidence in a question of this kind, and he had no business to come down to give evidence upon a subject which was a matter of doubt.

Mr. Parker, while concurring in the observations which had been made by previous speakers, was anxious to make a suggestion which this trial had brought to his mind, and which was also warranted by the frequency of similar trials, viz., that the time had arrived when the Medical Profession might very seriously take into consideration the propriety of forming a "Medical Defence Association," in order that the expenses of such proceedings might be met without harass and ruin to individuals.

Mr. Steele was afraid that the establishment of such an association would give the public the idea that the Profession feared and expected these actions, and that it would also have the effect of inducing juries, if the verdict happened to be against the Medical man, to give heavy damages, because payment would fall upon the society, and not upon the individual. He would rather take his stand upon the dignity and honour of the Profession, and fight the battle single-handed as Dr. Waters had done, throwing himself upon the sympathy and consideration of the Profession, if necessary. (Applause.)

The resolution was then put, and carried unanimously.

Mr. Fletcher moved the third resolution:—"That this meeting recommend that a subscription be opened with a view of indemnifying Dr. Waters for any pecuniary loss he may have incurred in conducting his defence, and for the further purpose of presenting him with some lasting memorial of the high appreciation with which they have regarded the dignified fortitude of his bearing under the prolonged persecution to which he has been subjected." Mr. Fletcher proposed this resolution with peculiar pleasure, seeing that he had known Dr. Waters for thirteen or fourteen years. He knew him in Paris and Vienna, and he knew then, and had known since, no man in whose character he had greater confidence, who was more thoroughly a gentleman and a Christian, and whose mind was more thoroughly accomplished and delicate. As far as he (Mr. Fletcher) had an opportunity of judging, Dr. Waters was about the last man of all his acquaintance against whom he should ever have imagined such a foul accusation would have been launched. Coming to the £ s. d. part of the resolution, Mr. Fletcher said he believed that they should do a great deal of good by subscribing to pay whatever expenses Dr. Waters might have incurred. He would not accept anything more than the amount he was out of pocket by the proceedings, but it would be gratifying to his own feelings and the feelings of his friends to have something as a memorial, not only that they considered him innocent, but that he had acted in a way which they regarded as meritorious, and had resisted temptations under which many men would have fallen. Dr. Waters had throughout strongly resisted, first the offer of private investigation, then reiterated offers of compromise, and had stood entirely upon his right; and from the very first step he took in his course to its triumphant termination he had been guided by a firm consciousness that he was in the right, and that "God would defend the right." (Renewed applause.) With regard to the costs incurred, he (Mr. Fletcher) knew that £500 had been paid by Dr. Waters before he went into court, but he did not know how much of this sum would go under the head of "taxed costs." From all he had heard, however, on the subject, he believed that the taxed costs paid to the victor in a case such as this bore but a small proportion to the real costs, or actual amount which a person was out of pocket even where he came off victorious. With regard to the subscription itself, Mr. Fletcher would rather see a large number of small subscriptions than a few large ones, for the great value of the money was this, that the public would look upon it as a real, honest manifestation of the belief, not only that Dr. Waters was innocent, but that his conduct throughout the whole matter had been marked by very high merit. (Hear, hear.) Then there was another point. They must remember the awful suspense in which Dr. Waters was kept between six o'clock, when the jury retired, and somewhat after midnight when they returned with their verdict. Upon that jury they knew that eleven were wise, and that one was "otherwise;" and so it was in general society. Some people were stupid enough, and others base enough, to believe any accusation, however absurd; and it was therefore no mere sentimentalism, but was a point of real

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and practical value that they should come forward not only with their resolutions, but also with what money might be wanted to make up Dr. Waters' pecuniary loss, and to present him with something which he would leave to his children as a practical proof that not only his Professional brethren in Chester and elsewhere, but those who knew his character and standing believed him to be thoroughly innocent of the charges brought against him. Whatever they did, they could never undo the ill which had been done, never give him back anything which would make up for the agony through which he had passed; but they could do something to replace a sense of wrong by the expression of their cordial sympathy. (Hear, hear, and applause.) To say that the injury to Dr. Waters was due to a few gossiping old women, or tittle-tattling dowagers of Chester, was not true. The real venom had come from their own Profession. A weak and dirty weapon had been chosen; but a very little poison placed upon it by Drs. Lee and Ramsbotham might have made it effective for the work of destruction. Whist would Mary Whalley have been without Drs. Lee, Taylor, and Ramsbotham? Who gave the instructions to Serjeant Shee? They must have been given by a Medical man. (Hear, hear.) The *animus* of the instructions as to the charge relative to the speculum could have come only from Dr. Lee, aided by Dr. Ramsbotham, and the suggestion as to the drugging must have been known to Dr. Taylor. It must be remembered that these gentlemen had been for months in consultation with the lawyers; and that, whatever they might have *said*, actions spoke louder than words. (Hear, hear.) Though Dr. Ramsbotham might have advised in so many *words* that they should not bring the action, he advised in *deed* that they should. He (Mr. Fletcher) was certain that all they could do would be done on behalf of the right cause; and although they could not undo the evil which had been done, they could cordially and thoroughly avow their belief in the complete innocence of Dr. Waters, in order that in future years no doubt might remain upon the case. It was most important, in regard to the future, that Dr. Waters should not only be clearly exonerated by the verdict of the jury, but that his Professional brethren should declare that this foul accusation had been thoroughly rebutted, and that there was no man who more completely carried with him the sympathy and best wishes of his friends in the Profession. (Loud applause.)

Dr. A. T. H. Waters, who seconded the resolution, expressed his most cordial concurrence with the preceding resolutions. It was, he thought, very desirable, considering the mental anguish and trying circumstances through which Dr. Waters must have passed, that they should express their sympathy with him, and their congratulations at the successful issue of the trial. It was also desirable to express their reprobation of the conduct of those members of the Profession who on this and similar occasions had been willing to lend themselves to those who were attempting to injure the character or ruin the reputation of a Professional brother. (Applause.) Though not in any way related to his namesake of Chester, he (the speaker) had known Dr. Waters for several years, chiefly in connection with the meetings of the British Medical Association. He had known him as president of the Lancashire and Cheshire branch of that Society, and as the reader of the address at the annual meeting of the Association in 1859. He mentioned these circumstances because they might not be known to every one present, and because they would show the high estimation in which Dr. Edward Waters was held by his Professional brethren in the counties of Lancashire and Cheshire. (Hear, hear.) It was very desirable (the speaker thought) to raise a subscription in the terms of this resolution for the purpose of indemnifying Dr. Waters from pecuniary loss incurred in conducting his defence; but they should not be satisfied with doing this merely, but subscribe to present him (as the resolution expressed it) with some lasting memorial of the high approbation with which they regarded the dignified fortitude of his bearing under the painful circumstances in which he had been placed. (Applause.) When they looked at the report of the trial, and read the searching cross-examination to which Dr. Waters was subjected, they must feel not only how ably he had withstood the attacks of the learned serjeant, but that only a feeling of strict moral and professional rectitude could have carried him unscathed through such an ordeal. (Renewed applause.) They ought not, under circumstances like these, merely to express their feelings in words, but to make also a substantial contribution, in order to show the public that on such occasions as this when a Professional brother was unjustly and scandalously attacked, they were prepared to carry him safely through the cost of it. (Hear, hear, and cheers.) The speaker then alluded to the mode in which the Medical Profession, and the public at Chester had come forward, including the highest dignitary of the Church and almost every member of the Profession, in order practically to show their sympathy with Dr. Waters, and their high estimation of his character. (Applause.)

The Chairman mentioned that the sum which the solicitor of Dr. Waters had already disbursed was considerably beyond that incidentally mentioned by Mr. Fletcher; and further, that the actual amount of the expenses incurred could not be known until Dr. Waters' bill had been taxed, a form which could not be gone through until next term.

The resolution was then put, and carried unanimously.

After some further discussion, the details as to subscriptions were referred to a sub-committee.

Mr. Desmond moved that the proceedings of the meeting be forwarded to the London Medical Journals for publication.

Dr. Callon seconded the motion.

On the motion of Mr. Hakes, seconded by Dr. M'Naught, a vote of thanks was passed to the chair, and the proceedings closed.

REVIEWS.

The Pharmacopœias of Thirteen of the London Hospitals, arranged in Groups for Easy Reference and Comparison. By Peter Squire, F.L.S., etc. 18 mo. Pp. 153. London: Churchill and Sons. 1863.

The President of the Pharmaceutical Society has done us some service by the compilation of this little work, which must have cost a good deal of time and pains. As he tells us in the Preface, some of the formulæ are valuable to the Practitioner; and others convenient to Pharmaceutical Chemists, who are often called upon to make up prescriptions according to the formulæ of various Hospitals. But more than this, Mr. Squire not only gives us useful matter, but he points out to the Hospital authorities the expediency of harmonising their formulæ with each other, and of bringing them into accordance, in all cases where it shall be possible, with those of the new Pharmacopœia. We must say, that an intelligent pharmaceutist must wince in his inmost soul at the provoking discrepancies between formulæ which ought to be alike, at the shabby contrivances, and the wonderful diversity of doses which these formulæ exhibit.

On Diseases of the Skin. By Erasmus Wilson, F.R.S. Fifth Edition. London: Churchill and Sons. 1863.

The fifth edition of the English text-book on cutaneous diseases needs at our hands no commendation. Its place in Professional estimation is secure. The success of Mr. Wilson's work is due to its clear arrangement, its natural system of classification, and its pre-eminently practical character. The nosological classification introduced by Mr Wilson is based on the structures affected and the causes from which the diseases arise. The whole family of skin affections are referred by him to two great groups,—the first, of diseases affecting the general structure of the skin, the second, of those affecting the special structures. The first group are divided into diseases arising from general causes, *e.g.*, erythema, lichen, eczema, impetigo; diseases arising from special external causes, *e.g.*, scabies, gelatio; diseases arising from special internal causes, *e.g.*, lepra, lupus, elephantiasis; diseases arising from the syphilitic poison; and, lastly, diseases arising from animal poisons, giving rise to the eruptive fevers. The second group contains diseases of the vascular, nervous, papillary, and pigmentary structures, the sudoriparous and sebiparous organs, the hair follicles, and hair and nail follicles and nails. This classification is, as we have said, a natural one, and, contrasted with the old artificial classifications of Plenck and Willan, and their various modifications, is an undoubted advance and boon to the student, substituting pathological ideas for mere names.

The chapter on the general pathology of the skin is conceived in the same spirit. Mr. Wilson teaches that erythema, lichen, eczema, and impetigo, representatives of the exanthemata, papulæ, vesiculæ, and pustulæ of Willan, are really

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all phenomena of inflammation of the superfices, and that they are mutually convertible. Erythema is simple vascular congestion; lichen is congestion of the pores and superficial portion of the follicles, producing a tumid state of those parts, and constituting *pimples*; eczema is a vascular congestion accompanied by effusion, and giving rise to vesicles; impetigo, a similar pathological condition, resulting in the production of pus and pustules. The same in essential nature, they are simply modifications arising from accidental conditions. This teaching we believe to be philosophical as well as practical.

In warmly recommending this edition to the Profession, we would observe that it has received numerous additions and emendations as well as some new illustrations. The contained matter is at least double in quantity that of the earlier editions.

On Human Entozoa: comprising the Description of the Different Species of Worms Found in the Intestines and other parts of the Human Body, and the Pathology and Treatment of the Various Affections Produced by their Presence. To which is added a Glossary of the principal terms employed. By Wm. Abbotts Smith, M.D., M.R.C.P. Lond., Senior Assistant-Physician to the Metropolitan Free Hospital, etc. Pp. 251. London: H. K. Lewis. 1863.

Considering the rapid advances which the study of human and other parasites has made within the last few years, and considering, also, the peculiar interest which naturally attaches itself to the history and production of the *Entozoa*, we are quite in the humour to welcome from the hands of the English student of parasites any work which shall bring our knowledge of this subject up to the present hour; and we should also be still further gratified if we found any English author producing a work which not only did this, but even extended our knowledge of the genesis, migrations, and economy of this singular class of beings.

On looking into the work bearing such an imposing title as that here given, we confess to have felt considerable disappointment, for not only is it deficient in the very kind of information which we so much require, but, we are pained to add, that it does not appear to be, in any legitimate sense, an original treatise. The greater part of it is, in point of fact, neither more nor less than a translation from Mons Davaine's well-known *Traité des Entozoaires, et des Maladies Verminestses de l'Homme et des Animaux Domestiques.*

If Dr. William Abbotts Smith had candidly announced on the title-page that his book was for the most part a translation of those portions of Mons. Davaine's treatise relating to the human entozoa, then we should have no fault to find; but, unfortunately, whilst recording in the preface "his deep sense of obligation to Dr. Davaine," and also "to Messrs. Baillière and Son, the proprietors of the copyright," he allows his name to appear on the title-page as if he were the author of an original work. Dr. Smith says the *nature* of the work is "sufficiently indicated on the title-page," and therefore it is unnecessary for him "to occupy the reader's attention with any lengthened prefatory remarks;" but he carefully screens the important fact that the matter of its pages is principally mere translation.

To make good our words, we turn to the First Part, and compare the two authors:—

"Dr. Smith, p. 1.	"Mons. Davaine, p. 1.
"Part I.	
"*Synopsis of the Entozoa which are found in Man.*	"*Synopsis des Entozoaires de l'Homme et des Animaux Domestiques.*
"Entozoa are parasitic animals which live in the organs of other animals, and which possess neither a distinct respiratory apparatus, nor articulated appendages specially adapted to locomotion.	Les entozoaires sont des animaux qui vi vivent dans les organes des autres animaux, et qui n'ont point d'organes respiratoires distincts ou déterminés, ni d'appendices articulés propres à la locomotion.
"The entozoa found in man may be arranged into five separate classes, namely, the Protozoa, the Cestoidea, the Trematoda, the Nematoidea, and the Acanthotheca."	"Les entozoaires sont organisés d'après six types distincts; ce sont, les Protozoaires, les Cestoïdes, les Trématodes, les Acanthocephales, les Nematoïdes, les Acanthotheques."

In this style, sometimes more literally, seldom less, omitting foot-notes, Dr. Smith goes on and on, until, out of Mons. Davaine's synopsis of 92 pages, he has modestly contented himself with extracting 52 pages, which he calls Part I.

As Mons. Davaine gave Dr. Smith "permission to make use of any portions of his work," he has copied a considerable number of the woodcuts; but we do not find any statement in the descriptions of these cuts as to the source whence they are derived. Neither is Dr. Smith to be congratulated on the selection which he has made, for Fig. 7 is a remarkably poor illustration of the common fluke (*Distomum hepaticum*); whilst Fig. 9 would, in our opinion, do the pictorial honour for the sea-serpent quite as well as for the common lumbricus (*Ascaris lumbricoides*), which it is intended to represent. The latter figure may be an original one, but certainly all the others are copies.

In no instance has Dr. Smith thought fit to employ inverted commas or brackets, although page by page is usually translated in the most careful, and, we must in justice add, most able manner. In short, with the talents our translator possesses, we think it a great pity that he should not have frankly called it a translation.

Messrs. Baillière only very recently issued an English edition of Moquin-Tandon's "Elémenta de Zoologie Médicale," (translated by Mr. Hulme)—a little work which contains an admirable and succinct account of the human entozoa. We repeat, Moquin-Tandon's *resumé* on this subject is the best account of the human entozoa which we at present possess to recommend to the student, whilst Dr. Lancaster's translation of Kuchenmeister will long retain its position as a standard work of reference. Mons. Davaine's treatise is really a valuable book; but in the mutilated form in which Dr. Smith has here presented part of it to the English public, it will neither bring credit to himself, nor advance the science of which it treats.

There is another point on which we must comment before concluding, for it will hardly be credited that Dr. Smith not only omits to do justice to M. Davaine, but even translates passages which Davaine himself reproduces from other writers with careful acknowledgment. Thus, for example, at p. 63, Dr. Smith commences a sentence thus:—

The colour of the face is changed, sometimes flushed, sometimes pale, and sometimes of a leaden hue; a bluish semicircle appears

and so on for twenty-nine lines, copying the original sentence, which consists of nineteen closely printed lines, and which commences thus, with inverted commas:—

"*Couleur du visage altérée, tantôt rouge, tantôt pâle, tantôt plombée; demicercle azuré*

the French sentence being continued, and finally closed with another pair of commas and a foot-note reference. This reference indicates that the passage is a quotation from M. Pinel's *Nosographie Philosophique*, but Dr. Smith never once mentions Pinel's name, neither is there the slightest indication by which the English reader might know that the passage is simply a quotation translated.

Finally, we may remark that we have compared scores of pages and hundreds of passages in Dr. Smith's work—or rather, in the work the title of which bears his name as if he were the author—with scores of pages and hundreds of passages in Mons. Davaine's work, and we find by far the greater number of the said pages and passages in the two books to correspond with each other. Here and there a number of sentences, and sometimes a number of pages are skipped by the translator, and occasionally a sentence appears to be made up in such a way that one might almost suppose it to be original. Some of the foot-notes are original, but, like celestial visitants, they come few and far between. Certainly, in all our experience of books, we never witnessed such a plagiarism (by permission?) as Dr. Smith's book exhibits.

Professor Charles Hooker, M.D., died in Newhaven, Conn., on March 19. He was a native of Berlin, Conn., and a descendant of the leader of the first settlers at Hartford, the Rev. Thomas Hooker. He graduated in Yale College, in 1822, and then began practice at Newhaven. In 1828 he was appointed to the chair of Anatomy and Physiology, which he retained until his death. He was the author of several valuable papers. In his death the Profession in America has lost one of its most esteemed members.—*American Medical Times.*

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PROGRESS OF MEDICAL SCIENCE.

Selections from Foreign Journals.

THE SPONTANEOUS ORIGIN OF ERUPTIVE FEVERS.

M. Roger communicated to the Paris Hospital Society the fact that a somewhat severe epidemic of scarlatina and measles had prevailed for some time past at the Children's Hospital. In a case of scarlatina, proving fatal on the third day, two series of lesions, both remarkable for their intensity, were observed. The first of these was a considerable *pseudo-enteritis*, in which the follicles of the small intestine presented a development such as is rarely seen in typhoid fever, but unaccompanied by ulceration. The other lesion was a most intense, violaceous congestion of all the viscera, brain, spleen, kidneys, etc.—the testicles themselves and the tunica albuginea presenting a turgescent lividity. But the highest degree of congestion was found in the lungs, which were gorged with blood, of a violet red, and of a soft consistence. The pulmonary vessels were filled with black, semi-coagulated blood. At the inferior lobe of the right lung there was a vast apoplectic extravasation. In this case, the condition of the lung would prove a cause of rapid death independently of the scarlatina poison.

M. Chauffard was of opinion that, with respect to the eruptive fevers, there is too great a disposition to refer them to contagion or infection. The rapid appearance and vast extension of these epidemics would seem rather to point to a kind of spontaneous production, the causes of which are at present not understood. M. Roger was much disposed to agree in this opinion; for in private practice, in which the progress of these cases can be better followed, it is not always possible to refer them to a contagious origin; and, in the midst of epidemics, unable to follow the traces of a contagion, we are often obliged to at least admit the appearance of a spontaneous eclosion. Quite lately M. Roger has met with two cases of measles followed by pertussis; this secondary affection being only explicable by its importation during the short visit of the Medical attendant, or by its spontaneous origin, for the children had been most carefully isolated. M. Behier, in corroboration, observed that towards the spring and autumn he has every year observed epidemics of eruptive fevers break out in the different schools in Paris, situated at such remote distances from each other as to exclude all idea of contagion. He took this opportunity of mentioning a remarkable case. He had attended three children of a family for the measles, and was called five or six years later to see one of these children who had a well-marked second attack of measles. The parents were congratulating themselves at the absence of the other two, at boarding-school, when at the very time of the visit one of these latter was sent home, also suffering from measles. How rapidly contagion is sometimes communicated he illustrated by another case. A mother, entering the Tuileries with her child, on hearing an infant near her suffering under a paroxysm of pertussis, at once withdrew. Nevertheless, at the end of some days her child was seized with pertussis. M. Empis considered the admission of the spontaneous development of the eruptive fevers to be a mere gratuitous hypothesis, which may have a mischievous effect by diminishing circumspection in regard to preservative measures. The true mode of propagation of these affections is by infection, to which in populous localities there is constant exposure. M. Roger explained that no one would think of contesting the contagion of the eruptive fevers. All that is now advanced is that we may admit a kind of spontaneous development when contagion has not been in operation. M. Chauffard observed that, while it cannot be doubted that certain diseases were originally imported from distant regions, yet, once brought here, may they not become in some sort naturalised, and be liable to spontaneous eclosions? In 1855 there had been numerous cases of cholera in Paris, without any such appearing in the provinces, when, on June 7, the same day on which the first case was observed at Avignon, the disease appeared at several distant points. Here spontaneous eclosion is a more natural explanation than infection; and do we not see the same thing occurring daily with respect to variola, rubeola, and scarlatina. M. Simonnet replied that a geographical progress has always been attributed to cholera. Its propagation may thus be traced, and its spontaneous origin here cannot be admitted. As to the eruptive fevers, children are constantly taken to the promenades, and how are we to ascertain when and how they have contracted the contagion. M. Guérard remarked that we have constantly the opportunity of observing that the most infectious diseases may affect isolated individuals, without any epidemic or endemic extension. These are sporadic cases, which in some manner preserve the germ of the disease, special influences, the nature of which we are ignorant, being requisite to give to this germ the generalisation of an epidemic. These great epidemic manifestations, such as the variola of 1825, are generally somewhat sudden in their origin, rapid in their progress, and, in this sense, of spontaneous origin.—*L'Union Médicale*, No. 48.

FOREIGN CORRESPONDENCE.

FRANCE.

Paris, March 20.

The Winter Session of the Medical School of Paris has drawn to its conclusion, and for a short time the lecture-rooms are closed, the Summer Session commencing in April. The academic season has been marked by little novelty, except, perhaps, the display of the exuberant admiration of the students for freedom of thought and of action. The time has passed away when the School of Paris was the most distinguished source of Medical education, and when the Practitioner could hardly be supposed to have received a finished education unless he had studied within its walls. The European reputation of Majendie and Orfila, with the facilities of acquiring anatomical information, combined to give a reputation to the University which it has feebly maintained. The English student finds in the schools and Hospitals of London all that is necessary to perfect his education, and now it is somewhat rare to find young men from Britain attending the lectures, whilst a few years since they were amongst the most numerous of the youthful foreigners who were devoting themselves to the acquirement of the science which they were afterwards to practise. There are still, however, some most distinguished professors of the different faculties, and many skilful operators in the Hospitals, who are fully capable of affording the most valuable instruction, and whose lecture-rooms are crowded with men anxious to gain information. Velpeau, Andral, Trousseau, Nélaton, and Rayer are names known wherever the sciences are cultivated, and to have attended their lectures is a recommendation of which any student may be proud.

Velpeau may be looked upon as one of the most distinguished men of the age. The son of a country blacksmith, he commenced his career as an humble student of the veterinary art, and, acquiring some knowledge, he ventured on practising upon the peasant what he had learnt from the horse. This led to his giving to an unfortunate patient a dose of hellebore, to remedy whose effects a more experienced Practitioner was called in, who, when scolding the young Velpeau for his unskilful administration of the drug, was so struck with his replies, that he undertook to assist in procuring an education for him. He made a rapid progress in all the branches of Medical science, and on his arrival at Paris he passed his degree of Doctor with great *éclat*. He became Surgeon at the Charité. His promptitude in diagnosis, his skill in operation, his lectures, have placed him in the highest rank of professors, and his lecture-room is always crowded with admiring pupils.

Andral, the son of a Physician, has from his earliest youth been an ardent lover of science. Pathological anatomy has been his principal study. To compare the observations during disease with the effects produced, has always been his object; he may be considered the first Physician who showed the necessity of autopsy. His auscultation is supposed to be perfect, and from him the best lessons upon this important diagnostic have been obtained.

Trousseau distinguished himself as Professor of Therapeutics and Materia Medica. He is one of the most agreeable lecturers of the day; his language always is correct, and he has a facility of expressing himself that renders his lectures peculiarly agreeable.

Nélaton is an admirable operator. When he is about to extract a calculus there is an immense throng of spectators eager to watch his skilful manipulation.

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Tardieu's works upon pathology have of late acquired considerable reputation, and this season he has been lecturing on Medical Jurisprudence, for which he has every kind of knowledge, but he dwells too much on some subjects that are not likely to be brought before the Medical man during a long life, at any rate in England, where the vices upon which he expatiates are little known, and upon which he is scarcely ever called upon in a court of justice to give evidence. The subject, too, is one little adapted for the study or even the comprehension of young men. M. Tardieu is a man of great intelligence, and commands the attention of his audience as much by his manner as by the subject he discusses. There will be a pause of a month between the two sessions. Clinical Surgery and Medicine will then be resumed at La Charité and at the Hôtel Dieu. Medical natural history and botany will be commenced, and for two months ample occupation will be found for the student.

The increase of mental alienation from demonosophy is attracting great attention at all the Asylums at Charenton; several cases have been admitted, but no less than forty unfortunate individuals have to attribute their disease to spirit-rapping, and to the new-fangled doctrines of the spiritualists.

At the Hôpital Lariboisiere, the method proposed by Dr. Chassaignac, of amputating limbs without the aid of the knife, has been successfully tried by the application of a caustic bracelet to the diseased limb; the soft parts are separated, and as soon as the bone is visible, it is cut through by the chain saw. Where patients are so feeble as to render the ordinary operation dangerous, this new plan is found eminently successful. Dr. Chassaignac has written an essay upon the subject, which gives the minute steps of his proposed addition to Surgical science.

Dr. Guyon has read before the Academy of Science a very interesting memoir upon the parasitic insect of hot countries, the Chique, *Dermatophilus penetrans*, in which he enters largely upon the parasitic insects which find their way into the skin of living beings, or inhabit any portion of the tissue. He describes the common flea very minutely, as the type of a large series of small insects, which have the power of inflicting considerable punishment upon animated beings. The mouth, he shows, is armed with three portions, included in two sheaths, which represent a conico-cylindrical beak, which case is capable of folding itself together by peculiar articulations. The body is covered by a hard envelope, almost horny, formed of several pieces articulated together. These pieces cover the thorax, and give origin to three pair of feet, admirably adapted for taking leaps. These insects undergo several changes during their existence, from an oval and white egg they come out under the shape of small worms or larvæ; they roll rapidly round upon themselves. After living for twelve days without any nourishment, they become red, and form a cocoon of fine silk, in which they become a chrysalis; and then, leaving this abode, they are formed into a perfect insect, and are fitted to become tormentors of the human race. The insect producer of the itch is of this class; it penetrates under the epidermis, making an oblique path for itself, in which it deposits a little vesicle full of limpid liquid; it is difficult to discover, because it does not remain in the centre of the elevation that it produces, but moves rapidly to another point.

GENERAL CORRESPONDENCE.

THE CASE OF RUSSELL v. ADAMS.

LETTER FROM MR. WM. ADAMS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg to forward to you a correspondence which has recently taken place between myself and Mr. Propert, and upon which it is unnecessary for me to make any comment.

I am, &c. WM. ADAMS.

5, Henrietta-street, Cavendish-square, April 22.

(1.)

"5, Henrietta-street, Cavendish-square, W., April 15, 1863.

"Sir,—The following quotation is from a letter received from a gentleman occupying a high position in our Profession:—

"'The sting of the matter is, that spite of the late trial, and notwithstanding the evidence since afforded by Dr. Cottam, Mr. Maitland, Dr. Webb, Mr. Toynbee, and others, as to the antecedents of the prosecutrix, there are some persons who still adhere to Mr. Propert, and who justify him in his apparently harsh treatment of you at the beginning of the affair, when he condemned you unheard, and refused to listen to the explanations you offered him, and who not merely condemn you by implication, but affirm positively as follows—viz., that were Mr. Propert's version of his proceedings made public he would be seen to be entirely justified, and that he is displaying great forbearance towards you in not noticing the attacks made upon him, and that his holding his tongue is safety to you. These latter expressions I have heard this week from the mouth of a personal friend of mine, a man of sense, and one whose opinion I value. He is a friend of Mr. Propert's, and as such believes that Mr. P.'s statement would crush you.'

"I wish to know whether the statement made in the above quotation be true or false.

"Is it, or is it not true that you are dealing out any such insinuations, or any insinuation whatever against my character?

"I must demand a plain and simple answer to this question, and without delay.

"I am, sir, yours, &c.

"Jno. Propert, Esq." "WM. ADAMS.

(2.)

"6, New Cavendish-street, W., April 17, 1863.

"Sir,—In reply to your letter of the 15th inst., I beg to state that I never heard of the statements alleged to have been made by friends of mine, with reference to yourself, in your letter referred to, neither do I consider myself in any way responsible for the opinions which they may entertain respecting you. I have, however, always felt much regret that a gentleman of your position in our Profession should not have availed himself of the proposal by Mr. Johnson, the attorney acting for Miss Russell, in the action brought by that person against you, contained in a letter addressed to your attorney, dated March 22, 1862, namely, 'that both the plaintiff and defendant should be examined as witnesses on the trial of the action,' and that such proposal should have been declined by your attorneys in their letter to Mr. Johnson in reply, of April 11, 1862.

"I remain, sir, yours, &c.

"JOHN PROPERT.

(3.)

"5, Henrietta street, Cavendish-square, April 18, 1863.

"Sir,—In my letter of the 15th inst., I asked you a plain question to this effect: 'Is it, or is it not, true (1) that you have said you were forbearing towards me by not replying to explanations which have been demanded from you for your conduct towards me; (2) that holding your tongue is safety to me; (3) have you implied that you are aware of allegations injurious to my character, which you withhold out of forbearance to me?'

"In your reply of April 17, you do not answer this question. I must therefore repeat my demand for an answer.

"You have introduced in your letter a subject totally irrelevant to my question, but I will remind you that, however desirous I was to be examined as a witness, and it would undoubtedly have been much to my advantage, the laws of evidence did not permit of it. You might learn this from any solicitor, and if you will refer to the published charge of the Chief Baron, of which I send you a copy, at page 30 you may see that the judge said, 'Miss Russell cannot be examined, nor can Mr. Adams.'

"Mr. Lush, in his opening address, explained this peculiarity in the law of evidence, and Mr. Serjeant Shee did not suggest that any other course could have been adopted. This, however, is a mere matter of legal procedure that has nothing whatever to do with the question to which, as a member of the same Profession, I require a plain and truthful answer.

"I am, sir, yours, &c.

"Jno. Propert, Esq." "WM. ADAMS.

(4.)

"6, New Cavendish-street, W., April 22, 1863.

"Sir,—Having, in my letter of the 17th inst., answered the questions contained in your letter to me of the 15th inst., I have no reply to make to your letter of the 18th, and I must decline any further correspondence on the subject of your letter.

"I beg to remain, sir, your obedient servant,

"W. Adams, Esq." "JOHN PROPERT.

OBITUARY.

THE DEATH OF MOQUIN-TANDON.

THE distinguished Professor of Medical Natural History in the Paris Faculty of Medicine died suddenly, apparently of an affection of the heart, on the 15th inst., in the 59th year of his age. The day before he seemed in vigourous health, and took part in the proceedings of the Academy of Medicine, presenting a memoir on Fevers, by Dr. Gibal, of Montpellier. He afterwards went into the library, and placed in the hands of Dr. Rufz, the Director of the Jardin d'Acclimatation, an address which he intended to give the next day, on the occasion of distributing the prize medals. He passed the evening at the house of a friend, and returned home without expressing any feeling of illness. Soon after retiring to rest, he was awakened by a vague feeling of pain in the region of the heart, and died almost immediately. As a botanist and zoologist, Moquin-Tandon stood in the first rank. He is best known in this country by his work on "Medical Zoology," the only book on the subject. He was the intimate friend and literary executor of Geoffroy St. Hilaire, and succeeded him as Vice-President of the Imperial Society of Acclimatation. On the day after his death the address which he should have delivered at the Jardin d'Acclimatation was read by Albert Geoffroy St. Hilaire. He was borne to his last home by representatives of the various societies of which he was a member. M. Costa attended from the Institute, Larrey on the part of the Academy of Medicine, Rayer for the Faculty of Medicine, and Pasey for the Botanical and Acclimatation Societies. In accordance

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with a wish expressed during life, the usual official eulogium was omitted at the grave. It appears that Moquin-Tandon was himself aware that he was labouring under serious heart disease, but, with curious pertinacity, refused to be examined with the stethoscope, and would not even allow his pulse to be felt. He had just prepared, at the desire of the Emperor, and at the instigation of our Society for the Prevention of Cruelty to Animals, the "Report of the Academy of Medicine on the Practice of Vivisection."

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a general meeting of the Fellows, held on Monday, April 20, 1863, the following gentleman, having undergone the necessary Examination, was duly admitted a Member of the College:—

Peter Daniel Anthonisz, M.D. St. Andrew's, Ceylon.

At the same meeting, Edward Nolloth, previously an Extra-Licentiate of the College, was also admitted a Member. Also, at this meeting, the following gentlemen, having undergone the necessary Examination, and satisfied the College of their proficiency in the Science and Practice of Medicine, Surgery, and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

Thomas Rutherford Adams, Kilnoganny, County Kilkenny, Ireland; Henry Barber, M.D. St. Andrew's, Ulverstone, Lancashire; Jas. Bishopp-I, Lawn-place, South Lambeth; Thomas Blunt, Wigston Magna, Leicester; Alfred Brocard Boulland, Merthyr Tydfil, South Wales; Hugh Campbell, St. Paul's-grove, Canonbury; Thomas Carter, Richmond, Yorkshire; John Ellerton, M.D. St. Andrew's, Wakefield, Yorkshire; Francis Hyde Forshall, Woburn-place, Russell-square; Edward Harley, King's College; Edward Bott, Bromley, Kent; Thomas Lyle, Stratton, Cornwall; Hugh Richard Duncan Mackintosh, The College, St. Bartholomew's Hospital; William Peter Rawlins, M.D. St. Andrew's, 2, Francis-terrace, Kentish town; John Reynolds, Truro, Cornwall; John Roberts, Kidwelly, Carmarthenshire; Joseph Septimus Steward, Eusemere-hill, Cumberland; Alfred Wiltshire, M.D. St. Andrew's, Malvern, Worcestershire.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary Examinations for the Diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 21st inst., viz.:—

Messrs. Denis Collins, Liverpool; Charles Etheridge, Stoke Ferry, Norfolk; Herbert Everitt, Norwich; Arthur Fenwick, Atunton; William Carter, Newbury, Berkshire; Herbert Morris Spencer, Ackworth, Yorkshire; George King, Lockford, Hants; John Spencer Ferris, Bradford-on-Avon, Wilts; Frederick John Tucker, Milton-street, Dorset square; Harry Gage Moore, Lymington, Hants; Charles Stephen Abbott Atkinson, Norwich; John Reynolds, L.R.C.P., L.S.A., Truro, Cornwall; Samuel Hall, Belper, Derbyshire; Anthony John Newman, L.S.A., Newnyn, Monmouthshire; Samuel George Freeman, Stoney Stratford; Albert Weaving, Oxford; David Howell Thomas, Swansea; Christopher Jeaffreson, Leamington; John Henry Simpson, Marksbury, Somerset; John Barrett, Bath; Thomas Carter Whyt, East Dereham, Norfolk; Henry Addison Hobbs, L.S.A., Croydon; Thomas Evans, Llandyssil, Cardiganshire; and William Quarrell, Weston-super-Mare.

At the same meeting of the Court, Messrs. Robert Edwardes and Henry Hadlow, of the Royal Marine Infirmary, Woolwich, passed their Examinations for Naval Surgeons. These gentlemen had previously been admitted Members of the College, their Diplomas bearing date respectively May 4, 1857, and June 24, 1859.

Admitted Members on the 22nd inst.:—

Messrs. John Baily Grewcock, Folkingham, Lincolnshire; William Gill, Truro, Cornwall; Basil Ringrose, Potter's Bar, Middlesex; John Hurd Wood, Notting-hill; Frederick Thomas Pagre, Hythe, Kent; Arthur Benjamin Jackson Eddowes, Loughborough; John David Frankish, Christchurch, New Zealand; Thomas Edward Mason, M.D. St. And., Dec-l. Kent; Edward Whitfeld Thurston, Ashford, Kent; John Walker Martindale, Windermere; Thomas Carter, L.R.C.P., and L.S.A., Richmond, Yorkshire; Walter Llewellyn Nash, Cheltenham; Aaron George Medwin, M.D. St. And., and L.S.A., Blackheath-road; Hugh Richard Duncan Mackintosh, L.R.C.P., Cheltenham; John New Moore, Moreton-in-the-Marsh; Walter Rundell, L.S.A., Ramsbury, Wilts; Samuel Wood, Finchley-road; Sidney Russell Hepburn, Hull; James Forman Milner, Hull, Robert Bowle, Hull; John Whitehead, M.D. St. And., and L.S.A., Preston, Lancashire; Joseph Good, Watford, Herts; and Charles Bevins, M.D. St. And., Sydling, Dorset.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, April 16, 1863:—

Charles Augustus Greaves, Wardwick, Derby; Thomas Hepple, Newcastle-on-Tyne; Edward Mahony, Richmond-road, Dalston; David Lewis Bronayron, Llangatho, Wales; Stephen Winter Fisher, Cotham-park Bristol; Charles Bevins, Sydling, Dorset.

The following gentlemen also on the same day passed their First Examination:—

Joseph Wilkinson Warburton, Royal Infirmary, Liverpool; James Walbridge Snook, St. Bartholomew's Hospital; Henry Rayner, St. Thomas's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

DAVIS, J. HALL, M.D., has been appointed Physician-Accoucheur to the Middlesex Hospital.

FOWLER, JAMES, M.R.C.S. Eng., has been appointed House-Surgeon to the Clayton Hospital and Wakefield Dispensary.

KENDALL, THOMAS MASTERS, F.R.C.S. Eng., has been honoured with the appointment of Medical Attendant on their Royal Highnesses the Prince and Princess of Wales when residing at Sandringham Hall.

MITCHINSON, GEORGE, L.K.Q.C.P.I., has been appointed third Physician to the Lincoln Lunatic Hospital.

DEATHS.

BAINBRIDGE, JOHN NATHAN, M.D. St. And., at 56, St. Martin's-lane, W.C., on April 16, aged 69.

BERTWISTLE, JOHN, F.R.C.S. Eng., at Primrose-cottage, Rosebank-road Old Ford, Bow, on April 11, aged 65.

BROOKES, WILLIAM C. F., M.R.C.S. Eng., at Warrington, Lancashire, on March 29, aged 41.

BULLOCK, JOSEPH, F.R.C.S. Eng., at Congleton, Cheshire, on March 26, aged 66.

GARLAND, HENRY, M.R.C.S. Eng., at Yoxford, Suffolk, on April 2, late of Belitha-villas, Barnsbury-park.

GUY, HY., M.R.C.S. Eng., at 1, Dorset-square, N.W., on April 14, aged 52.

LINDSAY, DR., of Liverpool, on March 18, aged 47.

STEEMAN, SILAS, M.R.C.S. Eng., at Durrington, near Worthing, on April 11, aged 66, formerly of Guildford-street, Russell-square.

WELLS, RICHARD FORSTER, F.R.C.S. Eng., at the Isle of Portland, Dorset, on April 9, aged 47, late of Artillery-place, London.

MR. HEATHER BIGG has been appointed Anatomical Mechanician to H.R.H. the Prince of Wales.

MR. JOHN BURTON, Walsall, passed his first Professional examination at the University of Aberdeen on the 6th and 10th of April.

HALL, the too celebrated plaintiff in the case of "Hall v. Semple," has applied to Sir Creswell Creswell for a divorce from his wife, on the plea of cruelty.

WILLIAM TURNER, M.B. LOND., F.R.S.E., F.R.C.S.E. & L.—On the 9th inst., Mr. Turner, of Edinburgh, was presented with a handsome claret jug and two silver salvers with the following inscription:—"Presented to William Turner, M.B. Lond., F.R.S.E., F.R.C.S.E. and L., on the occasion of his marriage, by his old and present pupils, as a mark of their esteem for him as their teacher and friend." An address was also presented at the same time, with a list of the subscribers, in number 160.

FACULTY OF MEDICINE OF THE UNIVERSITY OF MADRID.—There have been inscribed for the present scholastic year the names of 670 students, 566 Practitioners, and 3 Midwives. There are in Spain also ten other Medical schools besides that of Madrid.

PRIZE QUESTIONS OF THE MADRID ROYAL ACADEMY OF MEDICINE.—1. Exhibit the fundamental positions of a system of general pathology. 2. Pass under critical examination the methods hitherto employed for the extraction of morphia from opium, and expose the chief modifications these are susceptible of. The prize of 3000 reals (810 francs), a bronze medal, and the title of Corresponding Member, will be adjudged to the authors of the successful essays. The memoirs, written in Spanish, Italian, Portuguese, Latin, or French, must be forwarded to the Secretary of the Academy by October 1, 1863.

PRIZE QUESTION ON INSANITY.—So many cases in which the plea of insanity has been raised with very little success having of late occurred, it may interest our readers to learn that M. André has placed a prize of 1000 francs at the disposal of the Paris Medico-Psychological Society for the best essay on Moral Insanity (*Manie raisonnante*). The essays must be forwarded to Dr. Brochin, Secretary of the Society, 7, Boulevard Sébastopol, before December 31, 1863.

ST. THOMAS'S AND BETHLEHEM HOSPITALS.—At a General Court of the Governors of St. Thomas's Hospital, held on Tuesday, the 21st inst., at the Terminus Hotel,

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London-bridge, it was resolved :—"That the Grand Committee be empowered to continue the negotiation with the Governors of Bethlehem Hospital for obtaining the site of that hospital, and to submit proposals to that body either to build for them a new hospital in conformity with the plans and estimates prepared by Mr. Currey, the surveyor of this hospital, at a cost not exceeding 150,000*l.*, including the site, or to pay for the site and buildings of Bethlehem the sum of 150,000*l.*, subject to the approval of the Court of Chancery, and the sanction of Parliament and of this Court."

TRAINING INSTITUTION FOR NURSES AT BRISTOL.—A Nurses' Home, similar in character to the training institutions of London and Liverpool, has been lately opened at Bristol. Its objects are to provide trained nurses for the public, on the usual terms, and to supply gratuitous nursing to the sick poor. A home is provided for the pupils, under the direction of a resident lady superintendent; but, as thorough training can only be obtained in an hospital, the committees of the Bristol Royal Infirmary and the Bristol General Hospital have consented to admit the pupils of the Home to those institutions, and have arranged a complete course of instruction for them. Dr. Martyn, physician to the Bristol General Hospital, is treasurer to the new Institution.

THE Wiltshire papers contain long notices of the death of Dr. Richard Fowler, in the neighbourhood of Salisbury, in his ninety-eighth year. The deceased was the oldest member of his Profession, and of the Royal Society, of which body he was a Fellow, and was also one of the originators of the British Association, the meetings of which he invariably attended until within the last year or two. Only five or six years ago he made a journey to Glasgow, where an able paper which he had just written, "On the State of the Mind during Sleep," attracted much notice. Dr. Fowler received his Medical education at Edinburgh and Paris, and was well acquainted with Mirabeau and others who took a leading part in the affairs of France at that time.—*The Guardian*, April 22.

DEATHS BY FIRE.—In the fourteen years 1848 61, 39,927 persons—about eight a-day—were burnt alive in England, or were scalded to death; 1344 were infants under one year of age; 4500 were children of one and under two years of age; 9777 were between two and four years of age—and in these two years the child, not having learnt to dread the fire, incurs the greatest danger. The boys being, in nursery language, "most mischievous," are up to four years of age burnt in greater numbers than girls; but afterwards the clothes of boys are less combustible than the clothes of girls, and fewer of them are burnt to death. Between the ages of five and fifteen 6255 girls, but only 3750 boys, were burnt to death in the fourteen years. Subsequently men are exposed to fires and explosions in mines and works, and die by fire in much greater numbers than women up to about fifty years of age, after which the men grow more cautious or are partially withdrawn from danger, and the combustible dresses of women again turn the scale against them. 2122 old women (above sixty-five) in their feebleness were burnt to death in the fourteen years.—*Dr. Farr, Registrar-General's Report.*

ANTHROPOLOGICAL SOCIETY OF LONDON.—April 21.—Dr. Hunt, President in the Chair.—A paper was read by Alfred Tylor, Esq., F.G.S., F.L.S., "On the Discovery of Supposed Human Remains in the Tool-bearing Drift of Moulin-Quignon." The author quoted the accounts of this alleged discovery which appeared in the Abbevillois newspapers of April 9—18, and stated that on April 13 Messrs. Prestwich, Evans, and himself visited M. Boucher de Perthes, and observed circumstances which led them to suspect a deception had been practised by the quarrymen. The axes appeared to be artificially stained with the irony deposit of the gravel. On being put into water for a time they loosed so much changed that it seemed likely that a good brushing would have brought the whole of the colour away. Moreover, the presence of certain flints lying in a heap in the quarry, which flints had evidently been practised upon, did not escape the experienced eye of Mr. Evans. Mr. Prestwich suspended his opinion on their authenticity. Mr. Tylor considered that further examination may possibly prove whether the bone (a lower jaw) and the axes were genuine or not. At present the discovery cannot be accepted as proven, as there are strong grounds for suspecting that the reward offered by M. de Perthes has induced the quarrymen to introduce bones and flint instruments into the gravel so skilfully as to deceive even the patriarch of primeval archæology himself. Dr. Hunt entertained no doubt that the flint implement exhibited by Mr. Tylor was a forgery. Mr. Charlesworth, F.G.S., was also inclined to doubt its authenticity, and said that the reward offered by M. Boucher de Perthes would act as a strong stimulus to the perpetration of similar frauds. Mr. Carter Blake said that the appearance of the flint implement on the table was very different to that of the remains which had been derived from gravels in England. After some observations from Mr. Bendyshe, Mr. Davies, and Mr. Mackie, the Secretary read a paper, by Dr. Julius Schwarez, F.G.S., of Stuhlweissenburg, "On the Permanence of Type," in which the author demonstrated that the pre-Alexandrian Greeks uniformly recognised the doctrine of distinct foci of creation, and condemned the theory of the unity of origin of mankind. A discussion arose, in which Mr. Collingwood, Dr. De Meschin, Mr. Higgins, Mr. Blake, and the President took part. A paper was also read by C. S. Wake, Esq., F.A.S.L., "On the Relations of Man to the Lower Animals." The meeting adjourned to May 12.

ROYAL VICTORIA HOSPITAL AT NETLEY.—The sixth session of the Army Medical School was opened on the 15th by an address from Professor Longmore, Deputy Inspector-General. The lecturer commenced by a reference to the removal of the school and invalid establishment from Fort Pitt to Netley, and to a lecture he gave in October, 1860, and published in the *Army Medical Report*, in which was an account of the formation of the School, and of the purposes it was intended to accomplish. The main design of the School being to teach the means of diminishing the mortality in the army, and of reducing the number of incompetent and disabled soldiers, it was necessary as far as possible to show the Surgeons entering the army what were the effects of service on the soldiers, and in no place could this be done so effectually as in the Great Invaliding Establishment, to which sick men from all parts of the world are sent. The School was therefore established in the first instance at Fort Pitt, and now necessarily accompanied the Invalid Establishment to its new locality. The arrangements for the School at Netley were noticed, and very favourably spoken of. It was stated that since the formation of the School in 1860, three Surgeons, forty-four Assistant Surgeons, and eighty-nine candidates for commissions had passed through the courses of the School, forming no less than one-eighth of the entire number of Army Medical Officers. Reference was then made to the deaths of Drs. Schmitz and Hope, the only two gentlemen who have been at the School who have died. The former died of fever brought on or rendered fatal by his exertions during an outbreak of cholera, and the latter died of cholera. Both these young officers were most favourably spoken of, and their early deaths were deeply regretted. Allusions were then made to the best mode of study, and to the necessity of cultivating the habit of correct writing and expression, a want of which was considered to be one of the most general defects in Medical education at the present day, and the lecturer concluded a very admirable lecture by describing the arrangements for the current session. The lecture was attended by the Commandant, Colonel Wilbraham, C.B., Dr. Anderson, Principal Medical Officer, Major Ravenhill, Commanding Engineer, Major Rawlings, and other officers connected with the Hospital, and a few of their private friends. At the close of the address, Colonel Wilbraham observed that he hoped the opening of this great establishment at Netley would be productive of a twofold benefit; that it would give the old soldier worn out with the fatigues of foreign service a comfortable home and resting-place until his final discharge from the service, while for the Medical Staff, he hoped that the Royal Victoria Hospital would be what Woolwich was to the artillery—a head-quarters which all would think of with pride and affection. He concluded with a high compliment to Dr. Anderson and the other Medical officers for the zealous and kind co-operation they had given him, and for the accommodating spirit in which they had met all the difficulties of the first organisation of so large an establishment.

THE NEW TEST FOR SUGAR IN DIABETIC URINE.—The great interest excited by the announcement that the urine of diabetic patients rapidly renders the tincture of iodine colourless, has induced M. Trousseau to furnish some details which would otherwise have been left for a future memoir. In the first place, his field of observation, though

of short duration, has been of considerable extent. The urines of all the patients occupying the sixty-eight beds of the Clinique of the Hôtel Dieu, were tested every day for a fortnight in the presence of pupils and practitioners, as also urine supplied from the other wards by the students or employés. Then, there were ten nursing-women, whose urine exhibited very various characters. The fact seems decisively proved that glucosic urine has alone the property of decolourising in a few seconds a determinate and relatively considerable quantity of the tincture of iodine. The procedure is as follows:—Into a test-glass containing six cubic centimètres of urine, four drops of the tincture are dropped, sometimes five or six drops being required to produce a sufficiently deep colour of the urine. In other cases, two or three drops are amply sufficient for this purpose. The physiological or pathological circumstances rendering these different quantities necessary are not yet determined, it seeming, however, that the acute or chronic state of the malady is not the determining cause of such difference. The important clinical fact is that all morning urine, freshly collected, and acting on litmus-paper, whether derived from a healthy or sick person, will become highly coloured by from four to eight drops of tincture of iodine, and that during a variable period; while glucosic urine will very rapidly render colourless from four to even thirty-two drops of the tincture. Without impeaching the above statement, it has been objected that all urine will effect such decolouration; but the reply is furnished by comparing the effects on urine derived from any source, providing only that it is acid with glucosic urine after dropping in the iodine. It has been said that it is the uric acid which effects the decolouration, and not the glucose; but while the chemical action of the acid in effecting such change is unknown, it is very singular that the urines taken from a hundred patients should contain so little acid that they did not decolour four drops of the tincture, while glucosic urine, which generally does not contain much uric acid, alone possessed the property of rapidly decolourising from eight to thirty-two drops. M. Trousseau, and his colleague, M. Dumontpallier, have not asserted that glucose decoloured the tincture, but that this was done by glucosic urine. In fact, their own experiments have shown them that the glucose of commerce, whether added to water or to the urine of healthy or diseased subjects, will not decolour the iodine, although it reduced the blue fluid of Barreswill, and gave a reddish brown with potass. Moreover, they have found that cane-sugar, dissolved in water or urine, exerts no decolourising power; and again, some diabetic sugar, extracted with the greatest care, mixed with water or urine did not decolour the iodine. The experimenters were, then, well justified in limiting this power to natural glucosic urine, this operating in proportions which astonished all those who witnessed the decolourising action for the first time. Another curious fact is, that glucosic urine neutralises the action of iodine on starch. Thus, if into a mixture of starch and glucosic urine some drops of tincture of iodine be poured, the ordinary violet blue is not produced, the action of the iodine being neutralised by the presence of the glucosic urine. But if the number of drops of the tincture be increased, the urine assumes a beautiful blue colour, again to disappear on an excess of glucosic urine being added.

BOOKS RECEIVED.

The Consumptive Poor of South London. By Theodore E. Ladd, M.D. London: A. M. Pigott. 1863. Pamphlet. Pp. 31.

*** Dr. Ladd descants on the prevalence and fatality of consumption, and quotes the dicta of great Physicians to the purport that it is curable. He briefly alludes to the causes, or alleged causes, especially in women; and foremost amongst these he places "crinoline." He gives, in not very clear statistics, the proportion which consumption and other diseases of the chest bear to the total mortality, viz., 28 per cent. He then proposes to reduce the mortality amongst the poor "by giving him access in his hour of need to the same skill that aids the rich man in his weakness." Then he shows that the north side of the river boasts of four special institutions for chest disease, whilst the south has not one. "We want, undeniably, in south London a Hospital for consumption, asthma, and diseases of the chest." We have no objection to such an Hospital, nor yet to Dr. Ladd as chief Physician thereof, but we cannot help remarking that he makes use of some bye arguments, or admissions strangely destructive of his main purpose. His experience has taught him, that unless consumptive patients gain speedy admission to a "special" institution, positive harm results from the existence of such institution. The mental anxiety consequent on the effort to get admission; the toil of going backwards and forwards as out-patients; the journeys in omnibuses and steamers in bad weather; the cost of such journeys; foul air of the waiting-room; the time consumed in waiting to see the Physician, and then to get the medicine,—all these things do more harm to the patients than they get of good from the drugs and advice. But since it is impossible to provide Hospital accommodation for a disease which kills at least one-fourteenth of those who die, therefore, on Dr. Ladd's own showing, one additional institution may do more harm than good. Cheap railway fares and steamboats, cricket fields, athletic exercises, healthy dwellings, and something like obedience to the laws of Life,—if we could but inculcate these, we should be doing more good than by adding to the number of Hospitals.

On Ringworm, Scall-head, Baldness, and other Parasitical Diseases of the Head and Face. With an Appendix on the Constitutional Relations of Diseases of the Skin and Principles of Treatment. By George Ross, M.D., etc. London: Henry Renshaw. 1862.

*** Dr. Ross's little book is plain, easy reading. It does not contain much that is new, but it gives some information as to pathology and some general hints in treatment. In accordance with the views of Dr. Hughes Bennett and others, Dr. Ross asserts the vegetable character of the cell-growths both in ringworm and favus. The scraps of dialogue between the Doctor and his patients, which interlard the few "illustrative cases" given at the end, are undoubtedly the most original features in the book. Colloquies have been much used to enliven books of popular theology, whence we suppose Dr. Ross has taken the idea, deeming it (and few of his readers will disagree with him) necessary to do something to enliven his popular Medicine. Here is a specimen:

Subject, Lupus.
Dramatis Personæ,
Dr. R.
Patient, J. H.
Mother.

"Dr. R.: This is a serious business.—Mother: Yes, indeed, she has been ill two years; we were told at first that it was cancer (looking anxiously for an answer). Dr. R.: How did it originally appear?—Mother: Like a hard pimple inside the nose; we did not think much of it at first, but as it did not go away, we consulted Mr. —, who prescribed some ointment and lotions, and a variety of things, but it did not get a bit better. Dr. R.: Well?—Mother: We then saw Mr. —, and she seemed to improve while with him; but the skin broke at last. Dr. R.: She had better take a course of arsenic—a medicine that will require careful watching. J. H.: I have taken arsenic, and it did not benefit me. Dr. R.: How long?—J. H.: A month or two. Dr. R.: Then you must begin again." *Of course the patient is cured.*

Medical Record of Australia.

*** We are strongly inclined to criticise the treatment of dysmenorrhœa propounded by Mr. Beaney. We think that "hysterotomy and dilatation" would lead to fearfully abused results, if Mr. Beaney's practice were imitated by less skilful and cautious Practitioners. We deny that an os uteri which is "patulous, and admits the apex of the finger in the intervals of menstruation," even though it may be closed by spasm during accession of pain, is fitly treated by hysterotomy.

The Present Aspect of the Doctrine of Cellular Pathology. By William Turner, M.B. Lond. Edinburgh: Oliver and Boyd.

Catalogue of the Pathological Preparations in the Museum of Guy's Hospital. Vols. I. and II. By Samuel Wilks, M.D. Lond. London: W. Mackenzie. 1863.

The Pharmacopœias of Thirteen of the London Hospitals. By Peter Squire, F.L.S. London: John Churchill and Sons. 1863.

The Photographic Journal for April, 1863. London: Taylor and Francis.

The Medical Record of Australia, January and February, 1863. Melbourne.

Bulletin de l'Académie Royale de Médecine de Belgique for 1862. Tome V., No. 11. Bruxelles. 1862.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Dr. Cotton.—The paper shall appear as soon as possible.

A review of *Dr. Savage's* excellent Anatomical Plates shall appear next week.

Assistant will be very much obliged to the editor of the *Medical Times and Gazette* for information as to the following question:—"Assistant" attends an inquest on his master's patient. He receives the fee of £1 1s. To whom does it belong? Please reply in the forthcoming number of your Journal.—April 20. [To the master.—Ed.]

The Report of Mr. Hy. Thompson's Paper, read at the last meeting of the Medico-Chirurgical Society, on the "Successful Treatment of Severe Stricture of the Urethra by gradual Distension at One Sitting," will appear next week.

A. R.—It is not desirable to repeat club scandal and gossip. It is absurd to say that a man dies because he is bled. If a man is dying because the blood cannot pass through his lungs, the Practitioner may be justified in bleeding, to relieve the suffering organ. The fact that blood was drawn shows that the illness was a severe and hazardous one.

The following cases are in type, and will appear shortly:—Cases of Throat Dyssesthesia, with Clinical Remarks by Dr. Handfield Jones, St. Mary's Hospital; Vesical Calculus in the Female, and Excision of the Knee-joint, by Mr. Terry, Bradford Infirmary; Excision of the Hip-joint, by Mr. Hulke, Middlesex; Case of Entropium, by Mr. Spencer Watson, Royal London Ophthalmic; Amaurosis from Disease of the Cerebellum, Central London Ophthalmic; Case of Chorea in Congenital Syphilis, by Dr. Brinton, St. Thomas's Hospital; Cases of Diseases of the Spine and Spinal Cord, under the care of Dr. Brown-Séquard, Hospital for the Epileptic and Paralysed.

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The Silkworm in France.—M. Guérin-Méneville at a late sitting of the Société d'Acclimatation gave an account of the results obtained in various parts of France from the endeavours to overcome the baneful effects of the disease of the silkworm. It appears from this account that all the attempts to find a specific against this disease have signally failed; but that most practical men are now of opinion that the disorder is owing to the blight which has attacked the mulberry-tree in various districts. It is now certain that breeds brought from places where the disease of the silkworm does not exist yield a good crop the first year in the infected districts, but cannot be propagated, their eggs being tainted like those of the diseased worms. Hence breeders are obliged every year to import eggs from foreign countries, when they can find healthy ones, which becomes daily more difficult. Nevertheless, from the experiment, made with great care, it would seem that eggs obtained from diseased silkworms will produce a breed exempt from the disease in a country where the latter has not yet broken out. In order the better to compare the results obtained in different departments, M. Guérin-Méneville has established a "central laboratory of comparative sericiculture" at the school of Ailanthiculture, which he has founded at the Emperor's farm near Vincennes, where all the experiments made by the various agricultural societies of France are repeated, compared, and centralised. The acclimatisation of the silkworm which feeds on the Ailanthus, or Japan varnish tree, is progressing favourably both in France and in other parts of Europe. The Palma Christi silkworm has succeeded admirably at La Plate. That which feeds on the oak has failed in France for the present, but it is likely to succeed this year in Holland, eggs having been brought over from Japan by M. Pompe Van Meert der Woort. This silkworm is called "Ya-ma-mi" by the Japanese; it lives in a wild state in an island called Fatsy-sio, which is a place of exile. The silk it yields is made into very strong stuff, which never changes its colour, but which, on the other hand, takes no dye. This silk is a monopoly of the Japanese Government, and is not allowed to be an article of trade.

The Army Medical Department.

The *Madras Times* of February 16, in an able article on the treatment the Army Medical Department has received at the hands of Government, draws a common sense inference as to the probability of similar injustice being enacted towards the other branches of the Indian Army. The tardy restitution made in the last Warrant has had no effect in weakening the valid conclusion to be drawn from the whole history of the Department since the promulgation of the Warrant of 1858.

"There is little doubt that the battle of the Medical Service must be fought either by men not actually in the ranks, or by those who are not long enlisted, and capable, with advantage to themselves, of throwing up a service whose realities differ so widely from the promises by which they were deceitfully allured. This is not a pleasant way of getting justice. It is fatal to that zeal and love for his service, to that *esprit de corps* and high sense of reciprocal obligation, which the well-treated servant naturally feels towards a just and benevolent master. The painful grinder may be removed, we are relieved of his constant and aggravating annoyance, but we do not forget the wrench, the unpleasant operation which at length emancipated us, and we look with suspicion, for the future, on grinders in general. But the present treatment of the Medical Service in this country is calculated to make *all* officers doubtful of their future. If a warrant for one particular branch can be ruthlessly set aside, ignored, trampled upon by those to whom power has been entrusted, by executives whose acts are meant to represent those of the Sovereign, what other warrant is safe? Who shall say where the next coward blow may be struck? If acts contrary to the law of the land (for a warrant under the Queen's hand and zeal is undoubtedly law, and good law) can be repudiated with impunity, nay with triumph, we do not see what security there is for other branches of the military service. Another feature, which in the eyes of Englishmen renders these late proceedings in regard to the Medical Warrant more open to reprobation, is that they have been adopted towards a service which has, so to speak, no interest. Any similar attempt directed against the Army Department would immediately fall to the ground—the rank, position, and powerful political interest of the Army in general, render any tampering with their rights a hopeless affair; but with the Medical Department, and, we may add also, with the Indian Army, it is different. The laborious character of the Medical officer's duties, the comparatively few opportunities for distinction, the slowness of advancement, and the absence of the purchase system, to say nothing of the long preliminary education and the unfashionable nature of the study, have always kept men of wealth and titled rank from entering that profession. It is not "*distingué*," and the remuneration bears far too low a proportion to the labour. It has therefore few friends, and becomes thus proverbially amenable to all the hard hits which inconsiderate power may choose to administer. To a certain extent the Indian army suffers in the same category. It is an army for work—it is doomed to dwell in tropical jungles, and is therefore not fashionable. Its toes may be trodden on, and it may get an occasional kick without any great dread of the consequences. All this being contrary to John Bull's idea of fair play, we may yet have hope for the Indian services. If honest John only becomes thoroughly acquainted with the real state of affairs, he will soon take the proper steps to set matters right. He is slow to move, and glad to escape the trouble of thinking, if others will think for him, but when once thoroughly roused, as we have seen—at the miseries in the Crimea, in the Indian famine, in the Lancashire distress, the Slidell and Mason affair, etc.—his acts are very much to the point, and their issue far from doubtful. We believe, then, 'publicity' to be the best friend of the Indian services. They must get their case thoroughly made known to the home public. In this lies their hope; and, if Parliament will only honestly take up the question, their present and future rights are secure."

Medical Advocates.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Dr. Robert Barnes explains his evidence against Dr. Halford, in the action for malpraxis with the midwifery forceps, by stating that his evidence was founded upon the hypothesis of a contract to call in certain other Practitioners in case instruments should be required. On referring to the report in *The Times* of June 21 and 22, and the *Medical Times and Gazette* of June 29, 1861, I find that "Dr. Barnes and others were called to show that the use of instruments in a case of the present kind, without assistance, was wrong; and that the injuries were caused by the pressure of the forceps upon the sciatic nerve; and that such injuries could not have resulted from natural causes; and that the defendant did not administer the chloroform in a proper manner."

Now, what connection can exist between a question of contract and this "expert" evidence I am simply unable to comprehend.

Gattie *v.* Halford is a case of much greater importance than that of Bromwich *v.* Waters; the latter is one where expert evidence can seldom be used to strain a case against a particular person; but if so-called "experts" are to be found, who, for the sake of a fee, or for mere notoriety, will propound such opinions as those of Dr. Barnes, no man can practise medicine without being in constant jeopardy of some frivolous, but ruinous, action, and it behoves the Profession to at once check such proceedings by refusing to meet the performers. I am, &c.

35, Finsbury-circus. James Edmunds, M.D.

Puffin Island.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The following account of a sad shipwreck on the Cheshire coast may possibly interest many of your readers:—

From the best information I can gather it appears that two wretchedly rigged boats, despite of Admiral Fitzroy's cones, set out from London for a trial trip to the Welsh *Waters*, the one, as far as I could see through a strange instrument called a speculum (which is highly thought of here), looked like a Quaker boat, the other like a Ram's Bottom, or Monitor. A violent storm arose, which due precaution might have prevented the luckless craft encountering. The Quaker boat was driven almost to pieces on a *Lee* shore, whilst the Ram's Bottom sank more peacefully, from the thickness of its bulkhead, etc. The utmost efforts to save any valuables from the Quaker were made by an intrepid *Waters-guardsman*, Welsby, who dived in the bell. The boat he strangely found *faced* with *brass*, but it had no name, *nor age*, and contained nothing but an old log-book, *ten years old*, which, however, was utterly at variance with the ill-fated boat's present course, and was scrawled over with relics of Russian and Scotch.

The angry *Waters* are now peaceful; they have closed upon the wrecks. They saw them—are still—and satisfied. I am, &c.

Cysuro.

The Consolidated Life Assurance Company.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I beg to enclose you a form of application sent to me by the "Consolidated Life Assurance Company":—

"Sir,—A proposal having been made to this Company to effect an assurance on the life of Mr. ———, and he having made reference to you for information as to the general and present state of his health, I have to request that you will *(for his benefit)*, at your earliest convenience, write answers to the annexed queries, and transmit the same according to the address on the back hereof.

"Whatever information you may be pleased to communicate will be considered 'strictly confidential.'

"I am, Sir,
"Your most obedient servant,
"D. MacGillivray, Actuary and Secretary.

"45, Cheapside, London, April 9."

To this application I decidedly declined to accede, unless I were paid the usual fee of one guinea. Four days have elapsed, and I have received no answer; I therefore hand the office over to your valuable Journal for a little beneficial ventilation, which I hope will have the effect of teaching it that Medical men are not to be mulcted of their just demands by any body of directors who may choose to make such unjust regulations.

I am, &c. S. Day Goss, M.D., L.R.C.P.

24, Newington-place, Kennington-park, April 16.

Compulsory Burial.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In a report of the proceedings taken at the Westminster police-court, in reference to the refusal of a mother to have her child buried, and published in your Journal of the 18th inst., you remark—"If Dr. Aldis had but carried out the provision of the Nuisances Removal Act for England, 1855, Section 12, and taken out a summons against the owner for having his premises in such a state as to be a nuisance, and injurious to health, the difficulty might have been got over more quickly."

Permit me to explain some of the circumstances of the case more fully, when I think it will appear that I could not have acted more promptly. I reported the house, No. 12, Spring-gardens, Pimlico, to be infected with small-pox on April 8, upon which the inspector visited the premises, and served a notice on April 11 for their being cleansed forthwith. The assistant overseer informed me on the 10th, that the father of the child had applied at the workhouse the evening before for the child to be buried by the parish, but when the man who has charge of the funerals was sent, the mother refused, and behaved in the manner already described. The inspector hearing of this, went to the house to persuade her to have the child buried, when she consented, which caused a little more delay. But when the man went a second time to remove the body, she again refused. I also went afterwards, hoping to persuade the mother to allow the child to be buried, but she declined. The overseer complained to me again on the 11th, when I told him that I had no power under any Act to cause the dead body to be removed, and advised an application to a magistrate, which I made to Mr. Selfe on the morning of the 12th with a satisfactory result. I may add that it is always usual to issue a notice before serving a summons, and as the owner was willing to cleanse the house, the latter process became unnecessary.

I am, &c. C. J. B. Aldis, M.D.,
Medical Officer of Health for St. George's, Hanover-square.

1, Chester-terrace, Chester-Square, S.W., April 20.

Chinese Gelatine, or "Yan Yan."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I enclose a specimen of the above very valuable gelatinising substance, which I have no doubt will come into general use when better known.

"Yan Yan" is procured by boiling a sort of moss that grows on the house-tops in various parts of China, and squeezing the product through a cullender into cold water; it is then taken out and dried in sand. It is used commonly by the Chinese to thicken soups, etc., and the simplest

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way of preparing it is to soak two drachms (ʒij) in a little cold water for two or three hours till it swells, then boil it over a slow fire in a porcelain saucepan with a quart of water until dissolved, and flavour with wine, sugar, etc., to taste. On cooling it forms a stiff jelly, which sets in any weather.

The cost of this preparation in China is about two shillings and sixpence per pound, and, as it has ten times the gelatinising power of either isinglass or gelatine, and is particularly light and bulky, it will be found most economical; two ounces and a quarter being required of isinglass to make a quart of jelly, while ʒij of the Chinese gelatine is amply sufficient to make the same quantity. This gelatine has one great advantage over Irish moss, being quite devoid of taste or smell, and can therefore be flavoured to any taste, as many persons (especially children) object to both the taste and smell of the Carragheen. I am informed by intelligent Chinese that the jelly if made strong will keep good for three or four months.

Trusting you will bring this matter before the Profession by giving space in your journal for the above, and allow the specimen to be inspected by any persons who may feel interested in the subject.

I am, &c. A. W. Thornton.

Muswell Brook, New South Wales, Feb. 2.

P.S.—I have written the Chinese name of the article on the wrapper.

Bromwich v. Waters.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The late trial of Bromwich v. Waters brings forcibly to my mind advice given me some years ago by a distinguished obstetric Physician "never to examine female patients with the speculum without the presence of a third person." It furnishes ample proof of the soundness of the advice, and it is to be desired that this painful case should at least have the good effect of making Medical men in future take care to have a third party present whenever uterine disease requires the use of the speculum. This simple precaution would be a guarantee both for Doctor and patient. Accusations of improper conduct on the part of Medical men in such cases only receive a colour of probability from the privacy of the consultation, and the presence of a third person must be the best means of rendering it impossible for artful and unprincipled women to bring charges of misconduct against respectable Professional men. There is one point in the evidence of the above case which appears to be of importance, from its bearing on the physical proof of female chastity. Dr. Waters is reported to have said in his evidence on the trial "he was sure from the first examination he made of Mary Whalley that she was not a virgin." I confess I have not hitherto been aware that examination per vaginam could furnish physical proof that a woman was not a virgin. It is, however, never too late to learn, and I should be glad if some of your numerous readers would tell me how they would prove from examination of the vagina in the case of an unmarried woman who had not had a child the fact that she was not a virgin. The absence of the hymen is no proof, nor does the smaller or larger capacity of the vagina prove anything. Burns in his work on "Midwifery" quotes a case in which a woman, aged 51, who had been a prostitute from the age of 15, had a vagina small as that of a virgin, and the same remark has been made of other prostitutes on the contrary side. I have myself had a case of a young unmarried woman of good reputation, who consulted me for prolapsus uteri brought on from working hard; she had a large pelvis and capacious vagina. This was evidently a case of natural formation, but I have no doubt the size of the vagina is sometimes increased by vicious habits, independently of sexual intercourse. A Medical man may from examination per vaginam think it highly probable that his patient is not a virgin, but he must not confound the evidence of probability with that of demonstrative proof. That the extent of our knowledge on the subject should be clearly ascertained is certainly desirable, not only from scientific, but from moral considerations, lest, setting too much value on the want of supposed proofs of virginity, we should unwittingly blast the fair fame of innocent and modest women.

I am, &c. M.D.

April 18.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your Number of April 11, in commenting upon this case, you remark:—"Yet there is a singularity in the circumstance that a middle-aged lady, living in a country town, whose counsel remarked that she was of no great means, and that the expenses of a lawsuit must be seriously inconvenient to her—to say nothing of the worry and turmoil—should think of going to the enormous expense of such an action as this. It would interest us all very much if all the motives and advice, legal and otherwise, which prompted a step so momentous, could be fully known and analysed."

No doubt all this appears very singular to you, sitting in your editorial chair some two hundred miles from the seat of war; but here all is known and fully appreciated within and without the Profession.

The plaintiffs were governesses in a highly respectable family, living on small means with a brother now deceased, whose little property they came into at his death. Happy in the acquirement of some additional means, they were happier still in the obtaining and keeping the fast friendship of a wealthy banker's daughter, who, contrary to the advice and even the remonstrances of her kith and kin, persisted in bringing the malefactor to justice, confident in the success of her scheme, backed as it was by the Malvern Jupiter, at once her friend and adviser, and the ill-concealed foe of the Doctor. That Miss Bromwich really retained Mr. Serjeant Shee; that she employed detectives in various parts of the country to sift, and, if possible, find a flaw in the Doctor's character, no one here believes. Indeed, Miss Bromwich herself stated to several ladies, at an early stage of the business, that "a kind friend" was paying the expenses of Whalley's being put under Dr. Gully's treatment, as they (Miss Bromwich and her sister) could not afford to do so. If they, then, could not conveniently pay the homœopathic fees, can it be supposed that they could meet such an allopathic dose as would necessarily be administered to them by Mr. Serjeant Shee, and a perfect army of other legal gentlemen (one specially retained) and by Medical and other witnesses? The very idea is absurd.

Leaving, however, the ladies to the sweet reflections that a conscientious discharge of duty ever leaves behind it, and to the sober realities that will present themselves to them in due course on the appearing of the Little Bill to be provided for the inexorable lawyers, I will pass to the more pleasing subject of calling your attention to a couple of resolutions which were unanimously passed at a large and influential meeting of Dr. Waters' friends, held in Chester on Monday week:—

Proposed by the Rev. F. Ford, seconded by the Rev. J. Montgomery,—"That we, the undersigned, hereby concurring in the justice of the verdict pronounced by a jury of his country, desire to express our warmest sympathy with Dr. Waters, and our undiminished confidence in his high moral and Professional character."

Moved by General Hervey, seconded by Thomas Helps, Esq., "That this meeting deeply sympathising with Dr. Waters in the painful ordeal through which he has passed, and aware of the heavy legal expenses necessarily incurred by him, deem it proper and fitting that a subscription be entered into to assist him in defraying the same."

These have not ended (as the Malvern cure frequently does) in cold comfort, but already between £200 and £300 of subscriptions are announced, including amongst the contributors the bishop, the dean, clergymen, the Faculty, and others of every shade of opinion, religious and political.

Perhaps your readers may be now tired of this business; if you think they are not, I may, perchance, address you on a future occasion.

I am, &c.

A Country Practitioner not Ten Miles from Chester.

Beer v. Coffee.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Nothing in my opinion would do more to elevate the working classes of this country than the greater use of coffee as a stimulant. I say as a *stimulant*, because people in general have no correct idea of using it in that form simply. They mix it with various ingredients of a heavy, cloying character, such as chicory, brown sugar, and hot milk, which make it more or less nutritious, but heavy and unwholesome to the full stomach, and which mask its pure and beneficial action on the brain.

If coffee is to be used to satisfy hunger, or as part of a meal at which hunger may legitimately be appeased, of course it should be treated in an appropriate way. For this purpose it may, if the drinker likes, be mixed with chicory, dandelion, brown sugar, burnt sugar, "finings," and the other adulterating articles, and, above all, it should be mixed with abundance of hot milk. This constitutes part of a refreshing and substantial meal—a proceeding intended to appease natural bodily hunger; and along with the coffee and milk, bread, butter, meat, bacon, eggs, and similar articles of nourishment are most appropriate.

But people want refreshment at times which shall not be of this solid, filling description. There is what the poet calls, in the old song, "Drink to me only with thine eyes,"

"The thirst that from the *soul* doth spring."

Man is a social animal, and requires not merely food which shall enable his bodily machine to go through its daily amount of toil, but a kind of sustenance which shall cheer the mind, promote the flow of talk, make him fit for good fellowship, dissipitate care and its attendant selfishness (for a man who is brooding over his own troubles is, *ipso facto*, selfish), and excite feelings of benevolence. In fact he wants *stimulants*.

It is of no use to argue, as some persons do, that man "ought not to want stimulants," just as they say, too, that he ought not to want music, fine clothes, and the like. To the man of sense the two facts suffice, that man is led by instinct to seek them, and that Providence in its bounty has furnished them. We may as well preach to the wind as say that stimulants ought not to exist, or shall not be used.

Then the question comes, What stimulant? And at present the working man has only three to choose from—spirits, beer, and tobacco. These he can get in abundance anywhere, and often of good quality; they serve the purpose desired, but, unhappily, are attended with the most terrible dangers in the temptation to abuse.

Tea is accompanied also with disadvantages if used as a pure stimulant. But this I will not enter upon now. But to coffee there is no objection. It is aromatic, warming, exhilarating, sets the brain at work, inspires social and vivacious ideas, and fulfils all the conditions requisite for a *stimulant* for men who have had food enough, and want to enjoy themselves as rational and social beings.

But how should it be taken as a stimulant? Why, certainly hot, strong, clear, with a little pure white sugar. In this state it stimulates stomach and brain, and adds not a feather's weight to the labour of digestion. With coffee like this, working men would find their supper digest, and their talk genial and fluent, and would be disposed to enjoy their book, music, or any other rational amusement.

On the other hand, unfortunately, most people know coffee only as a weak, lukewarm, opaque, heavy mess, cloying to the stomach, and damping the nervous energy.

You may see people, even after good dinners at good houses, *horribile dictu*, after soup, fish, salad, entrées, roti, fowl, jellies, sweets, cheese, ices, dessert, and half-a-dozen kinds of wine, commit a last outrage upon their unfortunate stomachs by gulping down a mess of lukewarm coffee with sugar and milk. What such people are thinking of at the time, or what their dreams at night, or why those stomachs do not burst, it were vain to inquire. What is wanted after a good luxurious dinner is the little cup of coffee, hot, strong, and clear, as a fillip,—not the nutritious mess that would do for a schoolboy's breakfast. But in this, as in most other things, fashion, or supposed fashion (for it is not real; real taste demands the *café noir*, with its *chasse* or *gloria*,) overrides common sense.

Still more is the mistake made of supposing that working men can find in the thick, unstimulating mess presented to them as *coffee* at common coffee-houses, railway refreshment-rooms, and the like, anything to counterbalance their love of, or need for, beer, spirits, and tobacco. A man, whose stomach is full already, does not need hot stuff like soup, but the clear, bright, aromatic, nerve-compelling stimulant.

Some time ago, I entered a coffee-room, which is an appurtenance, and a most rational one, to a "mission house," established for the purpose of improving the morals and manners of the labouring class in this parish. There was a comfortable room, newspapers, some religious placards, rather too glaringly displayed on the walls, and everything well meant. I sat down, and ordered a penny cup of coffee after some interesting talk with the superintendent on the means of promoting the welfare of the working classes, and weaning them from the public-house. But when the coffee came, all my spirits fled at the sight of it. Not poor Mr. Pallett, in "Peregrine Pickle," could have felt greater horror at the sight of the *sillykickaby* which was offered him at the "feast after the manner of the ancients." I tasted a little drop, opaque, treacly, and vapid. To swallow it would have been *felo de se*; how to get rid of it without offence to the worthy superintendent who was talking to me I could not tell. At last, when his back was turned, I offered it to a groom who sat on the same bench. He shook his head emphatically in refusal. I, as a last resource, left the table, seized my hat, and fled.

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As I walked away, I could not help asking myself if it were reasonable to expect working men to leave the cool pewter pot, with its frothy, tonic, appetising potation, for such a sickly and hypocritical decoction of brown paper and treacle?

It would be perfectly easy to give a good cup of coffee for a penny. The superintendent of a coffee-shop might roast and grind the berry, and give half an ounce of coffee to a third of a pint of boiling water, and two lumps of white sugar. This would be worth drinking. This might compete with the half-pint of beer which a penny will purchase, and which, in my judgment, is a good investment for any poor man's penny.

It is much to be hoped that the promoters of working men's clubs and dining-rooms will not taboo good table-beer, not, at least, until Pall-Mall can show a teetotal club for the aristocracy. But whilst we do not forbid table-beer at meals, we should endeavour to show that, for purposes of stimulation, for the purpose which wine answers at the rich man's table—that is, to promote jollity, good feeling, and social talk—good coffee is better, cheaper, and more agreeable, as well as safer than gin-and-water and tobacco. And to this end the working people must have something in the shape of coffee that shall be worthy of the name.

As your ably-conducted Journal seems to take an interest in all social questions, I venture to ask you to insert the above.

I am, &c.
R. Druitt,
Medical Officer of Health to St. George, Hanover-square.

The Silvester Method in Chloroform Accidents.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—As we have nearly worked out the problem of the cause and the best mode of prevention of fatal accidents from chloroform, perhaps you would bear with me for a few more remarks on the note of the 11th inst. of Dr. Silvester, and the four last deaths in London from that agent.

I have individually studied with some care over ten thousand administrations of chloroform. I have never had any sort of chloroform accident in my own practice: my views are set forward in the three last volumes of the *Transactions* of the British Association, as the Medical journals, except yours, steadily refuse to state, or misrepresent, what is doing about anæsthetics. Dr. Silvester suggests the elasticity of the ribs as useful to get the chloroform out of the air in the lungs in impending or actual death from chloroform, but he forgets the chloroform is not in the air, but is in the blood of such a patient, and there is probably little or no air at all in the lungs, as the respiration will probably have ceased for five, or seven, or ten minutes, at the exact time when the "Faradisation" current is so useful in producing full inspiration and breathing. Of course everyone tries the Silvester method in such accidents. It was tried in the recent case, the subject of his remarks, but it is not sufficient I believe if continued for any time, too, it pushes mechanically a large quantity of blood out of the liver and portal vessels into the cava and right auricle. The very thing we do not want, as the death is in reality in asphyxia (apnœa)—cases attended by, if not directly caused by this enormous mechanical congestion of the right cavities The "blood stands still," as my friend Mr Paget once said to me, and we can only give it a fresh start through the pulmonary artery by immediate full action or dilatation of the lungs and respiratory muscles. This, in hundreds of experiments on the lower animals, is observed to be best effected by the Faradisation current (with intermittent broken circuit) through the phrenic nerve and diaphragm.

M. Flourens has just pointed out this marked congestion of the veins of the cerebral membranes as diagnostic of chloroform coma as distinguished from the coma of apoplexy. The cause, in fact, is the same—the *remora*, or back tide of blood in the veins (partly from the mechanical efforts at resuscitation, by rubbing the limbs, etc.), the right side of the heart engorged and not receiving the blood from the jugulars, where it stagnates. The left or systemic side of the heart, on the contrary, continuing active to the last, even after the pulse is gone.(a) I must confess I do not like the violent Silvester pressure on the ribs of patients under chloroform; they groan as if in great agony from it; they describe it as a hideous nightmare pressure worse than all the agonies of the operation without chloroform at all. I think I now begin to see that in Hospitals and by Dentists' assistants chloroform is given too often as a matter of routine, and one set of nightmare agonies are thoughtlessly substituted for the old sharp cut of the Surgeon's bistoury, not half so bad without chloroform. I believe the "Faradisation" current differs from all other varieties of galvanism, as vaccination is milder and differs from small-pox, and it makes chloroform now quite safe; but the Silvester method is imperfect.

A few words will prove useful as to the latest deaths from chloroform in London. One is noted last week. A young woman, aged 29, Selina L., Edgware-road, who died in an instant, apparently of syncope, as she was about to have a small tumour of the gum (epulis?) removed No one to blame, it being one of those singular and miserable cases of idiosyncrasy that can scarcely be anticipated. Dr. Lankester made some excellent remarks, as is his wont, at the inquest. Would that all our coroners were like him. A second case of death was at Guy's Hospital. A man put under chloroform for a dislocation to be reduced; he bore the anæsthetic one day very well, but the reduction was not effected, and he was desired to come again, I think, next day, but he was only half way under chloroform when his death, as a flash of lightning, suddenly occurred. The third case was removal of a small tumour, I believe an asphyxia case. This and the fourth, somewhat doubtful, are described in the *Social Science Review*. They all bear out the chief points I have urged of the operations being usually of a slight or trivial kind, or connected with tendinous tissues about joints. I see an erroneous case (typical !) in a book of Casper's, translated by the Sydenham Society. An old man, in uttermost exhaustion, pulse above 110, has his scapula cut out or removed by a tremendous surgical operation, and dies of shock and exhaustion seventeen hours after! This is not at all a death from chloroform, though it is certain to be copied as such into our manuals of toxicology. The deaths from chloroform, in a word, are all sudden; they are twice as numerous in male adults as females; they all occur in trivial operations; they are nearly unknown in children. Syncope from injury of tendinous tissues (as long ago referred to by John Hunter), syncope from touching the urethra with sounds, latent delirium tremens, etc., are the most frequent sources of the syncope seizures which form, perhaps, 40 per cent. of all the cases. This at least is what thousands of operations on the lower animals and careful deductive cataloguing of 200 deaths in the human subject point to.

I am, &c.
Sackville-street, W., April 20. Charles Kidd, M.D.

(a) A coroner's jury, the other day, and the coroner, held that the pulse came from the right ventricle, that there could be no engorgement as there was a pulse, and were within an inch of bringing in a verdict of malpraxis against an innocent Surgeon, and three Medical journals supported this dictum!

COMMUNICATIONS have been received from—

Dr. L. Emanuel; Dr. Thomas Hillier; Dr. S. Day Goss; Dr. A. W. Thornton; Dr. R. Dundas Thomson; Apothecaries' Hall; Dr. R. Payne Cotton; Dr. T. M. Ashton; Dr. Charles Kidd; Mr. Hulme; A Surgeon; Dr. Rhodes, St. Mary's Hospital; Bradford Infirmary; Dr. Buchanan; Mr. Smith, King's College Hospital; Dr. Hillier; Dr. Russell, Birmingham; Mr. Langston Parker; Dr. C. J. B. Aldis; Western Medical and Surgical Society; Assistant; Dr. John Burton; Dr. T. West; Dr. W. H. Moor; Dr. A. Stookes; Dr. James Edmunds; Mr. R. J. Rogers; Dr. P. H. Williams; Cysuro; Dr. Andrew Smart; Dr. John Struthers; Royal College of Physicians; Medical Society of London; Royal Medical and Chirurgical Society; Mr. James Robertson; Mr. W. Pursell; Dr. Andrew Wilson; Mr. T. M. Kendall.

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 18, 1863.

BIRTHS.

Births of Boys, 1052; Girls, 1028; Total, 2080.
Average of 10 corresponding weeks, 1853-62, 1797·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	746	691	1437
Average of the ten years 1853-62	596·2	570·3	1166·5
Average corrected to increased population..	..	..	1283
Deaths of people above 90	..	..	6

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	11	19	10	1	8	11	2
North ..	618,210	9	9	26	1	17	15	4
Central ..	378,058	10	5	9	3	5	8	4
East	571,158	20	6	19	4	18	13	3
South ..	773,175	12	17	21	2	23	20	2
Total.. ..	2,803,989	62	56	86	11	71	67	15

APPOINTMENTS FOR THE WEEK.

April 25. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's 2 p.m.; Charing-cross, 1 p.m.

Royal Institution, 3 p.m, Professor Max Müller, "On Language."

27. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

Medical Society of London. Special General Meeting, 8 p.m. Clinical Discussion, 8½ p.m.

28. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Royal Medical and Chirurgical Society, 8½ p.m Dr. A. T. H. Waters, of Liverpool, "On a Remarkable Case of Injury of the Head." Dr. T. K. Chambers, "On the Therapeutics of Continued Fever." Dr. H. Weber, "On the Pathology of Crura Cerebri."

29. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

30. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

May 1. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8 p.m. Meeting of Council.

Western Medical and Surgical Society of London, 8 p.m. Annual Meeting.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday (to-day) at 2 p.m.:—

By Mr. Fergusson—Lithotrity; For Caries of the Sternum.

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PICHOT & MALAPERT'S CARBONIFEROUS PREPARATIONS.

Extensively used in all the French Military and Civil Hospitals.—(*See Notice in* MED. TIMES AND GAZ., *March* 7, 1863, *p.* 248.)

CARBONIFEROUS CHARPIE, in 1 lb. and ¼ lb. boxes, 7s. 6d. per lb.; Bags of ditto, ditto, each box containing 10, 4s. per box.
CARBONIFEROUS PAPER FOR COMPRESSES (containing 100 Dressings), 2s. 3d. per packet;
Ditto, ditto, large size (containing 25 Dressings), 1s. 4d. per packet; Ditto, ditto, Tissue, 9d. per sheet.

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Army and Navy Regulation Cases, Pocket Cases, from 14s. each; Dissecting Cases, at 8s. 6d. and 10s. 6d. each.

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IS THE ORIGINAL & GENUINE, WAS ESTABLISHED A.D. 1746,
And is Prescribed, with the greatest success, "by the highest authorities," for Fevers, Ague, Cerebral Congestion, Rheumatism, Chills, Influenza, &c. &c.
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Prices for Dispensing—1 oz., 9s.; ½ oz., 3s. 4d.

NEPENTHE, OR ANODYNE TINCTURE.

OBTAINED EXCLUSIVELY FROM OPIUM.
Prepared only by FERRIS, TOWNSEND, LAMOTTE, & BOORNE, Manufacturing Chemists and Wholesale Druggists, Bristol.

MESSRS. FERRIS AND COMPANY take leave to direct the attention of the Medical Profession to a selection from various reports upon the use of this most valuable form of Opium. NEPENTHE may be used with perfect safety in every case where an opiate is indicated; and, from the peculiar process by which it is prepared, it is deprived of all constituents which render the Tincture Opii, and most other forms of opium, in numerous instances, wholly inadmissible. NEPENTHE is always of uniform strength, and, in this respect, possesses high advantages. It may be procured direct from the Manufacturers, Messrs. FERRIS and COMPANY, Bristol, or through the leading Wholesale Druggists in London, and from most respectable Dispensing Chemists in Great Britain and Ireland. Every bottle has a fac simile of Messrs. FERRIS and COMPANY'S signature pasted over the Cork, to imitate which is forgery.

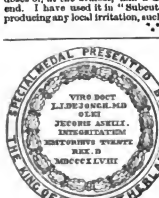
The price of NEPENTHE to the Profession is 8s. per lb., and the dose the same as the Tinctura Opii.

Report from F. PORTER SMITH, Esq.

I have pleasure in bearing testimony to the decided advantages possessed by Messrs. Ferris and Company's preparation of Opium called "Nepenthe" over other preparations of that important drug. I have used it for several years in Cancer of the Uterus, continuing it, with scarcely abated advantage, as a sedative, in one such case, for the long period of eighteen months, in doses of, at the utmost, half a drachm, which served the purpose to the end. I have used it in "Subcutaneous Injection" for Neuralgia, without producing any local irritation, such as abscess, &c. In the cases of unusually severe "after-pains" in connexion with labour, I can strongly recommend and endorse its successful and satisfactory employment. I have never met with any unpleasant symptoms, such as sometimes occur in some constitutions after the administration of morphia, &c., during an extensive use of this valuable addition to that "Practical Pharmacopœia" which waits for no "imprimatur" from College or Council.

F. PORTER SMITH, M.B. Lond.,
Associate of King's College, London, &c.
Evercreech, March, 1862.

*** Fresh Reports will be published in the Medical Journals from time to time.—Bristol, 1862.



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(*Knight of the Order of Leopold of Belgium*)
LIGHT-BROWN COD-LIVER OIL.

SELECT MEDICAL OPINIONS.

Sir HENRY MARSH, Bart., M.D., Physician in Ordinary to the Queen in Ireland:—"I consider Dr. de Jongh's Cod-liver Oil to be a very pure Oil, not likely to create disgust, and a therapeutic agent of great value."

Dr. BARLOW, Senior Physician to Guy's Hospital:—"I have been well satisfied with the effects of Dr de Jongh's Cod-liver Oil, and believe it to be a very pure Oil, well fitted for those cases in which the use of that substance is indicated."

Dr. LANKESTER, F.R.S., late Lecturer on the Practice of Medicine, St. George's School of Medicine:—"I consider that the purity and genuineness of this Oil are secured in its preparation by the personal attention of so good a Chemist and intelligent a Physician as Dr. de Jongh, who has also written the best Medical Treatise on the Oil with which I am acquainted. Hence I deem the Cod-liver Oil sold under his guarantee to be preferable to any other kind as regards genuineness and medicinal efficacy."

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Diabetes.—Blatchley's Bran Biscuits, prepared according to Dr. CAMPLIN's prescription, (see "Camplin on Diabetes.") The Bran used by E. Blatchley is carefully prepared, rendered free from starch, and finely ground by steam machinery.
THE PREPARED BRAN for making the above may be had in any quantity of E. BLATCHLEY, Confectioner, 362, Oxford-street, three doors from the Pavilion. Established 23 years.
Full particulars for making the diet will be found in Dr. Camplin's work.

TO THE MEDICAL PROFESSION.

Charcoal Biscuits, Manufactured from the purest Vegetable Carbon, affording speedy relief to persons suffering from Bile, Indigestion, Flatulency, &c. Sold only in tins, at 1s., 2s., 4s., and 8s. each, by J. L. BRAND, Sole Manufacturer, 2, Wigmore-street, Cavendish-square, London. Wholesale Agents, Messrs. MAW and SON, Aldersgate-street, E.C. Chemists and others allowed a liberal discount. Post-office Orders made payable at the Vere-street Branch.

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ORIGINAL LECTURES.

PROFESSOR HUXLEY'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

Lecture V.

(*Being the Fourth of Six Lectures on Classification, and on the Characters of the Principal Groups of the Animal Kingdom.*)

(Continued from page 419.)

All embryonic *Reptilia* are provided with an amnion and an allantois, like those just described in the fœtal fowl. In the embryonic state also they possess visceral arches and clefts, but no respiratory tufts are ever developed in the arches, nor are reptiles endowed with an apparatus for breathing the air dissolved in water at any period of their existence. The skull of all *Reptilia* is articulated with the vertebral column by a single condyle, into which the ossified basi-occipital enters largely (Fig. 3). Each ramus of the lower jaw is composed of a

Fig. 3.

Fig. 3.—The occipital condyle of a Crocodile's skull viewed from behind. B.O, Basi-occipital; E.O, Ex-occipital; S.O, Supra-occipital.

number of pieces, and articulates with the skull, not directly, but by the intervention of a bone—the os quadratum—with which the hyoidean apparatus is not immediately connected. (Fig. 4.)

Fig. 4.

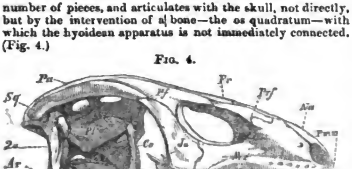

Fig. 4.—The skull of a Lizard (*Cyclodus*). *D D*, Dentary piece of the lower jaw; *Qu*, Os quadratum; *Sq*, Squamosal.

The fore-limb of Reptiles never takes the form of a wing, such as is seen in Birds, the "wing" of the remarkable extinct flying reptiles, the *Pterodactyles*, being constructed on a totally different principle from that of a bird. In no known reptile, again, are the metatarsal and tarsal bones anchylosed into one bone.

In all *Reptilia* the greater and lesser circulations are directly connected together, within, or in the neighbourhood of, the heart, so that the aorta, which is formed by the union of two arches, contains a mixture of venous and arterial blood. The blood is cold, and the majority of the blood-corpuscles are red, oval, and nucleated.

The bronchial tubes are not connected at the surface of the lungs with terminal saccular dilatations or air vesicles.

When the epidermis of *Reptiles* is converted into horn, the corneous matter takes the form of broad plates, or of overlapping scales, neither plates nor scales being developed within pouches of the integument.

The class of *Aves* consists of animals so essentially similar to reptiles in all the most essential features of their organisation, that Birds might fairly be said to be merely an extremely modified and aberrant Reptilian type.

As I have already stated, they possess an amnion and a respiratory allantois, and the visceral arches never develope branchial appendages. The skull is articulated with the vertebral column by a single condyle, into which the ossified basi-occipital enters largely. Each ramus of the lower jaw, composed, as in Reptiles, of a number of pieces, is connected with the skull by an os quadratum, to which the hyoidean apparatus is not suspended.

In no existing bird does the terminal division of the fore-limb possess more than one digit terminated by a claw, and the metacarpal bones are commonly anchylosed together, so that the "manus" is of little use, save as a support for feathers.

In the hind limb of all birds the tarsal and metatarsal bones become more or less completely anchylosed, so as to form a single osseous mass, the "tarso-metatarse."

The greater and lesser circulations of birds are completely separate, and there is only one aortic arch, the right. The right ventricle has a muscular valve. The blood is hot, hotter on the average than that of any other vertebrates, and the majority of the blood-corpuscles are oval, red, and nucleated. The bronchial tubes open upon the surface of the lungs into air-sacs, which differ in number and in development in different birds. Lastly, the integument of birds is always provided with horny appendages, which result from the conversion into horn of the cells of the outer layer of the epidermis. But the majority of these appendages, which are termed "feathers," do not take the form of mere plates developed upon the surface of the skin, but are evolved within sacs from the surfaces of conical papillæ of the dermis. The external surface of the dermal papilla, whence a feather is to be developed, is provided with a median groove, which becomes shallower towards the apex of the papilla. From this median groove lateral furrows proceed at an open angle, and passing round upon the under surface of the papilla become shallower, until in the middle line, opposite the median groove, they become obsolete. Minor grooves run at right angles to the lateral furrows. Hence the surface of the papilla has the character of a kind of mould, and if it were repeatedly dipped in such a substance as a solution of gelatine, and withdrawn to cool until its whole surface was covered with an even coat of that substance, it is clear that the gelatinous coat would be thickest at the basal or anterior end of the median groove, at the median ends of the lateral furrows, and at those ends of the minor grooves which open into them; while it would be very thin at the apices of the median and lateral grooves, and between the ends of the minor grooves. If, therefore, the hollow cone of gelatine, removed from its mould, were stretched from within, or if its thinnest parts became weak by drying, it would tend to give way along the internal median line opposite the rod-like cast of the median groove and between the ends of the casts of the lateral furrows, as well as between each of the minor grooves, and the hollow cone would expand into a flat feather-like structure with a median shaft, as a "vane" formed of "barbs" and "barbules." In point of fact, in the development of a feather such a cast of the animal papilla is formed, though not in gelatine, but in the horny epidermic layer developed upon the mould, and, as this is thrust outwards, it opens out in the manner just described. After a certain period of growth the papilla of the feather ceases to be grooved, and a continuous horny layer is formed, which constitutes the quill.

Between *Aves* and *Mammalia* there is a hiatus, not perhaps quite so wide as that between *Amphibia* and *Reptilia*, but still very considerable.

All Mammals possess an amnion of an essentially similar character to that of Birds and Reptiles, and all have an allantois. But the latter either ceases to exist after a very early period of fœtal life, or else it is "placentiferous," and serves as the means of intercommunication between the parent and the offspring. Of the nature and characters of the "placenta" developed in the majority of the mammalia I shall speak more particularly by-and-by. For the present, I pass it over as a structure not universally characteristic of the class.

The visceral arches are, throughout life, as completely devoid of branchial appendages in Mammals as in Birds and

Reptiles. In the skull, the basi-occipital is well ossified; but though it may enter into the formation of the cranio-spinal articulation, the latter is not single, as in Reptiles and Birds, but double, and the atlas has corresponding articular facets.

Fig. 5.

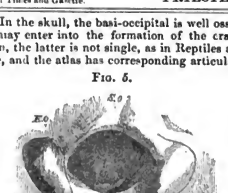

Fig. 5.—The occipital condyle of a Dog's skull viewed from behind. Signification of the letters as in Fig. 3.

Each ramus of the lower jaw is composed of only a single piece, and this articulates directly with the squamosal bone of the skull, and not with the representative of the quadrate bone.

Fig. 6.

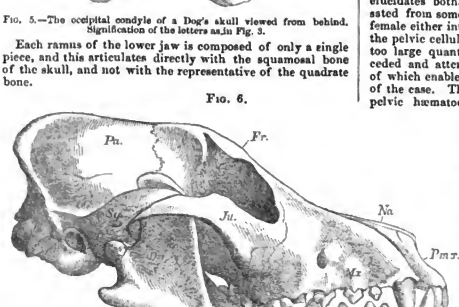

Fig. 6.—The skull of a Dog. Signification of the letters as in Fig. 4.

The greater and lesser circulations of Mammals are as completely distinct as in Birds, and there is but a single aortic arch, the left. The majority of the blood-corpuscles are red, free nuclei, and these are always discoidal, and usually circular in form. The blood is hot. There is a complete diaphragm, and none of the bronchi end in air-sacs.

Some part or other of the integument of all Mammals exhibits "hairs"—horny modifications of the epidermis—which so far resemble feathers, that they are developed upon papillæ inclosed within sacs; but, on the other hand, differ from the horny appendages of birds, in not splitting up as they are protruded, in the fashion so characteristic of feathers.

Finally, all Mammals are provided with organs for the secretion of a fluid which subserves the nourishment of the young after birth. The fluid is milk; the organs are the so-called "mammary" glands, which may probably be regarded as an extreme modification of the cutaneous sebaceous glands. These glands are aggregated into two or more masses disposed upon each side of the median line of the ventral surface of the body, and in almost all Mammals the aggregated ducts of each mass open upon an elevation of the skin common to all—the nipple or teat. To this the mouth of the newly-born mammal is applied, and from it, either by suction on the part of the young, or by the compressive action of a special muscle on the part of the parent, the nutritive fluid makes its way into the stomach of the former.

Royal Infirmary, Edinburgh.—We understand that Dr. John Struthers has just resigned his appointment as one of the Surgeons to the Edinburgh Royal Infirmary, on account of the occupation of his time with his anatomical duties. In England, Anatomical Demonstrators resign their lectures so soon as they are engaged with Surgical duties.

A CLINICAL LECTURE
ON
MENORRHAGIA DEPENDING ON MORBID CHANGES IN THE OVARIES.

DELIVERED AT
The Middlesex Hospital,
BY
W. O. PRIESTLEY, M.D.

(Continued from page 395.)

The connecting link between the form of menorrhagia I have attempted to illustrate, and the recently-described disease known as "pelvic hæmatocele" is most interesting, and the study of the two subjects conjointly mutually elucidates both. In pelvic hæmatocele, blood is extravasated from some portion of the generative apparatus of the female either into the peritoneal sac behind the uterus or into the pelvic cellular tissue; and, provided the blood is not in too large quantity, it there becomes encysted. It is preceded and attended by definite symptoms, the observation of which enables the physician to determine the true nature of the case. Thus it has been remarked that the subjects of pelvic hæmatocele habitually menstruate profusely; and, again, that in a large proportion of examples menorrhagia precedes the extravasation of blood, and the development of the attendant symptoms. Corresponding to these two facts, and bearing directly on the subject of the present lecture, we find in the statistics on hæmatocele, which have been collected by M. Voisin, in France, that the extravasation of blood was occasioned by rupture of the ovary or some of the vessels leading to it, in two-thirds of the patients affected, and that in a considerable proportion of the cases the ovary had undergone some antecedent softening or degeneration, the progress of which had probably provoked the previous sympathetic menorrhagia. The two subjects are no doubt intimately associated together, and in some cases of menorrhagia, dependent on morbid excitement of the ovary, I have had reason to believe that blood has escaped into the peritoneal cavity from over-distension and rupture of the ovarian vessels, provoking acute symptoms, but being insufficient in quantity to form such a tumour as is understood by the term hæmatocele.

M. Puech, of Montpellier, in an interesting thesis on hæmatocele, has shown that apoplexy or morbid extravasation of blood into the textures of the ovary is not an uncommon occurrence when the vessels of the organ are unduly congested, and that, if the distension of the ovary be excessive, rupture of its coats may take place, and blood make its escape either into the cavity of the peritoneum, or into the pelvic cellular tissue. Death either by syncope or peritonitis speedily ensues if a large quantity of blood is poured into the peritoneal cavity, but in moderate quantity it may, without terminating life, become surrounded by inflammatory adhesions, and thus form an encysted hæmatocele; or, if the effused blood be still smaller in quantity, it may provoke a limited peritonitis in the pelvis, which subsides under appropriate treatment. In the slighter cases, which terminate in recovery, we cannot have the aid of dissections to confirm diagnosis during life, but the following case, which I watched carefully, seemed to me an instance in which menorrhagia was followed by slight extravasation into the pelvis.

Case 3.—A married lady, 32 years of age, who had borne one child eight years before, but had not since been pregnant, was seized during the night with severe pain in the hypogastric region. The menstrual period had passed off a few days previous in the usual manner, and the day before she was in ordinary health, but had experienced fatigue in searching for a house, and in the evening had become extremely chilled by going out on foot with too light a dress for a cold evening. During the night the patient awoke with uneasiness in the abdomen, which gradually increased to severe pain, and induced her to send for Medical aid early in the morning. On arriving, I found her with a quick pulse, flushed and restless countenance, and suffering acute pain, but able to

move about without any great increase of distress. There was some tenderness over the region of the uterus, and slight distension of the abdomen. Examination by the vagina only enabled me to ascertain that the point of greatest tenderness was the region of the left ovary, but there was no tumour, and the uterus was apparently healthy. An opiate with a mustard-plaster and fomentations gave but partial relief, and half-a-dozen leeches were consequently applied round the anus. A marked alleviation followed, and, although the pain returned in severe paroxysms occasionally, it was kept in abeyance by the use of morphia suppositories. The next day I could feel the left ovary distinctly by the vagina. It was swollen, very tender to the touch, and had apparently by its increased weight sunk within reach of the finger. On the third day after the commencement of the attack I was informed that the period had come on profusely, and that since the discharge began there was a diminution of pain, but still much uneasiness in the left groin. Two days later there was a sudden accession of severe pain, attended by slight rigor, and such an increase of the sanguineous discharge as to amount almost to flooding. The pain was described as somewhat like labour-pain, and there was a sensation of weight and bearing-down in the rectum. The patient's face was again flushed, and the pulse rose to 120 from 95. There was considerable pain on pressure over the hypogastrium, and some abdominal distension. On making a vaginal examination, I found a boggy swelling, about the size of a walnut, behind the vagina and uterus, situated, I judged, in the retro-uterine cul-de-sac of peritoneum, and apparently separate from the enlarged ovary. It was slightly tender to pressure, irregular, and undefined at its upper part, and somewhat harder about its circumference than in its centre. The antecedent and attendant symptoms, together with the sudden formation and character of the swelling, led me to infer that blood had been extravasated into the retro-uterine cul-de-sac, probably as the result of excessive congestion of the ovary and rupture of some of its tissues. There was subsequently no further enlargement of the swelling, and the acute symptoms gradually abated. A somewhat profuse catamenial period occurred a fortnight later, but it was unattended by severe pain. After it was passed the retro uterine swelling was found contracted and much lessened. At the end of six weeks from the formation of the tumour there was no trace of its presence except a slight thickening in the situation where it had been detected, and the patient's health was re-established.

There is a point of considerable interest in reference to ovarian menorrhagia which deserves remark. It would seem that it is only those morbid conditions of the ovary which simulate, but in an exaggerated degree, the physiological changes connected with healthy menstruation, and in which the ovary is not extensively diseased, that have any influence in the production of uterine hæmorrhage. If you turn to Dr. West's chapter on Ovarian Dropsy, you will find evidence of the fact, that when cystic disease of the ovary is so far advanced as to have caused disorganisation of the ordinary structure of the ovary, the occurrence of menorrhagia is an exceptional symptom, and in a considerable proportion of cases, indeed, menstruation is altogether suppressed.

The causes of ovarian menorrhagia may be briefly stated to be those producing morbid congestion of the ovaries. Imperfect recovery after delivery, the patient being too much in the upright position before the uterus and its appendages have undergone the necessary involution, as was probably the case with the first patient whose history was detailed; the occurrence of abortion in the early months, when the ovary is yet large from the presence of a *corpus luteum*, and readily becomes morbidly congested at a subsequent menstrual period; a sudden chill, either during the menstrual period or interval, may take the initiative,—the ovary becoming congested in preference to some other organ of the body. Whatever suddenly checks the menstrual flow may lead to the same result. M. Puech has described the case of a woman whose menstruation was suddenly arrested with severe pain, and who after this accident menstruated profusely and too frequently, until she at length died of extravasation of blood from the ovary into the peritoneal cavity. The early events of married life, before pregnancy occurs, may be concerned in its production, and undue sexual excitement at any time is a recognised cause both of ovarian and uterine congestion. It is no uncommon occurrence to find prostitutes suffering from menorrhagia without appreciable disease of the uterus, and which may be referred to ovarian irritation. I have noticed this affection among the sequelæ, in some cases where gonorrhœa was supposed to have passed along the Fallopian tubes, producing peritonitis, and probably, also, inflammation of the ovary. I have, however, seen it in private practice most frequently, I think, in married women who are sterile. It is highly probable that sexual excitement which is not followed by the occurrence of pregnancy, leads in many cases to permanent congestion of the ovaries, and this may readily be lighted up into more active disease.

The *treatment* to be adopted in such cases as I have described may be conveniently spoken of as divided into two parts, viz., the treatment of the attack, and the management of the patient during the interval, or when no menorrhagia is present.

During the attack, if the hæmorrhage be at all profuse, above all other things it is needful to enjoin absolute rest in the horizontal posture. But besides this it will be desirable to prescribe some astringent, as the compound infusion of roses; tannin, or gallic acid in six or eight-grain doses every three or four hours; or the acetate of lead with opium may be given instead of these, if there be any reason for preferring it. The dull aching pain, or more acute paroxysms of suffering so commonly present, generally demand the administration of some opiate or other sedative, and these may be given by the mouth, with the astringent, or in the form of enema or suppository by the rectum. When given by the rectum, twenty-five minims of laudanum, with a cup of prepared starch, is a common form of injection for the purpose; but five grains of the pil. saponis c. opio, or a third of a grain of morphia made into a suppository with butter of cocoa, is even more convenient. Considerable care must be exercised in the use of opiates internally, for in the subjects of these attacks sickness of a very distressing character is sometimes provoked by them, and, indeed, the stomach is often so irritable, that for a time it needs no additional incentive to reject all nourishment. When experience warns against the employment of opium or morphia, a third of a grain of extract of belladonna with two or three grains of camphor every three hours may prove useful, and the extracts of henbane, conium, and Indian hemp are other remedies deserving a trial when other means are inadmissible or fail to relieve pain. The topical application of belladonna with chloroform and oil has seemed to me a serviceable adjuvant, and we may have recourse to this the more readily, as some other topical applications are less admissible. Thus, I should hesitate to apply cold for the hæmorrhage if much deep-seated pain were present, and hot fomentations are, as a rule, to be avoided after hæmorrhage has come on; for not only are they likely to encourage bleeding from the uterus, but they may possibly determine extravasation of blood, already impending, from the distended ovary into the peritoneum. Dry cupping-glasses may be applied either above the groin or over the sacrum, and are not open to the same objections. Constipation of the bowels must be avoided. The diet should be simple and taken cool, stimulants being taken sparingly, except in cases where the loss of blood is extreme. The clothing should be light, but sufficient to prevent chilliness of the surface, and consequent congestion of internal organs.

When the menorrhagia is past, the efforts of the Medical attendant must be directed to lessen the congested and irritable condition of the ovary, and perhaps also of the secondary and permanent uterine congestion. Or if the pathological changes have advanced beyond these, and inflammatory deposits have been thrown out either on the surface of the peritoneum or into the pelvic cellular tissue, attempts must be made to promote the absorption of them. Some patients require little more than rest in the recumbent position, avoidance of sexual excitement, with careful regulation of the bowels, and liberal diet to re-establish health. But whenever one or both ovaries are left painful and tender, and prolapsed much below their natural position by increase of weight, and if combined with this there be enlargement of the uterus, besides rest, counter-irritation of some form ought to be employed. This may be by dry cupping-glasses frequently applied, or by friction with a croton liniment over the sacrum, or by the repeated application of sinapisms or tincture of iodine over the hypogastric and iliac regions. And problematical as it may seem to bleed a patient who has already lost too much blood, the application of three or four leeches to the cervix uteri or anus is, perhaps, of all others, the means which affords the most marked relief to pain, and, by lessening the congestion in the interval, it diminishes the

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severity of the symptoms at the next menstrual period. After various other measures have failed, I have repeatedly seen this local abstraction of blood midway between two periods begin the first improvement of the patient, which has at length terminated in the restoration of health. Great care must also be taken to regulate the bowels and to guard against the accumulation of fæcal masses which might press injuriously on the parts affected. Inaction of the liver should also, as far as possible, be counteracted, so that no further congestion of the pelvic organs be favoured. Attention must at the same time be directed to improve the strength of the patient, and to make up, as far as prudence will permit, for the previous loss of blood. The Hospital patient, whose case I first described, took the "Haustus ferri sulphatis," for which I have given the formula. I know of no better tonic aperient than this common prescription for such cases, either in Hospital or private practice, and its proportions may be varied according to circumstances.

If, however, the case is so far chronic that it does not readily yield to treatment, and particularly if the oft-repeated attacks have resulted in permanent enlargement of the ovaries and uterus, or in the production of that immobility of the pelvic organs, and hardness of the cellular tissue surrounding them, which is characteristic of the exudation of plastic lymph, I should be disposed to give drachm doses of the liquor hydrarg. bichloridi twice or thrice a day, for the purpose of promoting absorption, and when this had been continued sufficiently long, five-grain doses of bromide of potassium.

In conclusion, you must not lose sight of those general indications which are applicable to all patients whose strength has been impaired by any illness. I allude more particularly to matters of hygiene, and especially to change of air when it may be expedient, to generous diet, and such stimulation as prudence dictates in each individual case.

ORIGINAL COMMUNICATIONS.

"WHAT IS DIABETES?"

By ROBERT VENABLES, M.A., M.B. Oxon.,
Physician to the Royal Kent Dispensary.

"WHAT is diabetes? Urine saccharine; specific gravity, 1025-1030; if not diabetes, what is it?" Such are the semi-Socratics occasionally pressed upon me, and they involve a problem not quite so easy of solution as at first sight may appear. The question has often proved not a little embarrassing. I hit upon an answer, however, which, though not quite satisfactory, has mostly answered its purpose. My reply now usually is: "It is much more easy to say positively what a thing is not than always strictly to define what it really is; I therefore affirm that this (disease) is not diabetes, never has been diabetes, and the probability is never will become diabetes."

Until the time of Prout, at least two species of diabetes were admitted by nosologists,—the mellitic and insipid; and this division is recognised by some even in the present day. Under this division, every form and variety of diuresis was referred to the *genus* Diabetes, the only distinction being the saccharine or the insipid state of the urine. This view naturally led to great confusion, for diuresis of every kind—no matter what the cause, or however transient the diuresis itself—was pronounced diabetes. We know, however, that diuresis (a) often proves a mere temporary affection—in hysteria, for example—and soon disappears.

There is a form of diuresis characterised by the large amount of urea in the urine. So abundant at times is this principle, that the urine gelatinises, as it were, into a solid crystalline mass on the addition of strong nitric acid. (b) In many such the specific gravity, upon which much reliance has been placed as indicative of the presence of sugar, is very high, often rising to 1030 or 1035. I have seen it as high as 1038, and in one instance 1042. These are extreme cases, and probably of very rare occurrence.

In excess of urea (azoturia) the urine voided at each micturition cannot always be considered excessive. Indeed it is often below the natural quantity; but the constant desire to pass water, and the frequent micturitions in consequence, render the whole amount of urine voided in a given time much above the normal standard.

We meet with other cases of diuresis (c) in which the urea is far below the normal amount (anazoturia). (d) Such are sometimes attended with the voiding of very large quantities of urine, and, as may be readily imagined, of very low specific gravity, 1·010, or even lower. There is a marked contrast between the two urines just described. The first abounds absolutely in urinary principles, the latter is deficient in these.

Reagents show that the former is—at least comparatively—rich in the urinary pigments; whereas, in the latter, these are greatly diminished, and in some instances afford scarcely a trace. Uric acid, too, is often spontaneously deposited in cases of diuresis with excess of urea, (e) indicating a true acidity of the urine, and a phlogistic diathesis. In anazoturia, on the contrary, the urine is often alkalescent, loaded with carbonate of ammonia, and prone to spontaneous fermentation, whence in all probability the carbonate of ammonia. Prout mentions instances in which enormous quantities of urine have been voided—in such instances, sixteen, even twenty pints in the twenty-four hours. Excessive quantities of urine have been passed by young children in similar circumstances.

Many of such cases have been looked upon as diabetes, and detailed as such, and Prout makes a similar remark. Hence the necessity of establishing a distinction between true diabetes and these spurious forms. I recommended that the term be restricted to those affections in which the urine is saccharine. Hence, I define diabetes to be a disease in which a saccharine state of the urine is *the* characteristic symptom." (f)

This was a step in the right direction. There is good reason for believing that another error frequently prevails. Though the term diabetes be restricted to those urines only of which sugar is a constituent, as a counterpoise, it is sometimes, if not often, held that all saccharine urines are necessarily diabetic,—a source of nearly as much error (and far more serious in its effects) as that which Prout (to be hoped not unprofitably) struggled to correct. Prout's dictum, if it may be so named, is not unfrequently misunderstood. He did not intend that all saccharine urine should be regarded as unquestionably diabetic, nor that saccharine urine and diabetes were reciprocal terms, and therefore universally predicable of each other. I had Dr. Prout's co-operation in several cases of saccharine urine, but neither of us for a moment entertained the notion of any alliance with diabetes.

Diabetes may be defined a disease in which a saccharine state of the urine is an *essential characteristic;* without this saccharine state it is quite right to question, indeed to deny the claim to the diabetic character, and I believe this is now admitted by the most experienced in this affection. What, then, the inference? That many of the instances of successful treatment are to be explained upon these principles that they were *not* cases of diabetes, nor even allied in any way to this affection, except in the one circumstance of saccharine urine.

Of simple saccharine urine I see numerous instances; many of these merely transient, which pass off without any treatment whatever; others more permanent and more obstinate. Some of these require treatment, not only Medical, but by strict, sometimes severe regimen. Some recover, and get rid of the sugar altogether after protracted intervals; with others the saccharine diathesis—if it may be so named—is more obstinate, and may continue without the least inconvenience, or even the patient's consciousness of his position. I know the case of a gentleman, now far advanced in years, whose urine, to my own personal knowledge, has been saccharine for the last eight or ten years. He suffers no inconvenience whatever; the urine varies in specific gravity, and the quantity of sugar increases or diminishes apparently guided and regulated by changes in the habits of the patient for the time being.

(a) Voidance of large quantities of urine.

(b) The acid must not be too concentrated, and should be reduced by the addition of one or two parts of water; neither should it contain any nitrous acid. In either case, if too concentrated, or intermixed with nitrous acid, the urea will be decomposed, and error may result.

(c) By the term diuresis is to be understood an inordinate or excessive flow of urine. I use the term uresis in contradistinction, meaning merely urine voided in the ordinary quantity, or not in remarkably permanent excess.

(d) "There is a great advantage in expressing disease concisely, explicitly, and, when possible, in single terms. Dr. Willis in adopting a nomenclature of this sort, has set a good example—hydraria, anazoturia, and azoturia, are all single terms, derivatives from the Greek, and express watery urine, urine with deficiency of urea, urine with excess of urea—this being the type of the unassisting process of the kidneys."—Author's Lectures, &c., *Med. Gazette*, March 2, 1839.

(e) Prout acknowledges two kinds of azoturia; one without, and the other with diuresis.

(f) "On Stomach and Renal Diseases," p. 24.

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Dr. Pavy tells us "that a diabetic patient may, by a purely animal diet, keep down and limit the amount of urinary sugar voided to 1000 grains per day, and thus the patient not in any way know of the existence of his complaint, otherwise than by the necessity of restricting himself to the regimen essential to this object."

Prout himself tells us that a saccharine condition of the urine is not necessarily diabetic. Thus he says:—"Indeed, a saccharine condition of the urine exists in dyspeptic and gouty individuals much oftener than is supposed, and hundreds pass many years of their lives with this symptom more or less constantly present, who are quite unaware of it till the quantity becomes increased." (g)

What, then, are we to infer from these facts? That many of the cases treated successfully as diabetes were really explicable upon these principles; that they were cases of ordinary uresis; some of the saccharine forms, others the insipid, but neither in any way allied to true diabetes. What, then, is diabetes, and how is the real to be distinguished from the spurious disease?

The first question to be answered is whether the urine be saccharine or not, because, if there be no sugar there can be no diabetes, and there is an end of the matter. Then how are we to determine the presence of sugar? A variety of means affords us a choice, and we can readily satisfy ourselves upon this point. It is, however, no part of the object of this paper to detail at any length the different plans; still I think one or two hints may save the analyst a great waste of time, and no little amount of unnecessary trouble.

First, the taste, if it gives the sensation of sweetness, settles the question at once; but it must be recollected that urine may hold a considerable quantity of sugar in solution, and yet not taste sweet; but, on the contrary, saline and bitter. This I have found often the case, and when the taste gave no sensible evidence whatever of sugar, chemical tests gave very satisfactory indications of this principle in tolerably large quantity. What, then, is to be done? When the specific gravity (h) or any other conditions of the urine renders the presence of sugar questionable or doubtful. The more expeditious, or at least the readiest plan, which I always adopt, and which I recommend to the busy Practitioner, whose object must always be to economise time, is the fermentation test. I introduce into a small phial, of from half-an-ounce to an ounce capacity, sufficient of the urine to nearly, but not completely, fill it. Next introduce a small fragment of the German yeast, shake so as to diffuse the ferment, and put into a tumbler of water heated to about 90° or 100° Fahr. It will very soon acquire the temperature of 70° or 75°. The bottle may now be corked and transferred to the waistcoat or trousers pocket. Fermentation, if sugar be present, will soon begin, in times varying from one to two, three, or four hours. If this does not happen, the phial with its contents may be kept at the fermenting temperature for from twelve to twenty-four hours; it is unnecessary to point out the means of doing this, as it may be accomplished in various ways. The fermentation takes place with more or less rapidity, and more or less activity—violence—in a ratio no doubt proportioned, *cæteris paribus*, to the quantity of sugar held in solution. If, after a reasonable time, there be no evidence of fermentation, I look upon the question of diabetes as completely settled. Sugar cannot exist in solution, exposed to the influence of a ferment at the temperature mentioned, without undergoing the vinous fermentation, with the evolution of carbonic acid gas and the generation of alcohol.

We shall now suppose the alternative fermentation to have taken place, is sugar necessarily present? By no means. Urine may ferment, more especially under the influence of a fermentative, even though there be not a particle of sugar present. Therefore the object of the above is only to decide whether additional inquiry be necessary.

Several methods have been recommended, and Trommer's (i) seems to be the best, and perhaps as manageable as any. If fermentation and the copper test confirm each other, the cautious Practitioner will avail himself of several others, if not at his first examination, at some of his subsequent ones. This general confirmation will not leave room for a possibility of doubt. It not unfrequently happens in complicated conditions of the urine that the colouring pigments and the cloudiness not removable even by filtration will so embarrass and so vitiate the results, that doubt, even serious error, may ensue. The removing of all these causes of obstruction may therefore in certain cases be found advisable, sometimes absolutely necessary. There are means, no way difficult, of effecting this object. In my lectures on the Chemical History, etc., of Urinary Diseases (*Medical Gazette*, 38, 39), I suggested acetate of lead for clarifying, etc., the urine, and precipitating by hydro-sulphuric acid gas. (k) This seemed to many a troublesome and otherwise inconvenient process, and I then proposed to remove all embarrassing agents by acetate of lead in slight excess, and removing this last by phosphate of soda in the equivalent proportions, or rather in slight excess. By these means a perfectly clear, transparent, and, in most instances, colourless urine will be obtained, and the tests for sugar will act with unfettered energy and give satisfactory results.

The above plan removes albumen, and all other urinary constituents that can offer any obstacles, and will be found far more expeditious and much more effective than evaporation to dryness, boiling the residue in distilled water, filtering, etc., not unfrequently recommended.

So far, we have only determined the presence of sugar; but is the disease diabetes? It is clear the answer must be determined by collateral circumstances. Sugar, as already observed, is but one,—though an absolutely essential one,—of the elements in the diagnosis.

The collaterals laid down by Prout are perfect transparency; pale straw colour, with a greenish tint, and a faint, peculiar smell. The odour that of newly mown hay; sometimes of sour milk. Taste in a greater or less degree sweet; specific gravity from 1020 to 1050 (l), but there is no precise limit to the possible height of the gravity, the elevation above the normal of course depending upon the amount of sugar in solution. It may be assumed, however, that really diabetic urine should, *cet. par.*, always have a standard not under 1·020. This may appear a singular proposal, when I refer to a case in which the gravity of diabetic urine was under 1009. But in this instance the patient was at death's door—more appropriately, death was at the patient's door. As the fatal issue approaches, I have often observed that the gravity falls very low; the daily urine diminishes in quantity; uresis decreases; uric acid nearly disappears; and even the quantity of sugar becomes greatly reduced. These may be considered as portending the fatal issue close at hand.

To recapitulate concisely the symptoms on the first appearance, or in its incipient stage, of diabetes:—*saccharine diuresis*; an absolute essential; inordinate appetite, ultimately becoming voracious; urgent thirst, at last insatiable; arid, rough, unperspirable state of skin; emaciation; lassitude, listlessness, and disinclination to any kind whatever of exercise or other exertion, bodily or mental. These symptoms, from being at first slight, as the disease advances become aggravated, ultimately terminating in organic disease of some of the viscera—not unfrequently terminating in

(g) "On Stomach, &c., Complaints," p. 82. Possibly he might have added which may never occur, or any of the phenomena of diabetes.

(h) To save time and space this quality will in future be symbolised by the initials "sp." "gr."

(i) Tickling and various others have tried to simplify, but the reader is referred for information to G. Bird, Bence Jones, Thudichum, and my own essay on Urinary Analysis.

(k) The urine should be boiled for a few minutes with the required quantity of crystallised acetate of lead in about the proportions of four grains of crystallised acetate of lead to every sixty grains of urine. Boil the mixture, and immediately a copious precipitate, of a dirty white colour, somewhat resembling cream, is formed. Filter, and treat the filtered portion with sulphate of soda in excess—i.e., for every four grains of acetate of lead add eight grains of crystallised sulphate of soda. The mixture being again heated, sulphate of lead is deposited. Then filter; a clear, transparent liquid passes, which contains no sugar and some unimportant salts. The liquid thus obtained is neither acted on by the cupro-potass reagent, nor by the caustic potass, unless sugar be present. These reagents in this way become perfectly reliable, very accurate, but afford no results when sugar is not present. The acetate of lead separates albumen and other organic matters, which now can give no trouble. I cannot at present recollect the authority for this process; probably I took no note, because it is identical with my own process, which I have repeatedly exhibited to my pupils upon every appropriate occasion, the only difference being that I used the phosphate instead of sulphate of soda for precipitating any excess of lead. I generally clarify and purify from a half to one ounce of the urine, and take a determinate proportion for each experiment. If the analyst wishes to avoid the weighing out upon each occasion the salts, acetate, and sulphate or phosphate, the tests may be dissolved in their relative proportions in merely the necessary quantities of distilled water, so as to have as little excess of the solvent as possible. The operation can be thus always readily performed, and almost instantaneously, as the solutions can be kept adjusted ready for use. It is advisable to add a few drops of acetic acid to the lead test to prevent its precipitation, which is apt to occur from the carbonic acid in the atmosphere.

(l) Prout has seen it as low as 1010. In No. 436 of this Journal, November 6, 1858, I mentioned a case in which the specific gravity was only 1013, and one subsequent examination gave a specific gravity 1050·74. I questioned the diabetic character, but I found it admitted of no doubt.

disorganization.(m) The tongue is coated with a whitish mucus, from which it cannot be freed; a frothy, glutinous saliva exudes from the angles of the mouth, encrusting them, and giving a peculiar thickness to the voice, so that the patient articulates as if he had marbles, or some other foreign substance in the mouth. There is another, a local symptom, which, though not an invariable attendant, yet is present sufficiently often to deserve notice,—I mean an affection of the penis in men; of the orifice of the urethra in women. It often appears in the former as phymosis, and, not unfrequently, as a sort of erythematous blush, attended with a thin, curdy secretion, of a viscid character, not from the urethra, but from the external coating of the glans itself and the internal lining of the prepuce. This was the condition of an officer, a captain in my own old corps, the Royal Artillery. The moment I saw the condition, I believed it to be a commencing gonorrhœa, for which I know this condition has been mistaken; but I was saved from committing any blunder by his stating he was suffering from diabetes. Anaphrodisia is by no means an uncommon concomitant of diabetes.

But the object is not a detailed or complete history of diabetes, but to show the necessity of limiting the application of the term, and confining it to its legitimate boundary.

My own inference is, and from no very narrow experience, that diabetes is an incurable disease, at least so far as our present knowledge and means extend.

With respect to the natural constituents of the urine, they are said to be in the normal proportion of health, while in relation to the quantity of fluid they appear in a ratio very much diminished. My own observations warrant the notion that sugar is both a foreign and an exclusive principle, at least in so far as diabetes is concerned. The quantity of urea is generally reduced when sugar is copious, and they seem to alternate with each other;—as the amount of sugar increases, the urea diminishes, and *vice versâ;* upon which Prout observed, this alternation of a principle containing nearly half its weight of nitrogen with one containing no nitrogen at all, exhibits one of the most singular of the phenomena in physiology.

Lithic acid is often present, in very large quantity, in simply saccharine urine, and such is highly acid, the crystals depositing spontaneously in extraordinary profusion. The case to which I have so frequently referred—No. 436—was of this character. The amount of deposit very large; the urine saccharine acid, and of specific gravity 1045. The disease was reported "Diabetes," and particulars in accordance with this view were then given. But I have very good grounds for believing that this was a mistake, and altogether an inadvertent misrepresentation. Although both urea and uric acid may exist in diabetic urine, they exist—especially the latter—in very diminished quantity. The amount of lithic acid in comparison with that of the watery portion of the urine is so small that a minute quantity of urine affords but very slight evidence of its existence, and hardly any of the amount. How much less then in diabetes, where the fluid portion so greatly predominates!

When we consider that lithic acid—and we may also add urea—begins to reappear in the urine in either its amorphous or crystalline form, it affords a much more favourable view of the nature of the case. Were it not that this doctrine is supported by the authority of Prout, I should feel disposed to question whether such cases are really diabetic, but rather instances of simply saccharine diuresis in its most aggravated forms. As urea often abounds, and lithic acid spontaneously deposits in either its crystalline or amorphous form, it seems no outrageous stretch of the imagination that such urines may be explained, not unfrequently at least, upon the principles above stated.

If diabetes is to be admitted as one of the *genera morborum*, it must contain species, two at least, under it. We have ignored altogether the division into the insipid, a saccharine condition of urine being essential.

I think it much more practical, and I presume it will be found much more consistent with the phenomena of diabetes to admit an acute and a chronic form of this disease. I have, however, seen cases which have exhibited but little more than the ordinary phenomena, yet without any obvious cause become suddenly aggravated, and carry off the patient with scarcely any warning. As an instance, I may refer to the case, already mentioned, to illustrate the extension of the redness, heat, and irritation of the tongue and mucous membrane to the urinary organs—the glans and orifice of the urethra presenting all the appearances of gonorrhœa.

This gentleman had spent some years in Ceylon, China, and other low latitudes; had been subject to nocturnal emissions. On returning to England, to use his own expression, "he was struck with the cold of this climate." His health became seriously affected, and Medical opinion pronounced him suffering from congestion of the liver, of the kidney, and of others of the viscera. I saw him first on March 3, 1860; he was then clearly suffering from diabetes, so pronounced by Bouchardat and others of the most experienced urinologists in this country. When I saw him there was no evidence whatever of any organic visceral disease. I saw him in all two or three times; very shortly after, I heard he had gone to Margate, and about a fortnight or three weeks after I heard of his death, but whether this occurred in London or Margate I could not learn.

With respect to the essential nature of this disease, it seems universally admitted that we really know little or nothing. It is well known that starch and other vegetable matters may be easily converted into sugar.

Nor is this a morbid product, generated by diseased or perverted action. It appears only as the result of imperfect assimilation, or of arrested metamorphosis. The starch transformed into sugar in diabetes passes through the system in health daily; but with this difference, that, having become sugar, this is further transformed into carbonic and the vegetable acids already named. Where these various transformations take place, how effected, we still remain ignorant, and are left to mere conjecture; nor are we any better informed how these transformed matters escape from the organism. We are like, the mariner at sea without his compass: he knows not where he is, what the course he is pursuing, or that which he ought to steer. So we are with respect to sugar in the blood. Where, or to what organ, are we to take it for disintegration, and the rearrangement of its constituent elements? Can this take place in the lungs? In No. 436 of this Journal, I mentioned the case of a Medical gentleman in consumption, whose urine was distinctly saccharine. Could this state be owing to any imperfection or any impediment to the pulmonary function? Was it through any defect here that the sugar in the venous blood did not undergo the fatty transformation and deposit itself in its appropriate tissue?

I have since examined the urine of many consumptive patients, and in a great proportion I have found sugar in the urine. If the sugar which passes through the system undergoes the fatty metamorphosis in the lungs, or is there fitted for its ready transformation in some other of the organs, the appearance of sugar in the urine in phthisis would be no longer a mystery. It would greatly assist this inquiry if we could examine the arterial and venous blood of phthisical patients. If both were found saccharine, the question would be settled.

Curability.—With respect to the curability of this disease, I can only say for myself I have no notion at present of any such happy possibility. Most of the plans proposed seem based upon the principle of reducing the amount of sugar and diminishing the quantity of urine; but neither of these—sugar or superabundance of urine—constitute the radical of the disease. They are merely the effects, the symbols, of a condition of which we really know nothing. Who has, or even pretends to have, explained the "ratio symptomatum" of this disease? In a discussion on diabetes at which I was present, it was asserted that the large quantities of urine voided arose from the large quantities of drink taken by the diabetic patient. I maintained, on the contrary, that he drank because he was thirsty, and he urinated because he drank. Which of these is the true explanation? Thirst is a most irksome and intolerable sensation; it exists, and must be appeased, which can be effected only by drink. Grant this, and the rest is clear. Excessive potations overload the blood with fluid; the kidneys, as depurators, set to work to free the blood from a principle which renders it watery and poor, and unfits it for circulation. This, to some extent at least, explains the excessive diuresis which prevails in diabetes. But these are not the essential agents; we can consider them only as the results of certain morbid conditions, the nature of which have hitherto baffled all our efforts to drag them to light and expose them to our view. We may suppress, we may stifle these effects, but the root of the evil remains intact; it is only the

(m) I do not understand organic disease in the usual acceptation of this term. I look upon all perceptible changes in the organism, organic for function, inflammation, congestion, tumefaction, destruction of tissue, would be more correctly named disorganisation.

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branches that are lopped, to revive under more congenial circumstances.

In the instance of the officer of artillery, the urine at one time exceeded two gallons, and at times much beyond this. When I last saw him it was reduced to between three and four pints, and the quantity of sugar was also greatly diminished; still the disease was not subdued. There was no evidence of any visceral disease, nor of any particular derangement (besides the diabetic) of the health, yet the patient died, as already stated, very unexpectedly. Considering everything, I can come to no other conclusion than that, however the milder cases may be kept in check, the cure of confirmed diabetes in the present state of our knowledge is beyond the reach of our art.

These observations may perhaps be looked upon by some and condemned as discouraging all further attempts to investigate the nature and phenomena of diabetes. Nothing can be farther from the object of this paper. On the contrary, it is rather calculated, or at least intended, to show that the field for inquiry is still open to new energy, and ready for further cultivation. Therefore let the reader not despond, but put his shoulder with more vigour to the wheel. My endeavour has been, if possible, to free the matter from some of its difficulties. How far I have succeeded is not for me to judge. The zealous and energetic pathologist I would encourage in the words of Seneca—"Multum egerunt qui ante nos fuerunt, sed non peregerunt, multum restat operis, multumque restabit, nec ulli post mille annos nato præcludetur occasio aliquid adjiciendi."

P.S.—In No. 90 of this Journal, January 25, 1851 will be found a paper by the author "On the Adjustment of Urinary Sediments for Microscopical Examination;" and 436, November, 1858, "On the Crystalline Modifications of Uric Acid," in which a plan for the examination of urinary deposits with greater ease, and calculated to save trouble and time.

REPORT OF A FATAL CASE OF SNAKE-BITE.

By L. EMANUEL, B.A. and M.D.,
Assistant-Surgeon to the Bengal Army.

Cases of snake-bite in European subjects being rare, perhaps the particulars of the following case, which rapidly ended fatally, may be worthy of your insertion:—

On the night of September 3, 1862, the 104th Regiment being encamped near Meerut, a soldier lying on his cot suddenly complained that he had been bitten. By the advice of a comrade, he applied some vinegar to the wound, and was brought into Hospital about a quarter of an hour later. There was then a dark-red spot, size of a sixpence, just below the right nipple; the limits of the discoloured areola were distinctly defined, and around it was a little swelling. The pulse was good, regular, full, and somewhat accelerated. The skin generally was bathed in clammy perspiration. The respiration was at this time natural and easy. There was extreme restlessness and anxiety. The wound was scarified, and nitric acid applied, and stimulants given internally; they were, however, immediately vomited.

A few minutes after admission he complained that he was unable to open his eyes, ptosis of both eyelids having taken place. The pupils were at this time natural, but sluggish. It now became extremely difficult to induce him to swallow anything. Small quantities of brandy and ammonia were given, but had a tendency to pass into the air-passages, or were instantly spit up. He showed great unwillingness to take anything. From time to time his lips were convulsed. He remained much in this state, the pulse keeping good, the skin becoming colder and more clammy for about three-quarters of an hour. At the end of this time he was still conscious, for when asked to put out his tongue he slightly protruded it.

The respiration now began to be difficult, infrequent, and shallow. The lips had become livid, and the skin bathed in copious clammy sweats. A few minutes later he had become quite unconscious. The pulse was still tolerably full, but weaker than it had been. The power of swallowing was completely lost. He lived about half an hour longer. The pulse only began to fail about ten minutes before death. There was no stertor at any time.

It is remarkable that in this case the eyelids became paralysed early, and later the muscles employed in deglutition. When he could no longer answer questions, he gave signs of understanding them, and it was never necessary to shake him or repeat the question.

The brain was examined after death. The sinuses of the dura mater and the veins on the surface of the brain were gorged with blood; there was very little fluid in the ventricles.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

ST. MARY'S HOSPITAL.

THROAT DYSÆSTHESIA—CASES AND CLINICAL REMARKS.

(Under the care of Dr. HANDFIELD JONES.)

Case 1.—*Simple Throat Neuralgia—Benefit from Iron and Quinine.*—Jane B., aged 35, admitted October 1. Had suffered a year with her throat. There was no soreness in swallowing, nor any evidence of inflammation, but it was the seat of distressing constant aching pain, which came on first after a tooth had been removed. The pain was not constant; would come and go; and was increased by fatigue and causes of depression. She was exceedingly nervous, but showed no fussiness or hyperæsthesia, and seemed to have a calm, well-ordered mind. She was of large, rather lax make. She lived not far from a canal. She had occasionally not full power over her jaws. Often lost her voice, and said her throat felt weak. She had had the tonsils amputated without any benefit. November 16.—Has taken citrate of iron and quinine with benefit. The throat has been much relieved, but becomes again raw and tender when she takes any fresh cold.

Case 2.—*Throat Dysæsthesia—Laryngeal and Pharyngeal Constrictive Spasms — Cure by Iodide of Potassium and Iron and Quinine.* — M. B., aged 67, admitted December 14, 1857. She had been ill six months. She complained of feeling as if she should be choked; the phlegm "kept rising." At times she had dysphagia, and was always hawking. She had not much cough. She referred her pain to the region of the os hyoides. There was nothing morbid to be felt externally, and internally the top of the epiglottis could be reached with the finger; it seemed normal; there was nothing wrong to be found in the throat. She had a sallow aspect. Tongue clean. Appetite very good. Bowels regular. Often suffered from frontal headache, which "took her sight away." An œsophagus bougie passed readily without pain. Had nausea and retching of a morning. ℞ Potassi. iodidi, gr. iij.; sodæ carb., gr. v.; infusi. gent. co., ℥j. ter. die. ℞ Pil. hydr., gr. ss.; ext. rhei, gr. ij. in pil. omni nocte. A blister to the front of the throat. 21st.—Much better; she can swallow better, and has not the heat and burning round the throat and mouth which she had. ℞ Potassi. iodidi, gr. v.; tinct. cinchon., ʒj.; infusi. gent. co., ℥j. ter. die. 31st.—Has been much better, but is now for the last two days suffering in the same way. She complained of irritation about the throat, referred to the thyroid cartilage, with a sense of dryness. Bowels open; urine normal. She now took for a week small doses of carbonate and sulphate of magnesia, with vinum colchici and tincture of opium, but with little or no advantage. The dysæsthesia was absent occasionally. She was now ordered, on January 7: ℞ Ferri et quinæ citratis, gr. v.; potassi. iodidi, gr. j.; tinct. nucis vomicæ, ♏x.; aquæ, ℥j. ter. die; pil. hydr. col., gr. v., alt. noct. 14th.—Throat and mouth much easier, though dry at times. 28th.—Has now scarce an y of the old affection. She was now to take the iron and quinine without the iodide of potassium. On February 11 she was discharged well.

Case 3.—*Laryngeal and Pharyngeal Spasm cured by Hydrochlorate of Ammonia and Bark.*—Hannah C., aged 20, was admitted October 18. She had been ill one week. She stated that she had been taken in the night with choking sensations in her throat; "her breath seemed to be leaving her." At the same time she had palpitation, lasting a quarter of an hour. Her tongue was much coated, and her appetite was bad. Bowels open. Some menorrhagia. Pil. hydr. coloc., gr. v., alt. nocte. ℞ Spt. ammon. fœtid., ʒi.; infus. valerian, ℥v., ter. die. 29th.—Food seems "to stick in her throat" as before. ℞ Ammon. muriat., ℈j.; mist. camph., ℥i., ter. die;

(pil. rhei co., gr.v., p.r.n.). November 5.—Throat much better. ℞ Tinct. cinchonæ, ʒss.; infus. gent. co., ℥j., ter. die. 12th.—Much better. 19th.—Better. Discharged.

Case 4.—Cranial Rheumatism, Throat Dysæsthesia, Laryngeal Spasm cured by Iodide of Potassium and Iron.—Charlotte H., aged 37, admitted September 13. She had been ill eighteen months with great pain in the top and sides of the head, with feelings of fright, and a tendency at night to jump out of the window, and to scream. She was rather feverish at night. Urine very clear. Bowels always relaxed. Loss of appetite. Pulse of fair force. Skin warm. She had lost four children: they all died in the birth. No eruption was observed on them. She was ordered at first mistura ammoniæ acetatis, ℥j., 4tis horis, and an alum gargle. On the 18th this was changed—℞ Potassii iodidi, gr. v.; infusi. gentianæ co., ℥j., ter. die.; and pil. saponis co., gr.v., omni nocte. October 9.—She reported that her head was very much better, but she had choking sensations in her throat, so that at times she had to fight for her breath. This was mostly at night when she awoke. She felt as if she had something to bring up from the throat, which was a little inflamed. Urine very clear. Pulse steady. Pt. c. mist., ter. die. ℞ Ferri carb. saccharati, ℈j.; ft. pulv., ter. die. 30th.—Throat quite well. Head a little queer at times. Pil. c. mist. et pulv. At the next visit, November 6, she was well.

Case 5.—Throat Dysæsthesia—Debility—Cure by Iodide of Potassium, Iron, and Quinine.—Eliza W., aged 36, admitted October 23. She had been ill one month. She has a dreadful "worrited feeling" in her throat, which she said prevented her sleeping, and affected her eyesight; when the feeling was bad it made her "violent," and caused her to scream. She could take no tea, coffee, or beer. Tea "made her throat bad directly." Pulse of fair force. ℞ Potassii iodidi, gr. iv.; ammoniæ sesquicarb., gr. iv.; infusi. gentianæ co., ℥j. ter. die. ℞ Ferri carb. saccharati, ℈j., ft. pulv. ter. die. November 3.—Was much better; sleeps well at night. 10th.—Going on well. Rep. pulv. ℞ Quinæ. disulph., gr. iij.; tinct. zingib., ♏x.; aquæ, ℥j. ter. die. December 8.—The "worrited" feeling in her throat is entirely gone; she was able to sleep at night; speech was affected at times if she took tea or coffee. 29.—She has had a severe shock from the death of her youngest child four days ago; had not been able to sleep since. ℞ Ferri et quinæ citratis, gr. x.; tinct. nucis vomicæ, ♏x.; aquæ, ℥j., ter. die. Under this treatment she continued to hold her ground fairly well up to the present time, January 29, in spite of nursing a sick child.

Remarks by Dr. Jones.—The above cases are examples of an affection which, as far as I know, is not noticed in standard works, and, though not a life-perilling disorder, is one which causes no little distress, and for the cure of which patients are very grateful. I confess to a predilection for the study of these minor and more manageable diseases rather than for those grave affections where there is room for diagnosis,—and little more. It seems a poor thing to know all about a disease except the most desirable knowledge, viz., how to cure it. It is very possible to confound these affections with the so-called hysterical, from which, however, I consider that they are positively differentiated by the results of treatment. The term hysteria or hysterical should be applied, I think, to no case where there is really an honest desire on the part of the patient to get well, and where there is no morbid tendency to exaggerate the sufferings. A genuine specimen of hysteria will lead the unfortunate doctor a pretty dance of attendance on one symptom after another, and will be infinitely more benefited by moral discipline than by all the drugs that were ever invented. The patient is sick because she wills to be so, and sick she will be as long as it suits her, and no longer. There are doubtless examples common enough of a mixed kind, where, along with some real bodily disorder, there is more or less hysterical mental perversion. But there can be no question that the cases recorded above were not of this kind. Plainly and clearly the patients got well on a drug treatment that would have done small good to an hysteric.

As to the nature of the disorder, it seems plain that it was a pure neuralgic affection, as evidenced by the absence of visible disease, the remissions, the general state, and the juvantia. Now, the great rule to bear in mind in dealing with all neuralgia, which does not depend on some actual cause of irritation (as a decayed tooth), or on gouty or syphilitic poison, or the like, is, that in 99 cases out of 100 it is either rheumatic or simple. The former it probably is if the urine is thick with lithates, the strength pretty good, and the patient has suffered previously from rheumatism; the latter if the urine is pale, clear, of low sp. gr., if the patient is feeble, and gives no history of rheumatism. However, it is very common, as these cases exemplify, that the two affections run into each other in the same patient, and that the dysæsthesia at its outset is rheumatic, and afterwards becomes simple. In the rheumatic condition iodide of potassium and hydrochlorate of ammonia are the two remedies, the latter if muscular tissue seems to be specially involved. Alkalis should be given with the iodide as long as lithates are deposited. In the simple, neuralgia, quinine, iron, and opium may be relied on, with rest, good diet, and pure air. It is often in doubtful cases good practice to begin with the treatment directed against rheumatism, replacing it if it fails, or proves inadequate to effect a complete cure, by the direct tonics. No, only in throat dysæsthesia, but in a multitude of disorders like in nature, only varying in situation, the above plain directions will lead to satisfactory results.

Dr. Türck (*Wien. Allg. Med. Zeitung*, vii., 9, 1862) has described an affection which seems to be similar to, if not identical with, the one I am considering. He calls it neuralgia and hyperæsthesia of the entrance of the throat, and describes particularly its exact seat. His therapy consists in resection of a piece of the gustatory nerve, and application of lunar caustic. This, he says, has been successful; but in my cases I am sure that the branches of the glosso-pharyngeal and sympathetic were much more involved than the gustatory nerve. In lingual neuralgia, on the other hand, which is a far more obstinate affection, division of the gustatory might, I think, be advisable.

MIDDLESEX HOSPITAL.

CASE OF ACUTE PHTHISIS — INFILTRATED TUBERCLE OF THE RIGHT LUNG—PHLEBITIS —DEATH—REMARKS.

(Under the care of Dr. GOODFELLOW.)

[Communicated by W. DUNNETT SPARTON, late Resident Obstetric Assistant.]

Charles R., aged 27, single, admitted on November 1, 1861. The patient was always strong until three months ago, when he caught cold, and from that dates the commencement of his illness. For some years he had been a clerk in a warehouse. No history of phthisis can be traced in any member of his family.

On admission, he had all the symptoms of acute phthisis; on the left side of the chest only a little moist friction was heard, on the right side the signs of tubercle in all its stages were well marked throughout the lung. He had frequent hæmoptysis. Respiration 52; pulse 120; urine abundant, free from albumen or sugar. Ordered to have milk diet and beef-tea, and to take a draught containing iodide of potassium and cinchona three times a day; the chest to be rubbed with an ointment of mercury and opium where painful.

November 3.—Urine specific gravity 1040, free from albumen. Ordered to have the right infraclavicular region painted with tincture of iodine.

6th.—Seems rather better; the chest is free from pain. Pulse, in recumbent posture, 99; sitting, 120; respiration 32. On the left side the friction sound remains, on right side chest signs are much the same. To have meat diet and beef-tea. Urine specific gravity 1030, free from albumen.

16th.—To take two teaspoonfuls of cod liver oil three times a day.

18th.—As he complained of much pain in the right inframammary region, a small blister was applied. Although his general health continues much the same, emaciation steadily progresses.

30th.—Since last night the right leg has become œdematous. There is no tenderness on pressure. The patient thinks that the limb became uncovered when he was perspiring freely in the night. Skin dry and hot; appetite failing; tongue dry, and coated with yellow fur; pulse 120, sharp; respiration 30, short; no rigors.

December 2.—Restless in the night; had one rigor. Countenance dusky, with hectic flush. The œdema of the right leg is somewhat less. Along the inner side of the ankle is a dusky red line, disappearing rapidly and entirely under pressure, not painful. The femoral and other large veins of the leg are cord-like and hard, and tender on pressure. The right femoral glands are enlarged and tender. Pulsation is good in both femoral arteries. Pulse 120 to 126,

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small and sharp; respiration 30, short. The sputa under the microscope were found to consist of tubercular matter and some yellow elastic tissue. The limb was ordered to be covered with cotton wool, and over this thin gutta-percha. He was also ordered to take a draught of chlorate of potash and hydrochloric acid thrice daily, and a pill containing quinine and Dover's powder twice a-day, and to have six ounces of wine and eggs.

3rd.—Right leg rather more swollen about the groin, not elsewhere. Pulse 130, extremely weak.

4th.—Right leg less swollen, free from pain. The patient can bear to have it gently rubbed. Pulse 138; respiration 34; thirst great. Urine specific gravity 1035, free from albumen.

6th.—Some delirium during the night. He is now exceedingly weak. Leg remains in same condition. Pulse 130; respiration 34, abdominal. Urine specific gravity 1035, free from albumen. To take instead of the quinine, a draught containing chlorate of potash, carbonate of potash, and nitric ether in peppermint-water every four hours, and linctus often.

8th.—No delirium. Right leg much the same. There is slight œdema of the left leg, and tenderness on pressure over the course of the principal veins. Pulse 140; respiration 34.

9th.—A line of redness has appeared on the inner side of the left ankle, as was the case before in the right foot. The œdema is much the same. Pulse 144; respiration 36. Sputa have a gangrenous fœtor. Over the whole of the right side metallic respiration, voice, and cough are heard.

He became gradually weaker, and died on December 12.

Post-Mortem Examination made Thirteen Hours after Death.—Extreme emaciation; great œdema of lower extremities, but more of right than of left; none elsewhere. *Head.*—Sinuses filled with dark blood. Brain and membranes normal. *Chest.*—Seven ounces of clear straw-coloured serum in pericardium. Surface of heart smooth. Right cavities full of dark soft coagulum; small dark coagulum in left cavities. Aortic valves competent, and valves generally healthy, with the exception of an abnormal deficiency at each extremity of the aortic valves, the free margin of the valve being at this part formed by a narrow tendinous cord. Weight of heart 9 ozs. Right lung much collapsed in front, and inseparably adherent at apex. About 3 ozs. of turbid serum in right pleura. Surface of lower lobe, and back part of upper lobe, covered with membranous shreds of semi-organized lymph, detached without difficulty. Whole of lower lobe, from base to apex, infiltrated with soft yellow tubercle, breaking down into cavities from the size of a pea to that of an orange. One large one at apex, the size of the latter. Several of the cavities in the lower lobe had their walls formed by disintegrating pulmonary tissue, and contained a dirty greenish fluid, of a decidedly gangrenous odour. Weight of right lung 58 ozs. Left pleura contained about 10 ozs. of turbid serum. Lower lobe covered with a thick, semi-organized, detachable, false membrane, with some recent lymph. Weight of left lung 21½ ozs. It was *quite free* from tubercle, but the greater part of the lower lobe was condensed and carnified, sinking in water, smooth on section, and very tenacious. Near the anterior inferior angle of the lower lobe was a patch of lobular pneumonia, the size of a cherry, coated on the pleural surface with thick yellow lymph. On section, this indurated mass was found to be partially detached at its circumference, and to exhale a gangrenous odour. Immediately behind this was another patch of lobular pneumonia, as large as a walnut, in an earlier stage. *Abdomen.*—About 8 ozs. of clear straw-coloured serum in the peritoneal cavity. Liver 59½ ozs., not adherent; surface smooth. Parenchyma pale yellow, flabby and soft. Hepatic cells contained an unusual amount of oil. Spleen 6 ozs., normal. Right kidney 5½ ozs., left 5½ ozs; surfaces smooth. Capsules non-adherent; parenchyma normal; stomach, intestines, pancreas, and supra-renal capsules normal. The lower four inches of the vena cava, the right common, and external iliac, femoral, popliteal, and posterior tibial veins, with all their tributaries, were distended so as to resemble firm, rounded, blue cords; the right external iliac being as large as the forefinger. The left common iliac vein was almost empty, but the left external iliac and femoral was distended like those of the right side, though to a less extent. On slitting up the vessels, a firm, decolourized, fibrinous coagulum was found occupying the lower four inches of the vena cava and the right common iliac. This was firmly adherent to the venous coat, except at its upper inch and a half. The venous coats were thickened and matted externally to the surrounding tissues. Below this the vein was found filled with firm dark coagulum, at some places adherent, at others not. At the adherent parts, as for instance in the right femoral, the venous coats were found considerably thickened, and of a dark red colour on the inner surface.

Remarks.—This case is related as an example of phlebitis coming on during the course of phthisis. Dr. Goodfellow had in the Hospital another phthisical patient at the same time, in whom very similar symptoms manifested themselves, and after death the condition of the veins was almost identical with that in the case of C. R. Phlebitis does not seem to be of rare occurrence in cases of phthisis, though many writers on the subject have not alluded to it. Louis, in his work on Phthisis (Syd. Soc. Ed., p. 19), records a case in which the affection extended into the iliac veins as far as the vena cava. The lungs in this case were healthy, except at the right apex, where there was a cavity. Hasse also relates a similar case, and refers to one other. Dr. Curnham has related four cases of a similar kind, in one of which the lower part of the vena cava was obstructed. In the case of C. R. it is remarkable to find the obstruction extending as high as four inches along the inferior vena cava. The phlebitis most probably arose from the absorption of pus from the diseased lung into the blood Dr. Goodfellow thinks; but why, under these circumstances, the inferior veins of the body only should be affected does not seem clear. There was an entire absence of any intestinal lesion in the case related; and in the cases of the authors alluded to, as well as those of Dr. Basham, there appears to have been very rarely any. The patches of pneumonia in the otherwise healthy lung seem easily accounted for in the same manner as the phlebitis. A very interesting point revealed by the post-mortem examination was the large size of the tuberculous lung, and the entire freedom from tubercle of the left lung. The occurrence of the pneumonia has been alluded to. The presence of tubercle does not seem necessary to account for it. Two other points of considerable value in the post-mortem may be mentioned. Where the "cracked-pot" sound had been very distinctly heard during life there was found a large cavity, with the lung adherent to the chest wall; and at the part where œgophony had been very distinct there were found adherent shreds of lymph, with but a small amount of fluid in the pleura.

CASE OF EXCISION OF THE HIP-JOINT—DEATH FOUR MONTHS AFTERWARDS.

(Under the care of Mr. HULKE.)

A FAIR, delicate girl, aged 4 years, was admitted into Regent Ward, under Mr. Hulke's care, on May 31, 1862, with disease of the left hip-joint, which had begun four years previously. It was attributed by the mother to a blow, after which she limped, and complained of pain in the knee and hip during several months; then the hip became swollen, and abscesses burst in the upper part of the thigh and buttock. These remained open about three months and then closed. Fibrous anchylosis took place, and the joint remained quiet till Christmas, 1861, when fresh abscesses formed. At the date of her admission, the left lower extremity was apparently three inches shorter than the right, but the actual shortening was only one-eighth of an inch, the remainder being due to obliquity of the pelvis. The thigh was fixed on the trunk, rotated inwards, and adducted, the inner side of the knee resting on the front of the other thigh. The femur was very slightly movable on the pelvis; the slightest motion caused great pain, which was felt more in the knee than hip. There were several sinuses communicating with the joint. No disease of the thoracic or abdominal viscera could be detected. The pulse averaged 120. She was thin, slept but little, and was worn with suffering.

During the first three weeks of her stay in the Hospital, much relief was derived from extension, with a weight hanging from a cord attached to the leg by a stirrup of plaster; but towards the end of June, fresh abscesses formed in the hip, and the discharge from the existing sinuses became more profuse. At this time, in spite of every care, a bed sore formed over the sacrum, the child's appetite failed, and her strength was declining.

July 8.—A careful examination under chloroform having established the presence of caries, the head of the femur, with the trochanters and part of the brim of the acetabulum were removed. The rest of the acetabular surface, though denuded of cartilage, was clothed with granulations. The

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bleeding was trifling. The limb was fixed in a line with the body, by a long splint interrupted at the hip. The child slept several hours during the night. On the following morning her pulse was 136; at night it had risen to 144; the skin was hot and the hip red, but not painful unless she moved. A caoutchouc bag of ice was ordered to be kept constantly applied to the hip.

11th.—Slept well; is now easy and cheerful; she says she has been much more comfortable since the use of the ice; relishes her food. Pulse 132.

From this date she steadily improved, till the middle of August, when an obstinate diarrhœa set in, coincidently with which the suppuration, which had much diminished, became profuse. Soon afterwards, whilst Mr. Hulke was absent from town, the splint was left off, in consequence of a sore having formed on the outer ankle from pressure, and the thigh became slightly flexed, and soon after œdematous. In October the diarrhœa returned, was not amenable to treatment, and the child died in November, soon after her mother had taken her from the Hospital, and about four months from the time of the operation. An examination of the body could not be procured.

BRADFORD INFIRMARY.

CASE OF EXCISION OF THE KNEE JOINT—RECOVERY—CONDITION OF THE LIMB EIGHTEEN MONTHS AFTER THE OPERATION.

(Under the care of Mr. TERRY.)

ARTHUR M., aged 9 years, was admitted into the Bradford Infirmary, under the care of Mr. Terry, on July 30, 1861, with disease of the knee-joint. About two years before he was kicked by another little boy; this was immediately followed by considerable pain and swelling. He immediately applied at the Infirmary, and, after leeching and fomentation with rest in bed, he appeared relieved, a slight stiffness and halt remaining.

On admission he was pale and unhealthy-looking. The leg was considerably shortened, from the partial displacement of the tibia backwards and outwards. There was great pain in the joint, with considerable effusion, more especially on the outer side of the ligamentum patellæ. The starting of the limb was always worse in the night, so that he got no sleep, and his general health began to give way.

On August 23, chloroform having been administered, excision of the knee-joint was performed by making the H incision as strongly recommended by Professor Fergusson. The upper surface of the tibia and a portion of the condyles of the femur and the patella were removed. The osseous structure was very vascular and healthy. The joint contained a large quantity of thick, curdy matter, with a large quantity of pulpy synovial membrane. The wound was then drawn together by wire sutures, the limb was secured in Lawson and Parkinson's splint, resting on Salter's swing apparatus, which is highly recommended by Professor Fergusson in his work, at page 458. In the evening of the same day he was very restless, and complained of great pain in the knee, which was relieved by an opiate.

24th.—The wound looked well, and was quite easy.

25th.—Continuing to do well; wound still looking well. Ordered beef-tea.

26th.—Wound looking well, and beginning to suppurate. In the evening, he complained of much pain in the wound, and had severe shivering, and there was diminished suppuration. The wound looked a little reddened and tense; this was relieved by removing several sutures.

27th.—He still continued very poorly. Pulse quick; tongue brown and dry, with rigors and sickness. The wound presented an erysipelatous blush for some distance above and below. Ordered the tincture of iron to be applied over the blush, and to take a mixture containing steel and quinine.

28th.—Much better than yesterday, the wound looking healthier, with increased suppuration. The remainder of the sutures were removed; he then continued to do well, and the splint was re-adjusted on September 24.

On December 24 he was allowed to get up, and the metal splint was exchanged for a gutta percha one.

This boy was seen by Mr. Terry in February last, eighteen months after the operation, and he was looking very well, and walked several miles daily to school. He had no pain, no swelling or thickening, and there was some slight motion.

VESICAL CALCULI IN A FEMALE—PECULIAR NUCLEI—OPERATION—RECOVERY WITHOUT INCONTINENCE OF URINE.

(Under the care of Mr. TERRY.)

HANNAH W., a very hysterical, pseudo-modest kind of girl, aged 24, unmarried, sent by a resident Practitioner for operation, was admitted into the Infirmary on February 3, 1863. She stated that symptoms of stone came on about a month ago, with violent pain in the bladder and along the urethra, with constant desire to pass urine. On passing a sound it immediately struck against a large and apparently soft stone. The bladder at the time was very much contracted.

February 13.—The operation had been delayed to give time for the cessation of the menses. Chloroform being administered, and the bladder injected with warm water, a small lithotrite was introduced into the bladder with the intention of crushing the stone. But the substance of the stone appeared so soft and elastic that the lithotrite had no power over it. Mr. Terry then proceeded to dilate the urethra with the finger, which was done readily, and then seized the stone with a small pair of lithotomy forceps. On passing the finger again into the bladder, he discovered a second stone, and this was removed in the same way as the former one. He then washed out the bladder freely with warm water, after satisfying himself that there was no more.

On examining the calculi, they were found to be exactly similar in appearance, size, and form; but that they were two distinct calculi was quite clear from the absence of any indication of connection. The shape was exactly like a Brazil nut, the length of each would be about two inches and a half, and about an inch in breadth, and one edge was thicker than the other. On making a section, it was clear that it was some vegetable matter covered over by a great deposit of phosphates, forming an entire coating, which was readily separated by the finger. On examining the nucleus more carefully, it was found to consist of a cellular vegetable growth. The girl denied having introduced anything into the urethra.

14th.—Passed a good night; she was quite easy, and had no incontinence. Passed water about every hour, which was rather bloody and purulent. Ordered half a drachm of tincture of hyoscyamus every three hours.

16th.—Retains the urine for two hours. Pus diminishing, and no irritation.

17th.—Retains her urine four hours, and it is less purulent; no pain. On putting the question to her this morning as to what she had used, she confessed that she had used two pieces of a Swede turnip, and pushed them into the urethra about five weeks since. The symptoms followed immediately. At first she denied having introduced anything into the bladder.

20th.—Discharged cured, and without incontinence.

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Medical Times and Gazette.

SATURDAY, MAY 2.

SMALL-POX BEHIND THE SCENES.

We are glad to receive at the present time Dr. Thomas Herbert Barker's book on Malaria and Miasmata. (a) He is well known to have collected an immense body of facts relating to

(a) "On Malaria and Miasmata, and their Influence in the Production of Typhus and Typhoid Fevers, Cholera, and the Exanthemata." Founded on the Fothergillian Prize Essay for 1859. By Thomas Herbert Barker, M.D., F.R.S. Ed. London. 1863.

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these much disputed subjects, and to have performed a laborious and well-devised series of experiments. His opinion on the propagation and habitat of zymotic diseases is precisely that which we gave expression to in our leading article last week, viz., that they are caused by organic poisons, capable of increase and propagation in the human body, which they infest and distemper, but also having lurking-places or breeding-places without, amidst filth and rubbish: that at times they lie dormant, and at times—like all other low organisms—propagate themselves with marvellous fecundity. This theory, it will be seen, reconciles the contagionists and the anti-contagionists. Zymotic diseases may be propagated by infection from the sick; again, they may be developed out of germs which lurk amidst decaying organic matter; and whatever "epidemic" states of heat and moisture favour "contagion," will also favour a seemingly *ab initio* development of these diseases.

In the case of small-pox, we are mercifully provided with a process which protects us against the disease, and, by lessening the disease, limits the source of infection. The small-pox germs, scattered amongst a well-vaccinated population, would resemble seeds sown in a soil which had been exhausted of certain elements necessary for those seeds' growth. Here and there a stunted plant might spring up, but no more.

But, unfortunately, it is found that we are practically not able to use vaccination to an exhaustive degree, and all the notions about the "extermination" of small-pox in which our progenitors indulged are but idle dreams. We are met by the following stern and unmistakeable facts. There is the fact that some persons soon wear out the protective power of vaccination, as they do that of small-pox, and are liable to either disease again and again. Secondly, human ignorance, carelessness, and prejudice are very formidable forces, and are sure to cause a residuum of unvaccinated persons, to say nothing of some who are ill-vaccinated, through the lazy and detestable practice of using "charges" of lymph on "points," "bottles," "tubes," etc. Thirdly, there is the fact that the state of health of a large number of children is such as to be an excuse—good or bad—for indefinite delays of vaccination, and is a possible cause of degeneration of the virus, or of its contamination by syphilitic or other poison. In the face of these facts, it is absurd to harp constantly on the old string. Vaccination will do much, but it cannot do all. There remain the extrinsic sources of small-pox, whence it bursts out from time to time, and these must be attacked with greater vigour. We must look upon an epidemic of small-pox as evidence, not merely of neglected vaccination, but of the existence of a destitute, filthy, ignorant, vagrant, brutalised portion of the population, amongst whom disease breaks out by a natural law, and from whom it spreads to the better classes, to remind them of their duties to their benighted brethren.

Desirous of knowing the facts from real life, we set out last Saturday afternoon to call on the Medical Officer of Health of a well-known London parish. "Do let us see the inside of things," we said. "Why this raging small-pox? Is vaccination neglected? if so, why is not the law put in force? Who is to blame?"—for in this, as in other calamities, we experience the true English feeling that it is somebody's fault. "You have come in the nick of time," was the reply, "for I have just received from the Registrar Vaccinator a list of four children who have been vaccinated, but whose parents have neglected to bring them on the eighth day for inspection, as the Act directs. Here is also a list of children who have been registered, but not vaccinated; and these lists are sent to me that I may coax or threaten, or go to law if I please, so as I get the thing done. Come with me, and you can make your own observations."

So off we set, and about ten minutes' walk brought us to a decent street, leading into one of the largest thoroughfares in London. We call at No. 69, and ask for Mrs. Thomson, the first name on the list. "No such person here," was the reply; "there was such a person, who left six months ago, and who keeps a stall in the street close by." Undaunted by this rather discouraging reception, our friend determined to go on, and find out the guilty person. So we came out into the great thoroughfare, the pavement of which was fringed for about half a mile with costermongers and other persons selling fish, periwinkles, vegetables, penny toys, fruit, ballads, crockery, cheap prints, and similar goods at stalls and barrows. Here our unabashed friend began to inquire of these stall-keepers if they knew Mrs. Thomson? "What Thomson?" "Why, she keeps a stall, and has a baby." The reiteration of this question soon produced a good deal of uninvited sympathy from the bystanders, mingled with occasional sarcasm; but at last he succeeded in finding a man named Thomson, who kept a fish stall. Our friend, first of all, adroitly found out where he lived, and then inquired about his wife and the baby. The fishman, in reply, swore that his wife had no baby; that if she had, it had not been vaccinated; that she was not right in her head; and that he knew nothing about the matter. Leaving him, we went off to the house where he said he lived. There we found his wife, a butcherly-looking woman, with a miserable baby in her arms, covered with patches of ecthyma. She vowed that the child had never been taken to be vaccinated, and that we must be in search of a different person. There was nothing more to be said or done here. Then we looked up case the second,—a woman with twins; out at work all day long; not to be seen. Case the third,—a young woman who had taken her child into the country. Case the fourth,—no house in the street of the number described.

"Now," said our friend, "how, in the name of common sense, are we to take civil proceedings against costermongers, vagrants, and persons with no fixed address? As for case the second, those twins whose mother is out at work all day must die soon, and then what will it matter? What Act of Parliament will induce such a poor wretch to lose the half day's work, which she must lose if she is to take her twins to be inspected?"

These perquisitions took up a good deal of time, so we went home to dinner, promising to return early on Monday morning, in order that we might see some of the persons whose children had not been vaccinated.

On Monday morning, accordingly, we went, and set out as before. On our way our friend said he would first of all call at a house to which the clergyman had directed his attention, because there was not a sufficient supply of water for the inmates, especially on Sundays.

The house, as we found, was a very large one, pretty clean, but most densely peopled—a family in each room—and not fewer than forty souls in it. Our friend first asked for the owner, a small tradesman, who occupied the shop. We were received by his wife. On stating the complaint, "Serve them right," she cried; "of course they've got no water. So soon as it comes in on Saturdays, they all go to the cistern and fill their buckets and tubs with it, and keep it in their own rooms. So some have more than they want, and waste it; others go without; and the end of it is, that we never have any from the middle of the day, Sunday, 'till it comes in on Monday afternoon, because the water is not turned on on Sundays." Our friend then proposed to see the cistern, to which the woman consented, and taking us into a back place, showed us, over a water-closet, a slate cistern, which, roughly measured with a walking-stick, seemed to be 4 feet long, 2 high, and 2 ft. 8 in. wide. Hence it would contain about 21⅓ cubic feet, which is equal to about 133 gallons of water, which was the allowance for forty human beings for forty-eight hours for washing and cooking, as well as for the use of the water-closet. But oh! the closeness, the horrid shut up smell, the nauseous bedroom and drain air that filled that house!

This was an episode. So on we marched to find the people

whose babies had not been vaccinated. First case—people out at work. Second case—people cannot be found; the house inhabited by many families, each in single rooms; indescribably nauseous from accumulated bedroom smells and want of open windows. Case third—mother did not believe in vaccination. Eldest daughter had had small-pox when a child, though she had been vaccinated. *Ergo*, etc., etc. Besides, the baby was not well enough. It was an ill-developed, whity-brown child of a year old, with big wrists, hot skin, and very few teeth. The woman was threatened with legal proceedings.

We had now seen enough, and came home. We put these details before our readers, some of whom may think them trivial, vulgar, undignified, not fit for a Medical journal, etc., etc. We say that in this class of facts lies the real cause why we have epidemic visitations of small-pox. When the Lords of the Queen's Most Honourable Privy Council can give the low Irish the habits of even the low English, when by a stroke of the pen they can demolish foul old houses, thin out their inhabitants, give them plenty of water, and grace to use it, and teach them to be cleanly as well as godly, then their mandate for universal vaccination will be of some service.

"SPIRITUALISM."

"And all the courses of my life do show,
I am not in the roll of common men."
"I can call spirits from the vasty deep."

So long as the art of "spirit rapping" only supplied amusing recreation for the busy, and harmless excitement for the idle, it was no more a subject for our notice than are the performances of Houdin or of the Wizard of the North; but when showmen and professors insist that the phenomena which they exhibit under the name of "spirit rapping," or under the more pretentious title of "spiritualism," are in reality communications from the world of spirits, they appeal to some of the most universal and deeply-seated feelings of the human mind;—the thirst after the unknown and the unseen, the ardent desire to peep behind the veil that divides the material from the immaterial world, and the longing after *proofs* of our own immortality. Such apparent success has attended the bold promise of the "spiritualists" to satisfy these perennial yearnings of the soul, that "spiritualism" has become a most injurious and dangerous form of excitement; confounding and blurring the boundaries between truth and falsehood, confusing and unsettling the weak, rendering men incapable of separating the domain of reason from the cloud-land of the imagination, and finally landing its unhappy votaries in our lunatic asylums. Forced thus by the most melancholy proofs to recognise in "spiritualism" a possible cause of terrible disease, we can no longer pass it by with only a smile and a shrug of the shoulders; we must face it, and examine it, as we would any other of the enemies we especially have to do battle with. We must inquire into its real nature and powers, learn its pretensions, and test the foundations, if any, on which they rest. In this spirit of inquiry we have read the latest, and we suppose we may call it the greatest publication of the "spiritualists," Mr. Home's "Incidents in my Life." Its object is to show that Mr. Home, like Glendower, "is not in the roll of common men; " that he, too, can call spirits "from the vasty deep," or "from their golden day," and that they "*come* when he does call for them," and not only then, but that whether he calls them or not, whether he is willing or unwilling, they come; and in this respect poor Mr. Home is less happy than was Glendower; he does not command the spirits, but is their servant and slave; by day and by night, in season, and out of season, they insist upon holding communion with him; very rarely indeed, if ever, so far as we can learn, for any useful or instructive purpose, but apparently for their own entertainment or amusement; because they are in "high spirits," and disposed for fun; or because in their disembodied state they suffer from *ennui*, and they return to their haunts of old in search of some excitement. We are told that the "facts" reported in this book "are certified by an immense number of persons who are here indicated by name or otherwise;" that the marvellous "manifestations" herein recorded have been "seen and investigated by persons of all ranks and classes from statesmen down to those in humble life," and that Mr. Home has "for years met, and meets every day with men of the highest attainments in art and science, who have carefully examined all these wonderful phenomena, and who have not rested satisfied with 'conjectures' either as to the table, or as to machinery alleged to be concealed" about his person. The testimony thus stated to be adduced in favour of the truth and reality of "spirit manifestations" sounds overwhelming both in quantity and quality; yet, if Mr. Home cherishes any hope that his book will silence or convince the unbelieving, mocking Hotspurs of the every-day world, he will be grievously disappointed, for when this promised mass of evidence is examined, it melts down into little more than Mr. Home's own "averments." We do not think that our mind is unusually closed against conviction, and we have carefully read the book, in the expectation of finding something like real proof of the pretensions of the "spiritualists," but we confess that we have utterly failed. Mr. Home's experiences as a "Medium" began in the nursery; his very cradle was kindly rocked by the "dear spirits" and in the same region of innocence he seems to have gained his idea of what constitutes evidence. In the nursery history of an apple-pie, all the witnesses as to its fate and the events of its career are letters of the alphabet: "B bit it," "C cut it," "D danced for it," and so on; and in like manner the vast majority of witnesses to the truth of "spirit manifestations" are letters of the alphabet: Count O., Count B, the Princess O., the Abbé de C., Miss E., the Princess de B., etc. It is true that nearly all Mr. Home's ladies and gentlemen of the alphabet bear titles, but we cannot allow that even that greatly increases the value of their evidence. We may be very narrow-minded and prejudiced, but we dare to confess that, though our dear old history of an apple-pie had stated that Baron B. bit it, Chancellor C. cut it, and Duchess D. danced for it, we should not think that the initials were any the more entitled to be considered as unexceptionable witnesses. All these alphabetical witnesses we must then utterly reject. Of the "statesmen" and the "men of the highest attainments in art and science," before mentioned, not one is named; and out of all Europe, only a short dozen of persons are brought forward by name as bearing testimony to the "facts" in the book. Of these few, "faithful among the faithless found," the majority are, like the Howitts, eager believers in any and every form of the supernatural, from the sweating statue of Hercules down through the Cock-lane ghost to Mesmerism, clairvoyance, spirit-rapping, and table-turning; and others bear a very meagre and modified testimony, the only evidence, indeed, of their belief in "spiritualism" being the fact of their presence at *séances*. Mr. Home considers this quite sufficient; but Mr. Adolphus Trollope has written to one of the journals a letter, which shows how very little such testimony may mean: he informs us that he "never saw anything of what, for brevity, may be termed professedly supernatural (so to speak) substances, such as 'hands,' or the like, but only professedly supernatural movements of natural substances." It must be regarded also as, at the least, a very suspicious circumstance, that it is only unquestioning, whole-hog believers who are deemed worthy to participate in the highest mysteries, and to witness the most wonderful "manifestations." Mr. Adolphus Trollope says: "I was requested by Mr. Home to absent myself for the future, in consequence of having expressed doubt and incredulity respecting a certain manifestation."

Mr. Home here again reminds us of the choleric Welshman—

". . . . . of many men
I do not bear these crossings."

While even in the presence of only out-and-out disciples the

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most wonderful phenomena, as the "levitation" of Mr. Home, never occur save in dark rooms, so that it is chiefly by the sounds of his voice that it is judged that Mr. Home is floating about in different parts of the room, and at varying heights from the floor. Altogether, therefore, though with the fear before our eyes that we shall be considered as being as hardened and as truth-rejecting as Sir David Brewster, we must still exclaim, with Hotspur—

> "But *will they* (the spirits) come,
> When you do call for them?"

We do not think it necessary to describe the means by which the spirits manifest themselves; everybody has read or heard of their rappings; their table-turnings, sofa-liftings, and chair-movings; their bell-ringings and accordion-playings; their hand-claspings and knee-pressings underneath tables, and so on. The only remarkable points about them are their pettiness, uselessness, and monotony; the spirits display a most woful lack of invention—one good *séance* exhibits nearly all their powers. The utmost that we can allow to be made out in the book is that several people honestly believe that they have witnessed various material phenomena inexplicable by any of the known laws of physics; this truly is not much, as we by no means deny that "there are more things in heaven and earth than are dreamt of in our philosophy:" and we do not forget that the skill of the juggler in the West has hitherto fallen far short of that shown by his brethren in the East. But we entirely sympathise with Sir David Brewster when he declares, to Mr. Home's great anger and contempt, that, though things happen which he cannot at once explain, "spirit is the last thing he will give into" in connection with rappings and the pitching about of furniture. It will indeed require vastly more evidence, and evidence of a much higher character than Mr. Home's "Incidents in my Life" contains, to persuade us that the spirits of the departed, of those "who have entered into their rest," occupy themselves in any such way, or that, if they are permitted to watch over, and hold communion with, their loved ones still in the flesh, they adopt any such modes of communication.

We ought perhaps, however, to apologise to our subscribers for our boldness in thus stating our doubts and our disbeliefs, and to warn them that in so doing we are endangering their property, for at one of Mr. Home's London *séances* the spirits occupied themselves in worrying and tearing to pieces a number of "Once a Week," which contained an article called "Spirit-rapping Made Easy." Rather a useless proceeding, and rather *infra dig.* on the part of the "spirits" we think; but we have disburdened our consciences by giving this hint of the special danger to which this number may be exposed.

In one light, however, as is suggested in the preface to the book, Mr. Home's autobiography may be found by us interesting and instructive, viz., as a pathological, or psycho-pathological study. He was a frail, sickly, highly-sensitive child, and was trained and nurtured in an atmosphere of superstition and credulity; his mother "was a seer throughout her life;" her great-uncle and uncle were also "seers, and gifted with second sight." While a mere lad he left the Scotch Kirk for the Wesleyans, the Wesleyans for the Congregationalists, was prevented only by the "spirits" from joining the Swedenborgians, and finally became a Roman Catholic, or rather a sort of Roman Catholic unattached, for he could not get on with his confessors, as the Roman Catholic Church denounces "spiritualism;" and he must hold strange and most unorthodox opinions about purgatory. He grew up a feeble, sentimental, half-educated man, cultivating only, or at least chiefly, the powers of the imagination; living in perpetual excitement, in that nursery and hotbed of "sensation," America—run after, fostered, and flattered as a "medium" of unusual eminence even in that land, where for a table to float in the air with half-a-dozen adults seated on it is a not uncommon "experience." How can we wonder then that he should fall into "trances," or that he should fancy he could see things we cannot see, and hear voices that we cannot hear? To what a morbid state of mind a man must have been brought when he could publish to the world that during his wife's pregnancy he was obliged to forbid her attending his spirit *séances*, because the child leaped in her womb in exact consonance with the rappings of the "spirits!"

THE WEEK.

CONGRATULATORY ADDRESSES TO H.R.H. THE PRINCE OF WALES.

On Wednesday, April 29, addresses of congratulation were presented to the Prince of Wales upon His Royal Highness's marriage, from the Royal College of Physicians, London, by Dr. Watson (Physician Extraordinary to the Queen), President; Dr. Budd (Senior Censor); Dr. Alderson (Treasurer), and Dr. Pitman (Registrar). From the Royal College of Surgeons, Edinburgh, by Patrick Newbigging, M.D., F.R.S.E., President, Royal College of Surgeons, Edinburgh. From the President and Council of the Royal College of Surgeons in Ireland, by Dr. Mackesy, M.D., President; Dr. Adams, M.D., Surgeon-in-Ordinary to Her Majesty in Ireland; and Dr. Hutton, M.D., Secretary.

A CAUTION TO OVARIOTOMISTS.

The *Dublin Medical Press*, of April 29, contains an account of a case in which pregnancy complicated an advanced state of ovarian disease. Dr. Donovan, of Skibbereen, who relates the case, states that the patient, a woman named Mary Fitzgerald, came under his care about four years ago. She was married, and the mother of two children. At that time he detected an ovarian tumour in the right iliac region, which he treated by pressure and iodine inunction. Twelve months after, the bulk of the tumour had so much increased that he determined on paracentesis, and drew off fifteen pints of a thickly gelatinous fluid. She made a good recovery, but five months after, the tumour having again filled, he again performed the operation of tapping, and drew off eighteen pints of a black, muddy-looking fluid, with a very offensive smell. A sharp attack of inflammation supervened; on its subsidence, the abdomen again enlarged, and he had again recourse to paracentesis, evacuating about sixteen pints of purulent fluid, probably the product of inflammation of the cyst. After this he lost sight of the patient for nearly a year. He was then summoned on a dispensary ticket to visit her, and was told by her husband to bring the instrument, as she was in great pain, and required to be tapped at once. He found her in great agony, but the pain recurred at intervals, and from its character he was induced to make an examination *per vaginam*. A child's head was at once discovered in the passage; labour went on regularly, and in a few hours she was delivered of a healthy full-grown infant. The woman died some months after from the ovarian disease.

TURNER AND ANOTHER *v.* RAYNELL.

This case, which was heard at Westminster on April 28, before the Judges of the Court of Common Pleas, is of great importance to the Profession. One of the points at issue was, whether it be necessary that a Medical man, bringing an action to recover for attendance and medicines, should be registered at the time of the commencement of the action. Another was, whether, in the case of a partnership, the registration of one partner entitled the firm to recover.

"The original action was brought on a Surgeon's bill to recover £46, in which a verdict was found for the plaintiff. A rule, however, was obtained to set aside the verdict and enter it for the defendant, on the ground that one of the plaintiffs was not registered as a Surgeon when the action was commenced, and that therefore, being partners, neither them could sue for the partnership account.

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"For the plaintiffs it was contended that one of the plaintiffs, Mr. Turner, being registered as a Surgeon and Apothecary, that was sufficient under the statute to entitle both to sue as partners, and the other partner, Mr. Smith, was registered as a Surgeon before the trial came on, which he contended was sufficient, under the 31st section of the Medical Act (the 21st and 22nd Victoria, cap. 90), which only required it to be proved at the trial that the Medical man suing was registered. It was further contended that both partners ought to be registered as Apothecaries, otherwise, one being disabled from recovering for Medical attendance for want of being registered, the partnership could not sue for the Medical attendance; and the whole of this bill, with the exception of two items, one for syringing an ear and the other for galvanising Mrs. Raynell, which it was contended were Surgical operations, was for Medical attendance. The charge for these two items was £2 10s. It was contended that to give this construction of the statute would be unreasonable, as it would prevent two persons joining in partnership, one of whom was a Surgeon and the other an Apothecary, one devoting himself to the Surgical and the other to the Medical practice of the partnership, which could not be the intention of the statute.

"For the defendant it was contended that the object of the statute was to secure that persons practising in the Medical Profession should be well qualified persons, under the penalty of not being able to recover their bills if they were not registered as Surgeons and Apothecaries, and, further, that the mere registry of one of the partners before the trial was not sufficient; it ought to have been before the action was brought.

"The Chief Justice, in giving judgment, said this was an action for Medical attendance and medicines supplied, and there could be no doubt that the defendant had had the consideration for the bill, and he now claimed to defeat the action under the 32nd section of the Medical Act, which provided that no Medical man should recover for his services unless he proved at the trial that he was registered under the statute. But the plaintiffs had complied with the words of the statute; they were registered at the trial. There was a direct judgment of the Court of Exchequer in Ireland, that this was sufficient, and he entirely concurred with that authority. If one of the partners only was registered, he still thought they were entitled to recover. A Medical man might employ an assistant or other person not qualified. Here one of the partners was qualified from the beginning as a Surgeon and an Apothecary, and the defendant had the fullest security in employing a firm the head of which was qualified and registered. How could it matter to the patient, when a Medical man sent his assistant who was not qualified, whether that person called himself a partner or an assistant; or whether he was entitled to be paid for his services by a salary or by a proportion out of a partnership? So far as the patient was concerned, it seemed to him to be precisely the same thing. Here both partners were thoroughly qualified; but the head of the firm, thoroughly well qualified and registered, gave the valuable services for which the defendant was taking what he (the learned judge) might call a stamp objection to prevent his recovering, which he thought not tenable.

"The other learned judges concurred.—Rule discharged." The ruling of the Chief Justice, if he be rightly reported, would seem to open a door to illegal practice, which we can hardly suppose the learned judge intended. It would appear to amount to this, that if in a firm one partner is qualified and registered, the other partners may practise legally without any qualification. We are heartily glad that Messrs. Turner and Smith obtained their verdict, to which they were clearly entitled; but we must dissent from the construction put on the law by Chief Justice Erle.

PARLIAMENTARY.

During the past week the Alkali Works Regulation Bill has passed the House of Lords. The chief alterations made in the bill have been the exemption of servants from responsibility, in the case of nuisances originating on their employers' premises; the imposition of an increased penalty, not exceeding £100 for a second or subsequent offence; and a provision that a party charged with occasioning a nuisance should not be allowed to appeal to a superior court, except when the Court of Quarter Sessions certified that there was some point of law on which it was desirable to have the decision of a higher tribunal. Without such a provision the law would be inoperative; for, as Lord Derby remarked, "It was frequently well worth while for a wealthy manufacturer, convicted of occasioning a nuisance, to appeal to the superior courts, knowing full well that the informer could not bear the expense of such a proceeding."

In the House of Commons on Thursday, the 23rd ult., the Chancellor of the Exchequer's contemplated changes in the imposition of the Income-tax were discussed. The taxation of charities is, we think, as much a piece of vexatious meddling legislation as is Mr. Gladstone's proposal to make every club or association pay £17 1s. for a licence to sell beer and spirits to its members. Sir H. Willoughby instanced the case of some Hospitals whose incomes would be reduced by £1500 or £1600, drawing from the Chancellor the rejoinder that they were so much the better able to bear their share of the taxation of the country. Mr. Roebuck's motion "that in the opinion of the House the tax imposed on precarious incomes should be lower than that on permanent incomes," although deserving a better fate, was withdrawn. Mr. Gladstone ultimately passed his tea, sugar, and income-tax resolutions.

The adjourned debate on the Irish Vaccination Bill was resumed.

"Lord Naas contended that the introduction of compulsory vaccination would lead to a decrease of its use and encourage inoculation, and therefore the bill would not carry out the object it was intended to accomplish. There were also cases in which it would be dangerous to vaccinate children at a certain fixed time, and in such instances it would be most unfair to subject the parents to a penalty for not having their children vaccinated. The measure would also interfere with the Births Registration Bill, just passed, as persons would avoid registering the births of their children, because by so doing they would bring themselves under the operation of this bill.

"Mr. Whiteside showed from the report of the Royal Jennerian and Vaccine Institutions, that the system of compulsory vaccination now in force in England had not been successful. It would be better not to pass this bill, and, in order to test the question, he would move that it be read a second time that day six months.

"Sir R. Peel said nine of the most populous unions in Ireland had pronounced in favour of the bill. As to the expense, it was a very infinitesimal burden upon the resources of Ireland, especially when compared with the immense sanitary advantage that would be derived from the measure. One beneficial result of compulsory vaccination was that where it was in force the loss from small-pox had enormously diminished. He trusted his right hon. friend would allow this bill to be read a second time.

"Mr. Whiteside then withdrew his amendment, and the bill was read a second time.

"On Friday, April 24, Lord Naas asked the Secretary of State for the Home Department whether the attention of the Government had been drawn to the increase of small-pox in the metropolis; and whether it was his intention to propose during the present Session any measure for the promotion of vaccination.

"Mr. Lowe said the misfortune of the question of vaccination was, that in quiet times no trouble was taken about it, and it was only when disease appeared in all its horrors that applications were made to the Government for legislation, which, if ever so good in itself, must then be tardy and inefficient to meet the evil. This subject had engrossed the attention of the Government. The House was aware that there was already in existence a measure for compulsory vaccination. That measure was not in all respects satisfactory; but the fault connected with the present spread of small-pox was not so much attributable to the state of the law as to the neglect of the local authorities on whom devolved the working of it. The matter, however, was still under the consideration of the Government, but no decision had yet been come to."

On the same night Sir George Grey had to defend his course of action in the case of Jessie Maclachlan, the Glasgow convict. He admitted that the verdict of the jury was right,

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but stated that facts subsequently came out, which, if they had been laid before the jury, might have led to a different result, and the impression made on his mind thereby was that the capital sentence ought not to be carried into effect. His statement, however, we believe failed to convince any of his hearers of the propriety of commuting the sentence, unless it were the party of northern "sympathisers." It is admitted on all hands that if not a principal, Jessie Maclachlan was at least an accomplice in the crime.

"On Tuesday, April 28, General Buckley asked the Secretary of State for the Home Department whether the building intended for criminal lunatics was ready, and whether those criminal lunatics now confined at the private asylum at Fisherton, near Salisbury, amounting to the number of 284, were likely shortly to be removed to the new Asylum.

"Sir G. Grey was informed that a large portion of the asylum was very nearly ready, so that very shortly about 100 patients would be removed to it. He did not know what number might ultimately be placed there, but the first patients received would be female patients.

"Mr. K. Seymer moved that the analysis of evidence appended to the Report of the Select Committee on Sewage of Towns, in Session 1862, be cancelled. He detailed the circumstances under which the Report was prepared, and complained of the manner in which the analysis of the evidence was drawn up, as irregular or informal.

"The motion was seconded by Mr Paget.

"Dr. Brady, the Chairman of the Committee, defended the analysis, which he had drawn up, he said, with great labour.

"After some further discussion, the analysis was ordered to be cancelled on the ground of informality."

REVIEWS.

Illustrations of the Surgery of the Female Pelvic Organs, with Physiological and Pathological References. By Henry Savage, M.D. Lond., F.R.C.S., Physician to the Samaritan Hospital for Women. Folio. London: John Churchill and Sons.

Had this work been entitled "The Anatomy of the Female Pelvic Organs, with Surgical and Pathological References," its nature and extent would have been more correctly indicated. It consists of coloured plates displaying forty figures, twenty-nine of which illustrate the general anatomy and relation of the pelvic organs, seven others displacements of the uterus, and the remaining four plastic operations for the relief of prolapsus uteri.

The artistic part of the work is the production of the eminent anatomical artist M. Léveillé, and those persons who are acquainted with Hirscheld's "Névrologie" will at once have an idea of the style of the illustrations; and we need only say that for clearness, and delicacy and beauty of execution, they quite equal his best delineations.

The plates are accompanied by descriptive text, in which reference is constantly made to the surgery of the part described. In his description of the superficial anatomy of the perineum, the author points out that the appropriate place for division of the pudic nerve is just aside of the clitoris, where it emerges from behind the crus clitoridis.

The erectile system of the generative organs is very fully illustrated and described, Kobelt's views being altogether adopted with regard to the analogy of the bulbi vestibuli to the bulb of the male urethra, and of the superior communicating plexus of veins beneath the clitoris to the corpus spongiosum urethra of the male. In conformity with the views of the same observer, the "Constrictor vaginæ muscle" is called "Musculus bulbo-clitoridis."

The author claims for Mr. James Traer, by whom the majority of the dissections represented in the plates were made, the merit of having discovered a new venous body situated immediately beneath the ovary, and named by Mr. Traer the "bulb of the ovary." We believe, however, that the existence of this plexiform mass of veins has been long recognised by anatomists under the name of ovarian or pampiniform plexus.

The fasciæ of the perineum are described as forming three distinct compartments—the two layers of superficial fascia form the "vulvo-scrotal or pudendal sac," lying in front of the other structures between the vestibular orifice and the pubic ramus. The adipose contents of the sac are liable to labial abscess, and the pus, "making its way backwards, points anywhere at the surface of the ano-perineal triangle."

The next fascial compartment is called the "superficial fascial compartment," formed in front by the deeper layer of superficial fascia, and behind by the "middle perineal fascia" (the anterior layer of the triangular ligament). The tensor cruris clitoridis muscle, the superficial transverse muscle, the bulb of vestibule and its pubic (*sic.*) efferent vein, and the crus clitoridis are described as being contained in this compartment; but with respect to the bulb and its *pudic* efferent vein this statement is inconsistent with Fig. I., Plate 2, where these venous structures are represented in their proper situation beneath the middle perineal fascia. The vestibular bulb may be considered as ensheathed in the middle perineal fascia The third fascial compartment is included between the "middle perineal fascia," and the "posterior perineal fascia," *i.e.*, between the two layers of the triangular ligament. In this compartment are found the deep transverse muscle, the pudic vessels, and, we may add, the vulvo-vaginal gland, (which is elsewhere stated to be placed beneath the middle perineal fascia) and the pudic nerve. As a result of their subfascial position, acute abscess of the bulb or of the vulvo-vaginal (a) gland form characteristic projections in the vulva.

The relation of the peritoneum is perhaps of all others the most important point in Surgical operations on the pelvic viscera, and it is therefore disappointing to meet with the following indefinite statements:—"The recto-vaginal peritoneal fold descends on the back of the vagina as far as the cervix uteri;" "the pelvic peritoneum covers the anterior and upper third of the bladder."

The following description is given of the connexion between the vagina and uterus:—"The external coats of the vagina lose themselves by degrees on the body of the uterus, the outermost being traceable half way towards the fundus. By this arrangement the entire cervix can be freed by dissection from the vagina without entering the pelvic cavity, wounding the bladder in front, the recto-vaginal fold of peritoneum behind, or interfering laterally with the uterine vessels." This we take to be a dangerous statement, and one that does not accord with anatomical facts, and we would prefer adhering to the safer and more correct determination that the vagina terminates "at the line of demarcation between the lower, or vaginal, and the upper, or supra-vaginal division of the cervix."—*Cyclop. Anat. and Physiology*, art. "Uterus," p. 625.

Dr. Savage states that the fundus of the uterus reaches a line drawn from the upper border of the symphysis pubis to the sacro-vertebral articulation. This is certainly too high. Dr. Farre, in the article just quoted, in common with other authors, makes the line to reach from the lower border of the symphysis pubis to the sacro-vertebral joint. It is a matter of regret that in Fig. 2, Plate 6 (which is intended to show the natural relation of the parts) the fundus of the uterus should be represented as projecting altogether out of the pelvic cavity.

The functions of the uterine ligaments are very clearly demonstrated in Plate 9, in downward and backward displacements of the uterus.

Plate 10 contains the only illustrations of the Surgery of the female pelvic organs, and appears to proclaim that it is the intention of the author to bring out another volume in continuation of the present one. The importance which Surgical operations for the relief of conditions incidental to women have attained, demands a further illustration of the subject, and from his connexion with the Samaritan Hospital no one perhaps has better opportunities for supplying the want than Dr. Savage.

The present work is a credit to those who have been engaged in its production, and will prove no less useful to the general Practitioner than to those who make the Surgical diseases of women their special study.

On the Cure of Club-Foot without Cutting Tendons; and on Certain New Methods of Treating other Deformities. By Richard Barwell, F.R.C.S., Assistant-Surgeon Charing-cross Hospital, etc. London: John Churchill and Sons, New Burlington-street. 1863.

Mr. Barwell has come to the conclusion that the treatment of acquired and congenital deformities by tenotomy is proved

(a) We use the terms bulb of the vestibule (Kobelt) and vulvo-vaginal gland as being more appropriate than "bulb of vagina" and "ano-vulvar gland."

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by the results of actual practice to be most frequently unsuccessful; that such deformities frequently recur; that in other cases a different or opposite distortion supervenes; and that in the large majority of instances power over the limb is injured or destroyed by the operation. We believe that this experience is at variance with that of many of our best Surgeons, but as the author has arrived at it honestly, we think that the Profession is indebted to him for avowing his conviction, and endeavouring, in accordance with that conviction, to substitute what he believes to be a more certain and successful mode of treatment. It is not, however, only to the operation of tenotomy that the author objects; he equally reprobates the after-treatment usually adopted. He holds that the different varieties of talipes all primarily affect the front half of the limb, and that the mechanical treatment of club-foot by shoes acting primarily and principally on the ankle-joint, is manifestly a mistake. He argues that to fasten the sole, which ought to be mobile and free, upon a stiff iron, and to force the contracted muscles *while at rest* into a new posture can only be a temporary remedy for the contraction, and will necessarily increase the paralysis which is "the head and front of the offending."

The plan of treatment he would substitute is founded on the principles of restoring the balance in muscular action lost by the paralysis of certain sets of muscles; of substituting a force for the weakened or paralysed muscles without depriving the still useful ones of their power; of applying the force as nearly as possible in the direction and position of the paralysed muscles, so that it shall act only on the parts on which the muscular force is nominally expended, and, at the same time, of maintaining movement in each part of the foot, which movement is gradually to be guided by the applied force from an abnormal into a normal direction. The means he adopts to carry out these principles are, "to substitute for the absent or diminished forces a spring or springs of india-rubber, stretched between the origin and insertion of the muscle, at a degree of tension that would supplement the weakened or supply the absent power of the organ."

We cannot here attempt to examine the manner in which Mr. Barwell has applied his method of treatment to the various distortions of the foot. It is sufficient to say that he has displayed a considerable amount of ingenuity, and that he has found his appliances, in his own hands, successful. On the whole, we think the book creditable to him as a practical Surgeon.

PROVINCIAL CORRESPONDENCE.

BIRMINGHAM.

April 26.

The most noteworthy fact in our recent Medical history is the establishment of a country house for convalescents in connexion with the General Hospital. Originally letters were addressed "The General Hospital, *near* Birmingham," but now the Institution is in the very centre of the most dense manufacturing district, with many peculiarly obnoxious factories in its immediate vicinity. The internal arrangements of the Hospital are as perfect as existing circumstances admit of; and it is beyond question that the Medical and Surgical staff fully sustains its high historical repute; but the growing hygienic difficulties of the situation have imperatively required the Sanatorium so opportunely provided.

A local pamphleteer has recently recalled public attention to the growing evils of prostitution, and the advisability of controlling it after the continental fashion. It is to be regretted that the author's statistical data are incomplete, and that he is imperfectly acquainted with many of the able papers which have been written on the subject, since it became the theme of the late Dr. Holland's elaborate contributions to the pages of the *British and Foreign Medico-Chirurgical Review*. It does not, however, admit of doubt that the evil is so rapidly extending that something must be attempted for its mitigation. The sanitary consequences are those which immediately concern us; and, seeing the apparently insurmountable nature of the difficulties in the way of legislative enactment, it becomes most important to ascertain if all be done that is possible for the treatment of venereal diseases.

A crowd of out-patients suffering from venereal affections seek relief at our two great Hospitals, and a considerable number are admitted within the walls; but there is very good ground for believing that a large proportion of the infected, especially women, do not submit to treatment;—hence spread of the mischief and degeneracy of the race. A Lock Hospital would certainly be a great *desideratum*, but the multitudes of poor at the doors of the existing charities are so large, and so many draw upon the funds who are perfectly able to pay for professional attendance, that a debt of many thousand pounds burdens the Hospital exchequers, and, so long as it does so, it is quite out of the question to set on foot any other establishment for the gratuitous treatment of disease.

Under existing circumstances, the problem for solution is how to treat venereal patients, particularly those suffering from the constitutional disorder, with the greatest economy of expense and time, and with the utmost simplicity and efficiency. During the last few months, the treatment of secondary syphilis, by means of moist mercurial fumigations, has been extensively adopted at the Queen's Hospital by the Resident Surgeon, Mr. John Wilders, who inclines to the belief that no other curative method, either mercurial or non-mercurial, is so likely to eradicate the syphilitic poison from the constitution, and to restore the sufferers to their pristine health. It is highly interesting to see the improvement that takes place in the condition and appearance of the patient, even while taking the baths, a process which is necessarily rather debilitating. Persons who at the commencement of the treatment are wan, pale, and thin, rapidly regain flesh and ruddy colour. Many of the cases cured by this method had before been treated by iodide of potassium in large doses, by nitric acid, and all the usual anti-syphilitic remedies, with little or no result; in fact, instead of getting better, many of them had become considerably worse—to wit the two following:—

W. R., aged 48, a sailor, contracted syphilis, about twenty years since, at a town on the Spanish coast, and has since that period frequently suffered from sore-throat, nocturnal pains in the bones, and, in addition to this, his wife has had several miscarriages, and some of his children have died within a year after birth, from hereditary syphilis. He was treated with mercury for the primary disease. About two years ago he first noticed a small ulcer over the sacrum, which, rapidly increasing, burrowed under the skin, until the whole of the buttocks and the lower part of the back became affected; the appearance presented was as if the man had had a burn on the back, which had destroyed the cuticle without penetrating deeper. His countenance was wan and pale, and he had been treated by many Medical men, without any benefit, with mercury by the mouth, iodide of potassium, etc. When he applied at the Hospital he was in such a state that he could not sit down. He had nine baths (cinnabar being the mercurial preparation used), and was perfectly cured in three weeks from the commencement of the treatment by fumigation.

T. W., a labourer, aged 35, had contracted a chancre nine years since, for which he was treated with mercury. His wife had miscarried, and also brought forth syphilitic children. He had had nocturnal pains, and his countenance had an unhealthy, earthy look. His legs, thighs, and buttocks were covered with rupial patches. Iodide of potassium had been given in very large doses, but under that treatment the disease progressed rapidly. After ten mercurial vapour baths the rupial patches had all disappeared, and the man's countenance had resumed the hue of health. He expressed himself as feeling stronger than he had done for years.

Two cases of complete excision of the os calcis, and in one of these of a portion also of the astragalus, have occurred in the practice of Mr. Oliver Pemberton, at the General Hospital. An abundant period having elapsed since the operations, the usefulness of the limbs can be spoken of with confidence. In both cases the patients were women about 25 years of age. In the one instance, performed eighteen months since, the entire os calcis was removed for extensive necrosis arising from a sprain. The line of incision was carried along the outer side of the tendo-Achillis and margin of the foot in the view of not dividing the attachments and connections of the plantar fascia with the former. The incision was seven or eight inches long, and admitted of sufficient widening for the removal of the bone without any additional transverse cut. There was only limited cellular inflammation, and the wound healed in six weeks. The patient can now use her foot with confidence and power. The ankle-joint is perfect, and long

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distances can be accomplished without fatigue. In the second case, Mr. Oliver Pemberton removed the posterior surface of the astragalus as well as the entire os calcis. A horse-shoe-shaped incision was adopted, the flap being turned down from the tendo-Achillis towards the toes, thus exposing at once the diseased bone and avoiding any division of the side of the foot. The recovery was rapid and complete, and now, at the end of six months from the date of the operation, the patient can walk about without any perceptible peculiarity in gait. Mr. Pemberton is of opinion that this operation will succeed in persons whose bones are fully developed and consolidated, and that it should be avoided in young subjects. The line of incision adopted in the second case will be found most desirable.

I have had an opportunity of seeing the man on whom Mr. Gamgee performed amputation at the hip-joint last September, for an enormous enchondroma of the femur, measuring upwards of four feet in circumference. Weighed immediately after removal, the limb was ascertained to be within a few ounces of 100 lbs. The man made a rapid and uninterrupted recovery, and is now residing in the neighbourhood of Lichfield in excellent health.

GENERAL CORRESPONDENCE.

MEDICAL PROVIDENT ASSOCIATION.

LETTER FROM MR. CARTER.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you kindly allow me space to say that the letters I have received leave no doubt on my mind that the Association will be sufficiently supported, while they seem to prove, also, that it can be very inexpensively maintained. A week in three years and a-half seems to be about the average of sickness among Practitioners.

The gentlemen who have favoured me with letters will receive private communications by-and-by, and I shall be glad to hear from any of those who have not yet written.

I am, &c.

ROBERT B. CARTER.

Stroud, Gloucestershire, April 28.

BROMWICH v. WATERS.

LETTER FROM MESSRS. KIMBER AND ELLIS.

[To the Editor of the Medical Times and Gazette.]

SIR,—We were much astonished at reading in your paper of the 18th instant a letter written by Dr. Ramsbotham in explanation of your remarks on his evidence at the recent trial. He says "the result has proved that we were grossly misled by the chief witness." We submit that the result has proved simply that the legal evidence was not sufficiently strong to obtain a verdict for the plaintiff.

The chief witness was contradicted, as was to be expected, but not in the slightest degree broken down in cross-examination. The Docter bears unwilling testimony in her favour when he says, "She made her statement to us with a degree of simplicity and absence of exaggeration not often united to falsehood, and she never wavered in the minutest particular in the account she first gave, although she underwent many very severe examinations and cross-examinations as well by Medical men—myself being one—as by acute counsel and solicitors."

Now that her mistress has not obtained a verdict, and the Medical journals have commented in harsh terms on the conduct of the Professional gentlemen engaged in the case, we are for the first time surprised by his opinion, that she is "the most artful and thorough impostor that it has ever been his lot to hear of." If he has arrived at this conclusion, he certainly had not done so the day after the trial.

The part of his letter which we feel most bound to object to is the next paragraph, wherein he asserts that he had been consulted in the case some time "before he had an idea that it was to be brought into a court of justice." To that assertion we are compelled to give a distinct denial. No Medical gentleman has been consulted by us in this case without having been plainly told at the first interview the reason why his opinion was desired, and that an action for the seduction of the girl was about to be tried. Dr. Ramsbotham first saw the girl in the presence of another Medical gentleman, whose name need not be mentioned, and knew perfectly well why they met in consultation. The mistress of the girl was present, and a gentleman from our office, and Dr. Ramsbotham was asked by his colleague to test the girl's story by putting any questions he liked to her, and he did so.

The Doctor goes on to say that it was "with great pain to himself that he became implicated in the case," and that he told us "his evidence would be of no use to us," and that he was "obliged" to appear to speak to the fact that there was no mark remaining of an ulcer ever having existed.

The Profession may infer what pain the Doctor felt in appearing at the trial from the following letter:—

"*Bromwich* v. *Waters.*

"Messrs. Kimber and Ellis.

"Gentlemen,—I presume by the series of questions which you transmitted to me respecting the above case a few days ago that you are desirous I should appear at Chester and give evidence at the trial. If so, you will oblige me much if you can inform me when my presence will be required. I understand it is expected that the trial will come off in April. Is that the case, and can you tell me what part of the month?

"I am, very faithfully yours,

"8, Portman-square, "FRANCIS H. RAMSBOTHAM."

"March, 16.

In that letter there does not appear to be any expression of great disinclination to be "implicated" in the case, and it is only common justice to the girl to state, that Dr. Ramsbotham expressed a favourable opinion of the truth of her story after he had examined her himself, and also after he had heard her evidence given in open court, though he *now* suggests that he has been deceived.

We must also state that since the trial the girl has not lost the confidence of her friends; and such is the opinion her mistress entertains of her, and so great is that lady's desire to prove in every possible way the innocence of Dr. Waters, that she has offered the large sum of 100*l.* (notwithstanding the expense she has already incurred in her attempt to vindicate her servant's character), to anyone who will come forward and prove the paternity of the child in a satisfactory manner.

In justice to the plaintiff and to ourselves, we beg that you will be good enough to publish this letter in your next issue.

We are, &c.

KIMBER AND ELLIS,

1, Lancaster-place, Strand, Plaintiff's Attorneys.

April 29.

P.S.—We take this opportunity of observing that the theory of some portion of the Medical press, and of certain Medical men, as propounded at recent meetings on this case—that a person who sincerely (if erroneously) feels herself aggrieved by a member of the Profession should not have the assistance of respectable members of the same Profession in her endeavours to elucidate the truth of the case—is one to which we cannot subscribe. That principle carried out would involve, as a consequence, that no Medical men should give evidence at all in a seduction case against one of their own Profession. Surely it is sufficient that there should be, as Dr. Ramsbotham virtually admits there was here, a *primâ facie* case.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, MARCH 17.

MR. PRESCOTT HEWETT, President, in the Chair.

MR. LITTLE exhibited a specimen of

MYELOID TUMOUR OF THE LOWER END OF THE FEMUR.

This specimen, consisting of a tumour involving the lower end of the femur, was removed by Mr. Curling from a man aged 27. The patient had enlarged glands in the groin and ham. The tumour had been two years forming. After amputation, the patient rapidly convalesced; the glands in the groin subsided. The lower end of the femur was enlarged to twice its natural size; the vertical section showed a thin shell of bone, from which the cartilage had disappeared, filled with dark red masses, and much bloody fluid. Some of these masses consisted of blood-clot, others contained myeloid cells.

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Dr. Dickinson exhibited a specimen of

CRETACEOUS DEPOSIT IN THE PERITONEUM.

It was taken from a man who died of disease of the spine, in connection with which was an abscess in the pleura. The cretaceous matter was no doubt the result of drying up of tubercle.

Mr. Henry Thompson showed for Mr. Jeaffreson, of Framlingham, the

BLADDER, PROSTATE, URETER, AND KIDNEYS, AND DEBRIS OF CALCULI

From a man who died recently, aged 86. Mr. W. Jeaffreson crushed a uric acid stone for the patient in 1846, and again in 1856. Mr. George Jeaffreson removed three or four small calculi with a lithotrite in 1859. The patient died of bronchitis in 1863. At the autopsy, seven small stones, evidently uric acid, the size of pins' heads, were all the calculus matter that remained in the bladder. The kidneys were atrophied, the ureters and bladder tolerably healthy. The prostate gland was greatly enlarged, especially the left lobe, which presented a well-isolated fibrous tumour, the size of a large nut, projecting very prominently. There was no difficulty in introducing an ordinarily curved instrument at any time; there was never any retention, nor, when awake, any overflow, or involuntary passage of urine.

Mr. Canton exhibited the parts removed in a case of

EXCISION OF THE ANKLE-JOINT.

The patient was a lad 15 years old, and had had the disease nine months. Rest and treatment were fairly tried; but as he was no better, Mr. Canton operated on February 21 last. The patient was doing well.

Mr. Holmes said that it would be interesting to trace the progress of this case, to ascertain how long he was in recovering, and also what kind of a foot would be the result. There was, he said, a great difference of opinion as to the relative merits of this operation and amputation at the ankle-joint. Mr. Barwell, in his work on disease of the joints, has stated that excision of the ankle was a trifling operation, and that the patients recovered quickly. He (Mr. Holmes) had seen several cases, and could not say that they were so successful as Mr. Barwell would lead us to suppose. They were slow in recovering, and they were not yet safe from amputation. One of the cases to which he referred was that of a boy who was not able to put his foot to the ground until eight months after the operation. In another case, the patient could not do so ten months after the operation.

Mr. Partridge said that he had performed Pirogoff's operation twice in children, and in the adult had once performed Syme's operation. In the last instance the convalescence was long and tedious, but in the others recovery was rapid.

Mr. Henry Thompson called attention to the difference in age between the cases compared. He could hardly imagine that it was to be expected that the retaining a portion of bone in the lower flap could contribute in any way to the rapid convalescence. As to experience, he had every reason to be well satisfied with the results of Syme's operation at the ankle-joint. He had done it five times; in four with excellent results; the fifth died of phthisis a few months after, before any opinion could be formed as to matured results. He believed that he could show three of them to the Society, and would do so.

As already announced in this Journal, it was resolved that members should be requested to bring cases of the various operations spoken of before the Society on the evening of Tuesday, April 21, in order to compare the results.

Mr. Thomas Smith then exhibited ureter and bladder, showing

PROLAPSE OF THE URETERS INTO THE BLADDER.

It was taken from a patient who had had stricture. The left ureter formed a swelling as large as a walnut, having a pin-hole aperture on one side for the escape of urine. The right was prolapsed to a less degree. In other respects the specimen presented the usual pathological changes found in cases of old stricture. Mr. Smith considered that when the ureters became so large as to be influenced by the pressure of the abdominal muscles, just as the intestines are ordinarily in defecation, the urine being unable to find a sufficiently easy exit from the ureter into the bladder during efforts of urination, the mucous membrane of the lower end of the ureters was forced into the bladder.

Dr. Markham showed a specimen of

CYST OF A SEGMENT OF THE MITRAL VALVE.

The patient had had obscure symptoms eighteen months before death, and for five or six months had been worse. There was a distinct diastolic murmur. He died suddenly of angina pectoris.

Dr. Markham, Dr. Peacock, and Dr. Bristowe were requested to make a report on the specimen.

Dr. Gibb brought forward a patient before the Society afflicted with

ELEPHANTIASIS GRÆCORUM AND LEONTIASIS.

He was 44 years of age, and had been twenty-five years on the Malabar Coast. He returned to England about five years ago, and, shortly after, the disease commenced in the hands in the usual way; afterwards it appeared in the feet; then the mouth, throat, face, and ears became affected, giving to the face the peculiar characters and expressions of leontiasis. His voice was a sort of shrill squeak or false tenor, owing to the extension of the disease to the larynx, which had been examined by Dr. Gibb with the laryngoscope, and the peculiarities there noticed were described. Some of the phalanges of the fingers and toes had fallen off; the nails were in a state of ulceration; insensibility of the various parts was present; and here and there hard tuberculous lumps were felt beneath the skin of the wrists, hands, etc. Altogether, the case was shown as a tolerably well-marked example of this terrible disease, and the voice had that peculiar character which permitted of the immediate recognition of the disease in ancient times.

Dr. Gibb illustrated a case of

SPONTANEOUS EXPULSION OF AN ELONGATED POLYPUS GROWING FROM THE LEFT VOCAL CORD,

by means of a series of diagrams, showing its progress from the beginning. The patient was a young lady whose voice had been affected for some years, but not lost. Latterly a growth had formed two-thirds the length of the vocal cords, and running parallel to them from before backwards. When the glottis was closed it lay over the fissure, and did not hang downwards in the trachea. Its pedicle was small; it became strangulated one evening, and permitted of spontaneous expulsion, thus obviating the necessity of its removal by operation

Dr. Dickinson showed a specimen of

APOPLEXY OF ONE SUPRA-RENAL CAPSULE.

It was taken from a patient who died of phthisis. There was no discoloration of the skin. The capsule was soft, and infiltrated with blood.

Dr. Wilks said that he had recently received a pamphlet from an Italian Physician on "Apoplexy of the Supra-renal Capsules." He had found that several persons had died suddenly from—he believed—apoplexy of the organ. He (Dr. Wilks) had often seen this condition of the capsule, and had not regarded it as having been of any great moment.

Dr. Wilks was requested to make a report on the specimen.

Dr. Montgomery then showed a specimen of

LARGE FATTY KIDNEY.

The structure was infiltrated with whitish matter, some of the tubes being filled with it. By careful examination he had found that the material was not fat, but cholesterine. He had found, too, that the so-called "nuclei" of inflammatory products consisted of cholesterine. He had suggested that some drug, which was known to have the property of dissolving cholesterine, should be used in treating these cases; and Dr. Bristowe had given copaiba in several cases, and with some improvement.

Dr. Bristowe remarked that he had given the copaiba in cases in which there was supposed to be the large fatty kidney as well as the granular one, with about equal results.

At a previous meeting, Dr. Ogle showed a case of

FIBRINOUS CONCRETION OF A GLOBULAR FORM, AND OF ABOUT ONE INCH IN DIAMETER, LYING LOOSE WITHIN THE LEFT AURICLE OF THE HEART.

The case was that of a woman, E. M. C., aged 43, who, having complained for six weeks of difficulty in breathing and swelled legs, was admitted into St. George's Hospital with anasarca of the legs, dyspnœa, and feeble but irregular action of the heart. On stethoscopic examination, "mucous râles" were heard all over the chest, and egophany on the right side. Moreover, there was a loud *bruit* at the apex of the heart, heard distinctly with the systole, and doubtfully with the

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diastole. The patient much improved after being cupped on the chest, and under the use of diuretics. No albumen was found in the urine. After a time, the breathing became more hurried, but no pain was felt. Dyspnœa increased until death occurred, about five weeks after admission. On post-mortem examination, the lungs were found to be œdematous, and their lower parts hepatised, and much fluid was found in the right pleural cavity. The heart was larger than ordinary, and its walls thinned. The mitral valve was reduced by thickening, and by calcareous deposit in its elements to a small buttonhole-shaped aperture. The inner surface of the left auricle had several patches of fibrin attached to it, and also lying "loose" within its cavity was a large spherical mass or concretion of fibrin, weighing rather more than four drachms, perfectly solid throughout, and uniformly granulated in a remarkable manner on its surface, excepting in two places, where marks, like indentations, existed. This globular mass had also attached to it at one spot a small amount of shreddy loose fibrin. Section through this singular body showed its interior to be mainly composed of friable fibrin; but at one part its circumference, and a certain amount also of its inner substance was formed of distinctly laminated and darker coloured fibrin. The kidneys were found to be large and very congested and to contain "fibrinous blocks." The supra-renal capsules were of ordinary size, but so firm in consistence as to be of almost cartilaginous hardness.

Dr. Ogle also exhibited a case of

LACERATION, WITHOUT EXTERNAL INJURY, OF THE WALL OF THE LEFT AURICLE OF THE HEART—FIBRINOUS CONCRETION UNDERGOING SOFTENING IN THE SAME AURICLE.

The subject of this was a child, aged 12, who had had scarlet fever, which was followed by suppression of urine and anasarca, and also by epileptiform attacks. When examined, it was found that there was a strong systolic *bruit* at the base of the heart, the action of which was very turbulent. There was also much dyspnœa. The child became collapsed and died, but before death the systolic *bruit* had disappeared. On post-mortem examination, the lungs were found to be œdematous; the heart was natural as to its walls and valves; several old-standing small masses of fibrinous coagulum, which in places were undergoing softening, were adherent to the endocardium of this cavity. In one part (only) the endocardium was slightly thickened and opaque, and just above the posterior edge of the mitral orifice it presented a horizontal laceration of about one inch in length, penetrating through the muscular walls of the auricle, but not the external serous (pericardial) covering thereof. The edges of this slit were sharp and rather uneven, and the muscular substance between them was darkly stained, and covered by coagulum and dark clotted blood. Excepting a slight thickening and yellowness of one part of the endocardium of the auricle, this structure was natural.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 14, 1863.

RICHARD PARTRIDGE, Esq., F.R.S., President, in the Chair.

A PAPER by Mr. Henry Thompson was read on

THE SUCCESSFUL TREATMENT OF SEVERE STRICTURE OF THE URETHRA BY GRADUAL DISTENSION AT A SINGLE SITTING.

It is the author's object to illustrate and explain a new method of treating severe or obstinate strictures of the urethra. This term is intended to denote those which are little benefited by dilatation. The distinction which constitutes its novelty does not consist in the mere production of some alteration or improvement in existing mechanical contrivances, but in the adoption of a mode of action on the stricture itself, which is different from those which characterise any of the other systems of treatment pursued at the present day. The author shows in what it differs from dilatation, simple and continuous; from rupture, or "instantaneous treatment;" from cauterisation; and from incisions. He illustrates the proceeding, which he distinguishes by the term "gradual distension," and describes the instrument employed to accomplish it. By the process in question, the strictured part of the urethra only is acted upon, and this not to a degree short of, but up to or even beyond the natural calibre of the canal, wherever the stricture may be situated. All this is accomplished at one sitting, but with gentleness and slowness, so as to avoid unnecessary rupture; the degree of distension being regulated with absolute certainty, and its extent indicated with extreme accuracy, by apparatus in the handle of the instrument employed. The object of the operator is not to rupture, but to over-distend the fibrous tissue which constitutes the stricture, so as to destroy, or, at all events, to impair, its natural tendency to contract. He aims at attaining that result which occurs from the practice of over-distending vital tissues elsewhere,—viz., to impair or destroy their contractility. This is known to happen after the application of over-distension to both healthy and morbid tissues, and is turned to account by the Surgeon for that purpose. The class of patients for which this proceeding appears to be best adapted is described, and illustrative cases are appended. The instrument consists of two long and narrow steel rods, accurately applied throughout their entire length by the single plane surface which each possesses. The external surface of each rod is convex, so that together they form a nearly cylindrical instrument, but tapering towards the lower extremity, where they are closely united. At the opposite or upper end they are also united, and are surmounted by a handle resembling that of an ordinary sound. This handle is attached to a screw with a very fine thread, which being turned causes the two rods to diverge very slowly and very gradually from each other at a given spot, about six inches from the handle. When the separation of the blades is effected, an index placed near the upper end, and connected with some numerals on a disc, shows the exact degree of extension made by pointing out that number of the catheter scale to which the distension existing at that moment is equivalent. The general form and contour of the instrument is that of a slightly curved catheter. When the screw handle is turned, the two rods separate, so as to form a long oval or spindle-shaped figure, the long diameter being about three inches and a-half or four inches in length, and the short diameter corresponding to the number of turns given to the screw, and varying between the slightest possible separation of the rods and an interval of about three-eighths of an inch, or even more. The action of the instrument has marked on it a graduation in inches, which commences one-quarter of an inch below the point of maximum distension or centre of the spindle-shaped figure produced by the separated rods. It is that point which will correspond with the stricture when the instrument is placed in the urethra, so that the contracted portion of the canal undergoes the greatest amount of distension which it can be desired to produce, while the rest remains wholly unaffected. The mode of applying the instrument is as follows:—A medium or full-sized bougie or catheter is first passed as far as to the stricture, and the distance from it in inches to the external meatus carefully noted. Suppose it to be five inches, the operator, taking the distending instrument, places the little blue steel collar which slides on its shaft opposite to the figure 5, and passes the instrument through the stricture until the collar arrives at the meatus of the urethra, and prevents the instrument from entering further. The maximum point of distending power must therefore correspond with the narrowest part of the stricture. The act of distension is now commenced by making two or three turns of the screw-handle, and is continued by slowly turning it once every half minute, taking care at the same time to prevent the instrument from shifting its position, by observing that the collar remains opposite the external meatus. In a short time the index, gradually rising, shows that the calibre is reaching Nos. 10, 11, 12, and so on, until in a few minutes No. 14 or 16 has been reached, which latter limit is usually quite sufficient. The screw-handle is now slowly turned backwards, not the whole way, but until the index has retreated to about No. 8 or 9, when the instrument is withdrawn. The operator next passes a full-sized gum-catheter into the bladder, and fastens it there, leaving it in place for about twenty-four hours. It is then removed altogether. All that remains to be done is to pass a full-sized metallic instrument every second day for a week, and after that at increasing intervals for a week or two longer.

Mr. Holt said that his mode of operating having been alluded to by Mr. Thompson, he was desirous of offering a few remarks upon the plan which that gentleman had proposed to the Society, as contrasted with that which he (Mr. Holt) had adopted for some years. Mr. Thompson's instrument differed materially from his, both in the method of its

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application and its capability of enlarging the strictured portion of the urethra, and he claimed for his instrument the power of dilating the stricture to No. 14 or 16, while the meatus is not interfered with. For its application, however, it was necessary a gum-elastic catheter should be retained in the urethra for two or three days. It was then removed, and the seat of the stricture accurately ascertained by passing a large bougie. This is to be marked, and such measurement is to regulate the distance which his dilator should be introduced. The patient being now placed under the influence of chloroform, the dilator was passed, and the handle slowly and gradually turned, so that dilatation could be effected to any extent, the whole operation occupying from ten to twenty minutes, according to the character of the obstruction. The dilator was now removed, and a No. 12 gum-elastic catheter substituted, and retained in the bladder for two or three days, according to circumstances. A No. 12 bougie was afterwards passed at intervals of a day, and so the after-treatment was continued as in any other plan. Now his (Mr. Holt's) first objection to this method of treatment applied to a difficulty which might arise in the hands of a Surgeon less accustomed to the passing of bougies than the author of the paper. The penis during an examination alternates in its length, and is at one moment quiescent and at another semi-erect. When this occurred, it would so alter the relative measurements as to render them of little value; and this part of the treatment was of great practical importance, inasmuch as it was necessary that the centre of the dilating power should exactly correspond to the centre of the stricture, and without it the dilatation would be either in front or behind the obstruction, and so be perfectly ineffective. His next objection would apply to instances in which there was more than one obstruction; for in his experience there were frequently two, and sometimes three or even four obstacles to be overcome, and in these instances it would be necessary to materially prolong the operation, or repeat it upon three or four separate occasions. Mr. Thompson laid particular stress upon his capability of dilating the stricture to No. 14 or 16 or more, when the meatus will only admit a No. 12. In the first place, he (Mr. Holt) believed the author was in error in supposing that a dense obstruction would allow itself to be dilated to the size he mentioned; it must be ruptured, as was shown by the occurrence of hæmorrhage. But even granting that it was so, he (Mr. Holt) could not see the least advantage that could arise from dilating a stricture beyond that which could be maintained by the after-passage of a bougie. The part which was so dilated quickly contracted, otherwise there would be any necessity for the after-passing of the bougie; but as this was necessary, and the bougie could only represent the size of the meatus, no advantage could accrue from distending the stricture beyond its natural limit. If any further proof were required that this was so, he might refer to the median operation of lithotomy, which he had frequently performed, and removed, without cutting the neck of the bladder and prostatic portion of the urethra, calculi varying from an inch to an inch and a quarter, the parts being dilated by the introduction of the finger, the subsequent passage of the forceps, and the extraction of the stone. In all these cases the patient had retained the power of expelling the urine at will, which specially showed how speedily any undue dilatation of the urethra contracts again. His (Mr. Holt's) third objection would apply to the necessity of retaining a catheter in the bladder both before and after the operation had been performed. In many instances the patients were quite incapable of bearing the retention of a catheter, from the pain and irritative fever it produced, and it confined them to the house or bed for an unnecessary period of time. Mr. Holt then related a remarkable case of irritable and intractable stricture, in which, after all the usual means employed for a long period had failed in the hands of an experienced surgeon, he had, in a few minutes, split up the stricture with his instrument, and the patient recovered without a bad symptom, and remained well to this time—a period of twelve months. Were he not afraid of occupying too much of the Society's time, he could relate several most interesting cases to prove that he had not made any selection for the purpose of enhancing the success of his operation; but that, on the contrary, he had operated upon the most severe and complicated examples that could be submitted to the surgeon. Two other cases he would briefly allude to. One was that of a gentleman from Liverpool, who consulted him for incontinence of urine, from which he had been suffering for two years, during which he was compelled to wear a urinal, and his health was so damaged that he was recommended to go to Madeira for a change. Upon inquiry, Mr. Holt was satisfied that the bladder was full, and, having gained the patient's consent to introduce a catheter, he with great difficulty passed a half No. 1, and removed three pints of most offensive purulent urine. His bladder was paralysed, and there was every probability, from the length of time it had been distended, that the ureters and the pelves of his kidneys were abnormally enlarged. For the purpose of keeping the bladder empty, the catheter was introduced three times during each of the first two days, and upon the third he passed the dilator and split the strictures, so that the urethra would admit a No. 10 catheter. In one month this gentleman returned to Liverpool, with his health almost entirely re-established, passing urine with the greatest facility, and the urethra admitting a No. 10 easily. During the last month, Mr. Cutler asked his (Mr. Holt's) opinion upon the case of a gentleman who had been operated upon by Mr. Syme. The patient had subsequently been subjected to internal division, and a second time Mr. Syme's operation was performed by Mr. Bickersteth, of Liverpool. When he consulted Mr. Cutler, he was obliged to pass the catheter five or six times in the twenty-four hours, and he was entirely prevented, by the escape of urine during the intermediate periods, from entering into society. Mr. Holt, having explained to him that it was such that he could not positively affirm what the result might be, consented to split the obstructions; but the patient, being exceedingly nervous from the recurrence of rigors after every attempt to enlarge the urethra, would not consent to the operation without the aid of chloroform. The dilator having been passed, it required all the force Mr. Holt could make use of, even with a towel placed over the large extremity of the tube, before the stricture could be split. Upon the dilator being removed, a No. 10 catheter was passed, and the bladder emptied. This gentleman never had a bad symptom of any kind or description; he never even went to bed, and in five days was able to visit some friends in the country. He declared that he could now pass urine better than he ever remembered; and in a fortnight he returned to Jersey, being capable of introducing an instrument himself without the least difficulty or pain. Mr. Holt stated that he had now operated, in Hospital and private practice, upon more than 250 cases, without any complication of either infiltration of urine, abscess, swelled testes, or inconvenience of any kind, further than the occasional supervention of a rigor or mild attack of stricture fever. He must therefore still retain his opinion in favour of his instrument, which had now been tested to the utmost. It was perfectly simple, and capable of being used by any Surgeon who was able to pass a catheter. The operation did not require either the previous or after retention of a catheter in the bladder; it was completed in one second, however many obstructions there might be; it did not, excepting in very severe cases, require the administration of chloroform, and the patients were not confined to the house longer than the afternoon in which the operation was performed; the pain was of the most trifling description, and the danger *nil*. He would only detain the Society another minute in describing a trifling inconvenience he had lately met in the dilator, and which had been only completed that day. The objections raised to it by some Surgeons were, that in its present state you had no positive evidence when you were in the bladder, and that the tube might possibly slip from between the blades. He had now so improved upon this that it was quite impossible the tube could so escape, and the dilator acting as a catheter permitted the flow of urine. He had no hesitation in declaring that, as now manufactured by Messrs. Whicker and Blaise, of St. James's-street, the dilator was as perfect as any instrument could possibly be.

Mr. Solly was pleased at any proceeding which showed the advantage of dilatation over cutting in the treatment of stricture. He contended that if an instrument could once be passed into the bladder, cutting was unnecessary. There might be cases in which it would be impossible to succeed in such an effort, and then incision might become requisite. He had never had recourse to the plans recommended by Mr. Thompson and Mr. Holt, but had been in the habit of adopting a modification of Mr. Wakley's plan, previously resorted to by Hutton, of Dublin. He used a catgut bougie instead of the metallic guide, and elastic catheters instead of the silver ones. He had used this plan of gradually dilating the urethra with much success. In Hospital patients he allowed the

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catheter to remain in the bladder for some time, but not more than half-an-hour in private practice.

Mr. Fergusson said it had been proved that dilatation of the urethra might be effected, even to the extent of a No. 12, 14, or 16 catheter in a few minutes, without risk, and effectually. The mode now adopted for this purpose differed entirely from what was called "forcing down a stricture" by the introduction of a full-sized catheter. This was not unattended with danger; for it was not always possible to tell where the point of the instrument would go, or to what extent the urethra might be damaged. By the mode employed by either Mr. Thompson or Mr. Holt, no such risk was incurred. He (Mr. Fergusson) thought the plan mentioned by Mr. Solly would not be found so effective as when the silver instruments were used. With regard to Mr. Thompson's instrument exhibited that evening, he questioned if it were strong enough to break up the stricture without breaking the instrument in some of the more severe cases. This could not occur when Mr. Holt's plan was resorted to; however great the force applied, the instrument could not give way. So much force was occasionally required, that he (Mr. Fergusson) should be fearful of trusting to Mr. Thompson's instrument. This instrument, as far as the plan of treatment itself was concerned, did not differ much from that of Mr. Holt. The plan of immediate dilatation would do much towards dispensing with internal and external urethrotomy.

Mr. Acton was glad to hear that the advocates of the various plans for treating severe forms of stricture had not found cause for disparaging that by internal incision, a treatment he had found most successful. It was admitted on all hands that dilatation, consistently persevered in, was alone sufficient to remedy the greater portion of strictures. In Hospital practice (in order to save the time of the poor) it might be necessary to resort at once to other plans; but among the upper classes, where a rapid cure was not of such importance, the patient usually objected to have his stricture split, or any other similar heroic remedy employed, and which he (Mr. Acton) was glad to hear was unattended with any danger. The Fellows of the Society must, however, recollect—and the shelves of the surrounding library would support the statement—that the advocates of every novel treatment of stricture had ever lavished the same praises on their different systems as had been listened to that evening. Time could alone test the value of the rival schemes; but he was not inclined to think that any one system would be found applicable to all cases. It had been stated in the course of the discussion, that within a short period, and in the practice of one Surgeon, 250 cases of stricture had been split. Now, seeing the comparative rarity of cases requiring such treatment, we must believe that many strictures had been split which would have been treated (by other Surgeons) by more simple means. The author of the paper had spoken of the success of his treatment depending "upon over-distension of the fibrous tissue, so as to destroy, or at all events impair, its natural tendency to contract." He (Mr. Acton) was yet to be convinced that over-distension at one sitting would accomplish this very desirable end; for the more he treated stricture, and the more he studied the structure which composed the india-rubber-like mass we had to distend, the less disposed was he to believe in a rapid cure, or that a healthy structure would at once displace this elastic tissue. Stress had been laid during the discussion by more than one speaker on the advantages of his or their operation as succeeding after others had been tried and failed. Mr. Acton would appeal to the practical Fellows of the Society if cases were not brought under their notice of patients who had been condemned to these heroic operations, and who before submitting to them applied for a second opinion, and who were cured by dilatation alone, showing that the operation that had been recommended was at least unnecessary. When dilatation was unable to effect a cure, internal incision came in most opportunely, and the division of the elastic tissue by the knife enabled the Surgeon to pass his instrument, and cure the stricture. This, he maintained, was the more scientific treatment, and more in accordance with all the theoretical and practical principles of surgery, and one which had been gradually gaining ground since the instruments employed had been perfected.

Mr. Maunder remarked that, whilst Mr. Holt stated that by his instrument the stricture was ruptured, Mr. Thompson called his mode of proceeding "gradual distension." Had Mr. Thompson had an opportunity of examining the urethra after death in a case in which his operation had been performed? If so, he (Mr. Maunder) thought he would have found the stricture to have been ruptured. Mr. Maunder related a case of retention of urine in which it was necessary to puncture the bladder through the rectum. Eventually retention again occurred, when Mr. Holt's operation was performed without difficulty, and the patient made a good recovery.

Mr. Brooke did not believe that Mr. Thompson's instrument would have sufficient power in some cases such as he had seen Mr. Holt operate on. The strain upon the joint was very great in Mr. Thompson's instrument, and no joint could be made of sufficient strength to relieve the worst cases of stricture. In no case that he could conceive of was either internal or external incision preferable to sudden dilatation. In the one instance there was a decided limit to the extent of the ruptured portion, whilst the incision might extend much beyond the limit of safety.

Mr. Hulke had employed Mr. Holt's plan in thirty cases, many of which were out-patients at the Hospital. He had never seen any untoward result, though the patients went about as usual. He did not regard it as a serious operation.

The President had in many cases followed Mr. Holt's plan of proceeding. He had never seen any but good results from it.

Mr. Thompson replied *seriatim* to objections raised by Mr. Holt. First, that there was no difficulty in measuring the distance at which a stricture was situated from the meatus in order to adjust his instrument, and that no man who found that a difficulty was competent to use an instrument in the urethra at all. It was, indeed, an ill compliment to Surgeons to imagine want of ability to accomplish so easy a matter. Secondly, that it was not often necessary to apply the instrument for two strictures in the same urethra, but if there were two, no difficulty in applying it twice existed. Thirdly, that although it had been his practice to tie in a gum catheter twenty-four afterwards, he did not regard it as necessary; he had done so as a precaution, and if any objection to this existed, it would be as safe to dispense with it here as after Mr. Holt's operation. From the remark, that there was no advantage in distending to No. 16, if the bougies subsequently passed could not exceed No. 12, he differed very widely. It had long been admitted to be a desideratum to find some means of dilating the stricture to the size of the canal where it is situated, and it is notorious that the bulbous portion, where stricture most commonly exists, is little more than half dilated by a bougie which fills the external meatus. The subsequent dilatation by such a bougie sufficed, but if thought necessary it might be maintained by the distending instrument itself which formed an excellent dilator. He had a patient at this moment who preferred it to a bougie for ordinary use. Again, it had been assumed on theoretical grounds that its power was deficient. He could only say that in practice the instrument had resisted very severe tests, and was amply strong enough for its purpose; but he would say again, as he had said in the paper, that where the induration surrounding the urethra was very considerable, involving, possibly, the substance of the corpus spongiosum throughout, especially when anterior to the scrotum, incision was more likely to be permanent in its effects than either his own or Mr. Holt's method. He agreed with Mr. Acton that this was highly useful in some cases. An important distinction existed between forcible catheterism and distension, which had been well drawn by Mr. Fergusson; the dangers of that now happily exploded method resulted from tearing away the stricture from its connexions, and driving it down the urethra. Simple expansion from within outwards, provided it was thoroughly efficient, had now been proved to be unattended with danger. Finally, it was most satisfactory to him to hear from Mr. Holt and others the success which had attended his operation, because in some particulars it was closely allied to his own proceeding: thus, he contended that Mr. Holt's operation might be perfectly performed with his (Mr. Thompson's) instrument, but that the latter possessed in addition these two advantages—first, power to carry the distension to a much higher point; and, secondly, that it could be done gradually and slowly, so as to over-distend the tissues as much, and rupture them as little, as possible. It was on these two grounds of difference that he claimed for this proceeding an examination and a trial, since he conceived them to constitute an improvement of no mean value.

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HARVEIAN SOCIETY OF LONDON.

MARCH 5, 1863.

Dr. FULLER, President, in the Chair.

MR. J. ZACHARIAH LAURENCE gave an exposition of the

DIAGNOSIS AND TREATMENT OF ASTIGMATISM.

Astigmatism is an inequality of refraction in the meridians of the globe of the eye, the maximum refraction generally existing in the vertical, the minimum in the horizontal meridian. The heterogeneous image thus produced on the retina causes a diminution in the "acuity of vision," so that types of given dimensions can no longer be distinguished at their normal distances. In many instances asthenopia is a prominent symptom, induced by rapidly alternating changes in the accommodation (with a view of obtaining correspondingly successive distinct portions of the retinal image), inducing muscular and psychical fatigue. The various changes the image of a luminous point thrown on a screen by an astigmatic combination of lenses underwent were then shown. At the focus of the vertical rays the focal line was shown to be horizontal; at the focus of the horizontal rays vertical, the images comprised within this range (the "intervalle focale" of Sturm) were shown to be ellipses with horizontal major axes, a circle, and ellipses with vertical major axes. An astigmatic eye perceives the images of a luminous point precisely in this way, the "focal lines" being producible by auxiliary convex or concave spherical lenses, which have the effect either of bringing forward or throwing backward their entire focal interval. The inability of simultaneously seeing horizontal and vertical lines with equal distinctness was then shown to exist in nearly all eyes, proving that astigmatism in a low degree is an almost normal condition of the eye. A series of cylindrical lenses were then exhibited, and their application to the cure of astigmatism. A very striking instance of this was then shown in the person of a young lady, whom Mr. Laurence, after having ineffectually treated for acute asthenopia three years ago by all kinds of lenses, general treatment, etc., had now completely cured by a 16-inch concave cylindrical lens with its axis transverse, the eye in this case presenting a normal refraction in the horizontal meridian, but a myopia of $\frac{1}{16}$ in the vertical one. Mr. Laurence drew attention to the scientific advantages the test-types of Drs. Snellen and Giraud-Teulon possessed over those of Professor Jäger,—the former being always viewed under one constant angle, and thus affording a gauge of the relative acuity of vision of different individuals. The cause of astigmatism was shown to be most commonly an inequality of curvature of the cornea, sometimes a congenital obliquity of the crystalline lens (as, probably, in the case of the discoverer of astigmatism, Dr. Thomas Young). The ophthalmoscopic signs of astigmatism were then enumerated,—an elliptical form of the optic nerve entrance, and an inability of observing in the direct image the horizontal and vertical branches of the retinal artery with equal distinctness at the same time. Finally, Mr. Laurence alluded to the important development this branch of ophthalmic surgery had received within the last two years by the late researches of Professor Donders, of Utrecht, and Dr. Knapp, of Heidelberg, who had demonstrated the comparative frequency of astigmatism, which, when recognised, led to the remedy of many otherwise perfectly enigmatical cases.

MEDICAL NEWS.

UNIVERSITY OF ABERDEEN.—At the late Graduation Term, the following candidates, after the usual Examinations, received Degrees in Medicine and Surgery :—

Degree of M.D.—James Forbes Beattie, A.M., Aberdeenshire, and John Brown, A.M., Haddington,—honourably distinguished; John Ford Anderson, Old Aberdeen; David Dyce Brown, A.M., Aberdeen; Alexander Collie, Aberdeenshire; François Gabriel Fropier, Mauritius; John Balmain MacLeod, Kingussie; Andrew MacMillan, Perthshire; James Shand Stuart, Banff; Robert Walker, A.M., Aberdeenshire; John Wight, Aberdeenshire.

At the same time, the following gentlemen were promoted to the Degree of M.D. :—

Alexander Stormont MacLaggan, M.B., and Alaxander Turner, M.B.

Degree of M.B.—Francis James Padfield, Bermudas, and James Ross, Inverness-shire,—highest honours; Robert Collins, Ayrshire, and Robert Harvey, Aberdeen,—honourably distinguished; James Ashburner Lightbourne, Argyllshire; James Green Milne, A.M., Fife; John Shand, Cape of Good Hope; James Dear Smith, Mayo; Robert William Troup, A.M., Aberdeen.

Degree of M.C.—James Beattie, John Brown, Francis James Padfield, and James Ross,—highest honours; Robert Collins,—honourably distinguished; John Ford Anderson, David Dyce Brown, Alexander Collie, François G. Fropier, Robert Harvey, James Ashburner Lightbourne, John B. MacLeod, Andrew MacMillan, James Green Milne, John Shand, James Dear Smith, James Shand Stuart, Robert William Troup, Robert Walker, and John Wight.

Also at the same time, the following gentlemen were declared to have passed part of their Examinations :—

George Henry Anderson, Charles Buchan, John Burton, Alexander Campbell, Samuel Davidson, Alexander Duncan, William Duncan, George Findlay, John Fraser, John Fowler, James A. S. Grant, William Grant, Alexander Gray, Robert Keith, George King, Benjamin Knowles, David Law, James Ledingham, Frank Leigh, Alex. Littlejohn, Christopher Macrae, William MacLean, John G. MacKendrick, Robert Milne, Thomas Milne, Alex. Minty, Alex. G. Mitchell, John Murray, Alexander Ogston, William Robertson, Peter Shepherd, Alex. Silver, William J. Smith, William S. Smythe, William Sutherland, Alexander Thom, John C. O. Will, John Whyte, and James Yates.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary Examinations for the Diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 24th ult., viz. :—

Messrs. Edward Lloyd Harries Fox, Broughton, Hants; Thomas Brewer, Halifax; James Atkinson West Spence, L.R.C.P., and L.R.C.S. Edin., Bedale, Yorkshire; Thomas Britton, M.D. St. Andrew's, and L.S.A., Driffield, Yorkshire; Michael Drury Lavin, Bushy, Herts; Thomas Lyle, L.R.C.P., Stratton, Cornwall; John Morton, Halbeach, Lincolnshire; Joseph Jeffery, Northampton; Nathaniel Heckford, Forest Gate, Essex; George Septimus Thompson, Newcastle; Peter Kirkpatrick Picard, M.D. Edin., Edinburgh; Edward Harley, L.R.C.P., and L.S.A., Ludlow, Shropshire; John Brown Oliver, High Wycombe; Thomas King, Monks-Risborough, Bucks; Edward Shaw Grattan, Belfast; Adolphus Burnell Great Rex, M.D. St. Andrew's, and L.S.A., Eccleshall, Staffordshire; Thomas Blunt, L.R.C.P., Wigston Magna, Leicestershire; John Nicholas Miller, L.S.A., Hampstead; William Donald Dear, Demerara; Fitzherbert Dermott, Australia, and Thomas Pilkington, Enfield, near Accrington, Lancashire.

The following gentlemen passed their Primary Examinations in Anatomy and Physiology at meetings of the Court of Examiners on the 28th and 29th ult., and when eligible will be admitted to the Pass Examination :—

J. J. Watson, J. H. Martin, T. H. G. Harding, John Stuckey, E. B. Shuldham, G. H. C. Cooper, B. H. Allen, J. A. M. Evans, Charles Bradley, Herbert Davies, James Whitworth, and John Morison, students of University College; Frank Holmes, Henry Pearson, Robert Whipp, T. J. Webster, and G. T. Joynson, of Manchester; James Folliott, W. F. Knapp, E. R. Smith, W. A. S. Royds, and G. C. Tayler, of St. Bartholomew's Hospital; R. M. Micklejohn, T. R. S. Nivison, E. A. Briggs, Thomas Rigg, R. O. Williams, Henry Barnes, John Wyllie, Thomas Nimmo, and William Walford, of Edinburgh; T. W. Jawison, J. G. Nevitt, Thomas Percival, and H. G. Jackson, of Leeds; H. B. Spurgin, J. C. Dwyer, Henry Couling, Henry Dawson, A. C. Jackson, T. R. Nason, E. L. Fyson, A. H. Wheldon, and C. J. Trenning, of Guy's Hospital; Joseph Langhorn and J. E. Collingwood, of St. George's Hospital; G. H. Madeley, Woodforde Finden, and D. G. Tuckwell, of King's College; A. G. Snewin, Charing-cross Hospital; G. B. Baker, St. Mary's Hospital; L. W. Morgan, St. Thomas's Hospital; E. W. Forster, Thomas Creighton, George Longbotham, and Anthony Bell, of Newcastle; A. B. Adams, C. M. Tidy, and John Craigie, of the London Hospital; William Bullus, Edwin Wykes, and W. S. Mann, of Birmingham; Thomas Elmes, of Dublin.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.—DOUBLE QUALIFICATION.—The following gentlemen passed their First Professional Examinations during the April sittings of the Examiners :—

Henry Black Purves, Kelso; Malcolm Brodie, Argyleshire; Henry Robinson, Derbyshire; Donald Macgregor, Perthshire; John Thomson, Fifeshire; Evan Jenkins, Cardiganshire; John Liddle Crombie, Perthshire; Stephen Coull Mackenzie, Calcutta; Archibald George Robertson, Edinburgh; William Sinclair, Stirling; John Fothergill, Westmoreland.

The following gentlemen passed their Final Examinations, and were admitted L.R.C.P. Edin., and L.R.C.S. Edin. :—

Richard Locke Johnson, King's County; Richard Philip Lisle, Cardiff, Wales; John Connolly, County Cork; Alexander James Macgregor, Perthshire; John Stewart, Berwickshire; Dennis Turnbull, County Durham; Patrick Hogan, County Clare.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen have passed their First Professional Examinations during the April sittings of the Examiners :—

Alexander A. H. Knight, Berwickshire; Alexander G. Miller, Edinburgh; Andrew W. M'Andrew, Lasswade; David Gentle, Fossaway; George B. Mouat, Stirling; John Crerar, Perthshire; Edward Hoggan, India; J. Keith Anderson, Arbroath; James Smith Crichton, Arbroath; Andrew D. Ducat, London; Joseph Wood, Northumberland; John Moffat, Isle of Man; Colin C. Sewell, Quebec, Canada; John Knox, Tyrone; Douglas Glendinning, Langholm; Alexander K. Morson, Newcastle-on-Tyne; Robert Skimming, Wigton; James Brims, Caithness; William M'Neil, Wigton; John R. Thomson, Slateford.

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The following gentlemen have passed their Final Examinations, and obtained the Diploma of the College :—

James Robert Joseph Woodbury M'Almon, New Brunswick; John Young, Fenwick, Ayrshire; William Stuart, Glasgow; George Macdonald, Perth; Joseph Fleming, Inch, Co. Donegal; John Parkinson Atkinson, Derbyshire; Thomas Algernon Chapman, Glasgow; William Fraser, Nova Scotia; Mathew Hunter, Eaglesham; William Chambers, Bambridge; James Rutherford, Falkirk; James Wallis, Aberdeenshire; George Arthur Wellesley Wright, Perthshire; John Mackie, Brechin; Francis Metcalfe Duncan, Edinburgh; Alexander M'Donald, Dunkeld; Gordon Hammond, Brechin; Douglas William Eshelby, Edinburgh University; William Johnson, Dundee; Alexander James Main, Mid-Lothian; John Ferguson, Fifeshire; Robert Robertson, Mid-Lothian; James Cleghorn, Caithness; Thomas Walker, New Brunswick; Christopher James Allan, Northumberland.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, April 23, 1863 :—

Thomas Carter Wigg, East Dereham, Norfolk; William Henry Hoskings, Guildford-street, W.C.; Hugh Richard Duncan Mackintosh, Cheltenham; Septimus Swyer, Brick-lane, Whitechapel.

The following gentleman also on the same day passed his First Examination :—

Thomas Powdrell, St. Bartholomew's Hospital.

The following gentlemen also passed the Preliminary Examination in Arts at the Hall on April 24 and 25, 1863 :—

Edward S. Angove, Camborn, Cornwall; Thomas E. Bowkett, East Indiaroad, Poplar; James F. Cadle, Usk, Monmouthshire; Josh. Henry Cattell, Birmingham; James Charlesworth, North Staffordshire Infirmary; Matthew Owen Coleman, Surbiton, Surrey; George A. Coombs, Burnham, Essex; R. Gorton Coombs, Burnham, Essex; James Parkinson Cunliffe, Gannow, near Burnley; John Glanvill, Wedmore House, Islington; Henry Walter Gosling, Oakley, near Bedford; Thomas B. Hay, 43, Caledonian-road; Thomas Lettis, Yarmouth, Norfolk; W. L. Roberts, Grimsby; William Spratt, Tottenham; John Tremearne, St. Ives, Cornwall; C. E. Wing, Bury St. Edmunds; James Bissell Withington, Oldbury.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BONE, Dr. WILLIAM, M.D. St. And., has been appointed Assistant Medical Officer to the Female Department of the Middlesex County Lunatic Asylum, Colney Hatch.

BOOTH, LIONEL, M.D., has been appointed Resident Medical Officer to York Dispensary.

DAY, E E., M.B. Lond., has been appointed Assistant-Physician for Diseases of Women and Children at King's College Hospital.

GIBSON, Dr. JOHN HAYDOCK, M.D. Edin., has been appointed Physician to the York Dispensary.

MARSHALL, HENRY, M.D. Edin., has been appointed Lecturer on Medical Jurisprudence at the Bristol Medical School.

MORRISSY, Dr. TOBIAS JOSEPH, M.D. Glasg., has been elected Coroner for Tipperary.

PLAYFAIR, Dr., has been appointed Assistant-Physician for Diseases of Women and Children at King's College Hospital.

TUTIN, JOHN HARLEDINE, M.R.C.S. Eng., has been appointed Coroner for the Liberty of Ripon, Yorkshire.

DEATHS.

BANNER, J. MAURICE, F.R.C.S. Eng., at 42, Rodney-street, Liverpool, on April 2.

BEELEY, BENJAMIN, M.R.C.S. Eng., of Holmfirth, Yorkshire, on April 10, aged 68.

BUTCHER, JOHN BREAY, M.R.C.S. Eng., at Truro, Cornwall, on April 14, aged 34.

CUPPAGE, J. GREER, M.R.C.S. Eng., Staff Assistant-Surgeon Army, half-pay, on February 10.

ELLIS, JAMES, M.R.C.S. Eng., Surgeon R.N., at 7, Belgrave-street South, Pimlico, on April 17.

GELSTON, JAS. P., L.F.P.S. Glasg., at Chester-street, Liverpool, on April 14.

HARDING, WM. WOODS, M.R.C.S. Eng., at North Kent-terrace, Woolwich, on April 11, aged 32, Surgeon 14th Kent Artillery Volunteers.

HOUSTON, WILLIAM, M.D., formerly of Ballymena, County Antrim, at Sydney, New South Wales, on December 27, aged 45.

JOHNSON, HENRY CHARLES, F.R.C.S. Eng., at 6, Savile-row, St. James's, W., on April 25, aged 54.

ZIEGLER, ALEXANDER, M.D. St. And., at George-square, Edinburgh, on April 10.

MR. FARADAY.—The French Academy of Medicine has just elected our eminent countryman one of its Corresponding Associates. The honour is indeed great to be selected from such a list of competitors (viz., Ehrenberg, Rose, Bunsen, Delarive, and Matteucci), and that almost unanimously, fifty-two out of fifty-three voters who were present giving their suffrages for Faraday. He has long been a member of the French Institute.

ACADÉMIE DES SCIENCES.—M. Schönbein has been elected as a Corresponding Member in the Chemical Section, by forty-three out of forty-four voters present.

THE LOSS OF THE "ORPHEUS."—Messrs. J. M. Trouson and M. Coates, the Surgeon and Assistant-Surgeon of the *Orpheus*, were, it is feared, amongst the officers who perished in the terrible shipwreck on the Manukau Bar.

GEOGRAPHICAL FEAT.—Captains Speke and Grant have completed their journey across eastern and central Africa, from Zanzibar to Khartum, by the White Nile, where they have arrived in safety.

ETHNOLOGICAL SOCIETY.—By the resignation of Mr. John Crawfurd, F.R.S., who has held the post of President of the above Society for the last three years, the Fellows of the Society will be called on next week to elect a President. The advantages which would accrue to science if the successful candidate were to be a member of the Medical Profession, or an Anatomist, we shall not now insist on. Several gentlemen highly qualified for this dignity, and one especially, a physiologist of European reputation, are stated to be likely to come forward, with every prospect of success.

FORT PITT.—The Army Sanitary Commissioners, on the occasion of their visit to the Hospitals, barracks, and other Government buildings at Chatham, a few days since, approved of the proposal for the conversion of the buildings at Fort Pitt into a Hospital for the whole of the troops of the garrison, including the Royal Artillery, the Royal Engineers, the Marines, and the three depots battalions of infantry. The invalids from the Royal Marines will continue to occupy Melville Hospital, as at present. Fort Pitt Hospital will accommodate about 300 patients, which is probably in excess of the number who will occupy it at one time. This arrangement will place at the disposal of the authorities the present garrison Hospital, a commodious building at the back of Chatham barracks, which, according to present arrangements, will be converted into barrack rooms for the troops of the Line.—*Times*, April 27.

THE SODEN COLLECTION.—At the last meeting of the Medico-Chirurgical Society several volumes, containing 850 portraits of members of the Profession, were presented to the Society by Mr. Soden, of Bath. They had been collected by his father. Many of the portraits were very rare, and, as works of art, there were some of great value. There was also a volume of autographs, one of caricatures, and two indexes to the volumes of portraits. The conditions on which they were given were that they should form the nucleus for the collection of Medical portraits, and that it should be called "The Soden Collection." The Council had gratefully accepted the gift, and had already thanked the donor; but, on the motion of Dr. Webster, the meeting passed a second vote of thanks to Mr. Soden. The President hoped the members would contribute autographs and portraits to the collection.

PATHOLOGICAL SOCIETY OF DUBLIN.—The last meeting of the twenty-fourth annual session of the above Society was held on Saturday, the 25th ult., in the anatomical theatre of Trinity College, John Hamilton, Esq., President, in the chair. Interesting communications having been made by Drs. Adams, Mapother, and Duncan, the President proceeded to announce the decision of the Council in reference to the awarding of the Society's gold medal. The successful essay of this year was, he stated, one of extraordinary merit, and displayed the greatest possible research, combined with the most accurate original observation. The work, for it was much more than an essay, was, moreover, admirably illustrated. The author had assumed the name of "Neuraglia," and on opening the corresponding sealed envelope, it was ascertained that the medal had been won by Mr. John Purser, resident pupil of the Richmond Hospital. On the evening of Tuesday, the 14th ult., the President received the members of the Society, and a large number of literary and scientific visitors, at a brilliant and agreeable *conversazione*, at his residence in Merrion-square.

WINDSOR ROYAL INFIRMARY.—Her Majesty and the Princess of Wales honoured this Institution with a visit last week, when they were received and conducted over the establishment by Mr. Blair, the House-Surgeon, who explained some of the most interesting cases to the royal party, the Queen, especially, taking a great interest in some of the patients.

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DEATH FROM SWALLOWING BLUE PILLS.—An inquest has lately been held at Rogate on a woman named Caroline Stevens, who died from mercurial poisoning brought on by taking blue pills. It appeared from the evidence that she had once been ordered by a Medical man to take a quarter of an ounce of blue pill in a month. She derived benefit from the prescription, and the next year she procured more in larger quantities, which she took till it affected her mouth. The following two years she obtained still larger quantities, and on both occasions it produced more or less salivation. She usually procured it in lumps of a chemist living at Petersfield. She thought the last time that she left it off too soon. On the present occasion she procured more, and had been taking it six weeks. Dr. Peskett, who attended her, found, by directions of the deceased, in an old wardrobe, done up in a quack medicine paper, ten rolls of pills, which he produced. Each roll was 1¼ inch in length, and 1½ inch in circumference. Deceased told him that she usually took fifteen pills twice a-day; on one occasion she took fifteen three times in one day; for several weeks not less than twice a-day. The druggist who sold her the poison said she had been in the habit of buying three or four ounces at a time. He sold it under the impression that she and her husband had bought the pills for the purpose of retailing them in the country.

THE IODINE TEST FOR DIABETIC URINE.—The announcement of MM. Trousseau and Dumontpallier has, of course, excited great attention, and some of their conclusions have already began to be challenged. M. Dechambre, editor of the *Gazette Hebdomadaire*, has made several experiments. From these it results that in some cases the action of diabetic urine on the iodine was as complete and as rapid as stated by M. Trousseau, in other cases normal urine decoloured the iodine as rapidly and as completely, and in two instances even more rapidly. His experiments also seem to show that the principal agents in the decoloration are sulphate of potass, uric acid, and the urates of potass, soda, and ammonia. It is in fact the relative proportions of these salts in the urine which regulates the decolouring of the fluid, with or without glucose. If this power belongs especially to glucosic urine, the amount of these salts in such urine will then have to be sought for. Professor Farge, of Angers, has also tried the test, and found that in two diabetic patients, whose urine was very glucosic, the decolourising power was at its minimum, the maximum belonging to febrile, or uric urine from other causes.

THE PREVENTION OF PITTING IN SMALL-POX.—Dr. Smart, House-Physician at the Royal Infirmary, Edinburgh, has found that a solution of india-rubber in chloroform painted over the face and neck, when the eruption of small-pox is fully out, prevents pitting. A paragraph in the *Scotsman* states that "when the chloroform has evaporated, which it very readily does, there is left a thin elastic film of india-rubber over the face. This the patient feels to be rather comfortable than otherwise, inasmuch as the disagreeable itchiness, so generally complained of, is almost entirely removed, and, what is more important, 'pitting' is thoroughly prevented wherever the solution has been applied. It may be as well to state that india-rubber is far from being very soluble in chloroform, so that, in making the solution, the india-rubber must be cut into small pieces, and chloroform added till it is dissolved. Dr. Smart has tried several other substances, but found none so generally useful. For instance, gutta-percha was tried. It has the advantage of being very soluble in chloroform, and would have been a very admirable application but for the tendency it has to tear into ribbons whenever the mouth is used, or even when the features play. India-rubber, on the other hand, is pliable and elastic, allowing free use of the mouth without any danger (as a rule) of its tearing off. If, however, from some cause or other, a portion is torn off, a fresh application of the solution by means of a large hair pencil remedies the defect, and the mask is once more complete. Several patients who have had this india-rubber mask applied concur in stating that they found it agreeable to wear, and their faces were perfectly free from 'pitting,' although other parts of the body, such as the arms, were covered."

THE MEDICAL BENEVOLENT COLLEGE. — The eleventh annual festival of this Institution was celebrated on Wednesday last, when about 300 gentlemen sat down to dinner at Willis's Rooms, the Right Hon. the Earl Manvers in the chair. Amongst the guests present were Lord Chelmsford, Colonel Brownrigg, the Master of the Temple, Sir Charles Locock, the Rev. Dr. Thornton, Sir John Fisher, Sir Watkins Williams Wynn, M.P., the High Sheriff of Cornwall, Dr. Sibson, Mr. Propert, Mr. Travers, Mr. Dunn, Mr. Toynbee, and others. After the usual loyal toasts had been disposed of, the chairman proposed "the President of the College, and success to the Royal Medical Benevolent College," which was warmly received, and responded to by Lord Chelmsford, who in return proposed the health of the Chairman, commenting on the fact that the Manvers family had been among the earliest and most firm supporters of the charity. The health of "the Treasurer" was proposed by the chairman, and responded to by Mr. Propert, who returned thanks warmly for the cordial manner in which his name had been received, and expressed his continued interest in the welfare and supervision of the arrangements of the College. The toast of "the Head Master" was proposed by Lord Chelmsford, and acknowledged by the Rev. Dr. Thornton, who said that he was confident that the methods of instruction practised in the school were those most calculated to promote the future welfare of the boys through life. The "Honorary Local Secretaries," "the Press," "the Stewards," "the Medical Charities of England," and "the Ladies," were all cordially responded to, and the guests separated at an early hour. We did not hear the total amount of the subscriptions received.

WE desire to remind our readers that the Society for Relief of Widows and Orphans of Medical men in London and its vicinity holds its seventy-fifth anniversary dinner on the 20th inst, which we hope will be well attended. The Society gave away last year £1948 in half-yearly relief, amongst forty-three widows and twenty-six orphans of its deceased members, besides £75 10s. in other relief. How strange, then, that this Society should only number some 450 present members in all Middlesex, and the London postal district elsewhere, when membership of the husband or father during at least the two years preceding his decease, and distress in the widow or children are the only things necessary for obtaining relief forthwith, and to be continued half-yearly. Why do not all Medical men join the Society, the wealthy and unmarried to give assistance to the families of their less fortunate brethren, the married, that their own families may not find themselves in want,—a far too common occurrence we regret to say? We feel that the non-publication of the names of the recipients of the Society's relief is one strong reason why the Society is so lightly regarded, but in truth very great honour attaches to its doings from this very cause, for the widow has only to prove her case to receive relief without delay.

THE FRENCH SCIENTIFIC CONGRESS FOR 1863.—The meeting of this body is to be held this year at Chambéry, in Savoy, from the 10th to the 20th August. The following are the subjects which are to be brought before the Medical Section:—1. The nature of Cretinism, and the question of the utility of establishments (as the Abendberg) for its treatment. 2. The question of the law respecting Cemeteries, and how far experience has determined the influence of these on neighbouring populations with respect to epidemics, endemics, etc. 3. The Pathogenic Influence of the Marshes found in Savoy, and what other means of neutralising this is there besides draining. 4. Would it be an advantage for Medical Science in France that the centres of Medical Education should be multiplied in proportion to the clinical, personal, and material resources of the Empire; if so, should these centres undertake a partial or complete education, and should they have the power of conferring the Doctor's degree. 5. What is the influence which the present system of the inspectorate of Mineral Waters has on the material prosperity of the various stations, on the Professional level in the vicinity of the stations, and on the progress of Hydrology. 6. Are the physical and chemical characters of the sulphurous waters of Challes and other places such as to render them suitable for employment under the form of pulverisation? 7. To what extent are the mineral waters of Evian lithontriptic, as compared with those of Vichy, etc. 8. What is the true part played by intestinal worms in pathology? Are they cause or effect, or both the one and the other; and, as a general rule, should their elimination be left to nature or be artificially induced? 9. Is the remuneration paid to ordinary Medical witnesses sufficient, especially in districts in which communication is difficult?

PREVALENCE OF CRIMINAL ABORTION IN THE UNITED STATES.—The editor of the *American Medical Times* draws

attention to the increasing frequency with which criminal abortion is perpetrated in the United States, and the very callous state of public feeling in the matter. He assumes this increase not only from the number of abortionists accused, though inefficiently punished, but also from the augmented proportion of still-births. This proportion has in New York rapidly increased since the first registry in 1805. Then the ratio of fœtal deaths to the population was 1 in 1633, but in 1849 it had risen to 1 in 340. In 1856, 1 child in every 11 was still-born—the proportion being 1 in 15 in Europe. Accurate records of private practitioners give us the ratio of premature births 1 to 78 of the entire births; while in New York the ratio is 1 to 40. The ratio of premature still-births to those at full time in New York was 1 in 10 in 1846, and 1 in 4 in 1856. From 1850 to 1857, the still-births doubled, and since that period the proportion has rapidly increased. The State of Massachussets exhibits the comparative frequency of abortions thirteen times as great as in New York city. The instruments of this crime are not exclusively the wretches who perpetrate it in Europe. "There is a class of Medical men, standing on the boundary between legitimate medicine and quackery, who both advocate and practise abortion. They assume a sanctimonious and clerical dress, and, under this specious guise, practise the black art of the abortionist. They are found in the most respectable Medical circles, and make their Professional associations subserve their base purposes. Judged by the moral code of a Christian civilization, they are the most abandoned criminals in the community, and should be thoroughly purged from the Profession. In this city, the Academy of Medicine, and in the country, the Medical Societies, should inquire 'Have we not abortionists among us?' We do not doubt that they will be found, and that, too, in startling numbers, especially in large cities."

BOOKS RECEIVED.

Statistical Tables of the Patients under Treatment in the Wards of St. Bartholomew's Hospital during 1862. By George N. Edwards, M.D. Cantab., Assistant-Physician and Registrar to the Hospital. Lond. 1863.

Statistical Tables of the Patients Treated in Guy's Hospital during 1862.

*** Out of 329 patients operated on at St. Bartholomew's during 1862, 32 died; out of 541 operated on at Guy's, 44 died; the mortality, therefore, after operation at the former has been somewhat the higher. The Guy's report notices the increase of typhus during the past year; the total number of fever cases having been 164, of which 24 died. Of the 164, 55 were typhus and 43 typhoid, the rest are entered under common continued fever, the exanthomata and ague. At St. Bartholomew's there were only 7 cases of typhus and 20 of typhoid during the year. The outbreak of typhus at Guy's took place in one of the large wards of Hunt's House, and necessitated the temporary closing of the ward. Of 13 nurses and assistants engaged in tending the sick, 4 died. During this time the Surgical wards were remarkably free from disease. We are glad to see that they have improved the patients' diet at Guy's by the issue of green vegetables alternately with potatoes during the summer months. No doubt such a change has "proved very acceptable to the patients, and has been much commended by the Medical Staff."

The British Journal of Dental Science, April, 1863. London: John Churchill and Sons.

The Stethoscope, No. 3, April, 1863. London: J. W. Davies.

On Malaria and Miasmata, and their Influence in the Production of Typhus and Typhoid Fevers, Cholera, etc. By Thomas Herbert Barker, M.D., F.R.S. Edin. London: J. W. Davies. 1863.

On the Cure of Club-Foot without Cutting Tendons. By Richard Barwell, F.R.C.S. Eng. Pp. 224. London: John Churchill and Sons. 1863.

The Urine in Health and Disease. By Arthur Hill Hassall, M.D. Second Edition. Pp. 416. London: John Churchill and Sons. 1863.

On Rupture, Inguinal, Crural, and Umbilical. By John Woods, F.R.C.S. Eng. London: John W. Davies. 1863. Pp. 326.

The Shilling Guide to the London Charities for 1863. By Herbert Fry. London: R. Hardwicke.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

We have every reason to believe that the report of a trial on which a correspondent founded an accusation against Dr. Robert Barnes is incorrect, so far as its version of Dr. Barnes's evidence is concerned. We believe that Dr. Barnes on the occasion referred to gave no testimony that was injurious to his brother Practitioner, and that it is his constant practice to act fairly and liberally, and that our correspondent was misled by a report which cannot be relied on.

Broughams v. Hansoms.—Mr. Rawlenson, C.E., and Sanitary Inspector, has written a sensible letter to the *Times* on the subject of sanitary appliances for the public use. We commend the following extract to the attention of some of our pallid, ailing Professional brethren:—

"An invalid takes a carriage airing with closed windows; such a ride is, however, in truth a carriage poisoning. If an open carriage cannot be used on any day in the year with safety, the individual had better not use a carriage, and no room should be occupied which has not an unceasing flow of fresh air through it—not necessarily a draught, but motion."

Locusts in India.—A new pest has afflicted India—that of locusts. For some months past large swarms of locusts have done no little injury in Scinde and the Punjab, and the fear is that they may take up their permanent abode in the latter. To deal with the scourge has called forth all the energies of the local authorities. The locusts have been especially plentiful in the districts of Goojrannala, Sealkote, Goojerat, and Rawul Pindee, all near the foot of the Western Himalayas. They cling to the long spikes of the acacia, the Shittim tree of Scripture, and there they breed, each female laying nearly a hundred eggs, which adhere to each other like an ear of corn. The Financial Commissioner of the Punjab has accordingly addressed a circular to all the subordinate authorities. As is the practice in Persia and Turkey, the villagers are to be induced by money and sweetmeats to grapple with the scourge by, morning and evening, forcing the locusts into bags while still drowsy or numbed, and burying them in pits. Experience shows that every bagful withdrawn from the swarm represents a large amount of grain and fodder saved, and a persistent destruction of them during the four or five months of the cold season will secure the best results. The locusts made a mistake when they selected the Punjab, of all other provinces, as the scene of their operations. They might prove worse than a famine caused by drought, and seriously affect the Budget.—*Calcutta Correspondent of the Times, March* 23.

Mr. Propert has at last given in. He has intimated to Dr. Markham his willingness to submit the question between himself and Mr. Adams to a court of honour, composed of his Professional brethren. That "question," or "case," or "affair," or call it what you will, has been submitted to the Profession already by Mr. Adams, and it is for Mr. Propert to reply to it manfully. We have all along regretted that Mr. Propert should have been so ill-advised or so unadvised, and hence that the memory of the services which he has rendered to the Profession, in the foundation of the Medical Benevolent College, has been overcast by this present flagrant instance of what seems to be injustice and cruelty to one of its members. Mr. Adams' case against Mr. Propert is,—firstly, the harshness with which Mr. Propert treated him, a Professional friend, in December, 1861, and January, 1862, when he assumed Adams's guilt, and referred him to a jury; and, secondly, the conduct of Mr. Propert in aiding and countenancing the Russells, which was equivalent to a condemnation of Adams. Mr. Propert may now show his Professional brethren that he was justified in the course he took; or if he should be judged to have acted wrongly, he will, no doubt, put himself into their hands, and do, say, and pay anything which the court may decide that he ought to do, say, and pay. Of course, Mr. Adams would be a mere imbecile unless he stipulated that both parties should bind themselves by the decision of this Court of Honour, as though it were a court of law. Now that the affair is *sub judice*, we must be silent. We have spoken heretofore on the basis of an accusation which Mr. Propert did not condescend to reply to. We will only add that a man of honour can wipe out almost any offensive conduct by a full and frank retractation and acknowledgment of error, and that we shall be most glad to see the veteran defendant taking this course, if it be so adjudged, and thus handsomely winding up a long and distressing controversy.

Mortality of the City Police.—The Lord Mayor's remark in the recent debate, that "for physique and intelligence the City police are far above the metropolitan police," may now be illustrated by the report of Mr. Borlase Childs, the Surgeon to the City police, on "the probable duration of life, and Medical history of the force." From this we learn that candidates for admission to the force have to produce testimonials of trustworthiness, and a twelvemonth's good character, before being submitted to examination as to the state of their physical fitness for a policeman's duties. The Surgeon conducts this examination in precisely the same way as prevails in examinations for the army, and the consequence is that the policeman's is a "picked life," and, on entering the force, he may be considered as a man possessing a high standard of health and capable of undergoing more than an ordinary amount of physica exertion. During the years 1852 to 1856, as many as 1,345 candidates sought admission to the force. Of this number, 534 were rejected by the Commissioner, who considers character only, and 181 by the Surgeon. Surgically considered, the recruitment of the force is similar to that of the army, but morally it was much superior, for as the men are chosen for good character and intelligence, these are the least likely to injure their health by excesses. Comparing the physical status of the force with that of the army, it is found that while the mortality of the household cavalry is 11·1, dragoons, 13·5, infantry, 17·8, and foot-guards 20·4, in our police force it is only 8·9 per 1000. Yet we may suppose that in the time of peace the duties of the policeman tax the constitution more severely than those of the soldier, and we may conclude that he system of recruitment for the police contributes greatly to the value of life among the members of the force. Of deaths which occurred during the years 1852 to 1856, there was only 1 of cholera, and this was the only death from this cause since Mr. Child's appointment in 1844; 2 died from typhus, 2 from small-pox, 11 from chest diseases, and 8 from other diseases.—*City Press*

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The Reputed Fossil Man of Abbeville.—Dr. Falconer, the eminent palæontologist, has written a letter to the *Times* which fully confirms the opinion we advanced last week as to the recent character of the jaw discovered by M. de Perthes. He accompanied Messrs. Evans and Prestwich to Abbeville, and examined the jaw and flint hatchets himself. He writes:—

"Now for the jaw itself. What complexion of intrinsic evidence did it yield? The craniological materials available at Abbeville for comparison were, of course, very limited; but the specimen presented a series of peculiarities which are rarely seen in conjunction in the jaws of European races, ancient or recent. Here I must be a little technical. 1. The posterior margin of the ascending ramus was extremely reclinate, so as to form a very obtuse angle with the ascending ramus. 2. The ascending ramus was unusually low and broad. 3. The sigmoid notch, instead of yielding an outline somewhat like a semicircle, was broad, shallow, and crescentiform. 4. The condyle was unusually globular; and, 5, what was most remarkable of all, the posterior angle presented what I may venture to call a marsupial amount of inversion. The first three characters suggested to M. Quatrefages—if I may venture to cite him for a preliminary impression and not a judgment—the recollection of something corresponding in the jaws of Esquimaux, while the fifth character suggested to me the recollection of what I had seen in the jaw of an Australian savage. Neither of us had at hand the materials requisite for a satisfactory comparison, but the combination of characters above alluded to struck us both as sufficiently remarkable to demand serious examination. M. Quatrefages departed for Paris, taking the jaw with him, while I returned to London, bringing drawings and a careful description with measurements of the principal specimen, and M. de Perthes confided to me the detached molar. I may add that the jaw specimen, although professing to have been yielded from below a heavy load of coarse flints, presented no appearance of having been crushed or rolled; and that, making allowance for the crust of matrix enveloping it, the bone was light, and not infiltrated with metallic matter. The condyle washed yielded a dirty white colour.

"As to the result, I have as yet no authentic information of the final conclusions which have been arrived at in Paris. My friends, Mr. Busk, F.R.S., and Mr. Tomes, F.R.S., both practised anthropologists, gave me their assistance in my part of the inquiry. The former, like M. Quatrefages and myself, was struck with the odd conjunction of unusual characters presented by the jaw, and speedily produced a lower jaw of the Australian type, brought by Professor Huxley from Darnley Island, which yielded the same kind of marsupial inversion, so to speak, with a nearly corresponding form in the reclinate posterior margin, ascending ramus, and sigmoid notch. But Mr. Tomes's abundant collection brought the matter speedily to a point. From the pick of a sackful of human lower jaws, yielded by an old London churchyard, he produced a certain number which severally furnished all the peculiarities of the Abbeville specimen, marsupial inversion inclusive, although not one of them showed them all in conjunction. We then proceeded to saw up the detached molar found at Moulin-Quignon. It proved to be quite recent; the section was white, glistening, full of gelatine, and fresh looking. There was an end to the case. First, the flint hatchets were pronounced by highly competent experts (Evans and Prestwich) to be spurious; secondly, the reputed fossil molar was proved to be recent; thirdly, the reputed fossil jaw showed no character different from those that may be met with in the contents of a London churchyard. The inference which I draw from these facts is, that a very clever imposition has been practised by the *terrassiers* of the Abbeville gravel-pits—so cunningly clever, that it could not have been surpassed by a committee of anthropologists enacting a practical joke. The selection of the specimen was probably accidental; but it is not a little singular that a jaw combining so many peculiarities should have been hit upon by uninstructed workmen.

"The break-down in this spurious case in nowise affects the value of the real evidence, now well established, but it inculcates a grave lesson of caution. "Sir, your obedient servant,

"21, Park-crescent, N.W., April 23. "H. Falconer, M.D., F.R.S."

*** We hear from Paris that the leading members of the scientific world there have unanimously come to the same conclusion as M. Boucher de Perthes, and consider the jaw to be geologically ancient. Notwithstanding this, our opinion is unaltered, and accords with that of Dr. Falconer, Messrs. Prestwich, Evans, and Tylor.

Employment for a Swiss Physician in India.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—You will oblige me by informing me, through the Correspondent column of the *Medical Times and Gazette*, if a foreign Physician (Swiss), graduated at a University, wishing to proceed to India or one of the British colonies, would be able to find Government employment in his Profession; or if not, what chance of success would he stand for private practice? I am, &c.

London, April 28. A. G.

[Write to Sir C. Wood, at the India House.—Ed.]

Medical Handbills.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I enclose two circulars which have been very freely distributed in this neighbourhood. As the parties evidently desire publicity, perhaps you will insert them in your widely-circulated Journal.

I am, &c.

April 26. An Old Subscriber.

"Mr. Rhind, L.R.C.P., M.R.C.S., begs to state that he has amalgamated the Practice of Mr. Grabham, Surgeon (who has left the neighbourhood), with his own. To meet the requirements of the district, Mr. Rhind has taken the residence lately occupied by Mr. Grabham, in Commercial-street, next door to the Mechanics' Institute, Shipley, in addition to his own residence, Claremont-villa, Victoria-park, Shipley. Mr. Roberts (Member of the Royal College of Surgeons, London), resides at the residence in Commercial-street. Mr. Rhind calls daily at the house in Commercial-street for messages and consultations. Special messages for Mr. Rhind will be forwarded at once to his house in Victoria-park. Hours for consultation may be learned on application at either residence; but it is specially stated that either Mr. Rhind or Mr. Roberts remains every Saturday afternoon, from 3 to 5, at the house in Commercial-street, for consultation. Claremont-villa, Victoria-park, Shipley."

"Mr. Rawson, Surgeon, Thornton.—In consequence of the many demands upon his time, Mr. Rawson finds it necessary to have stated hours each day, when he can meet patients coming from a distance. The hours of consultation at the Surgery in future will be:—Forenoon, 9 until 10 o'clock; Afternoon, 2 until 3 o'clock; in the Evening, after 7 o'clock. Saturday is devoted chiefly to Diseases of the Chest."

Astigmatismus.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I am again in need of help on a question of etymology. *Unde derivatur* "Astigmatismus" (?) a word lately introduced into ophthalmic nomenclature. I know what astigmatism means; it is defined, in a recent publication by Snellen, as a peculiar condition of vision, in which "horizontal and vertical lines cannot be seen with equal clearness at one and the same time, because the focal distances in the two meridian planes are unequal." This peculiar condition of the eye is no new discovery, having been described more than sixty years ago by Dr. Young, and subsequently by Professor Airy. A new name, however, has been given to it, and I cannot understand on what principle the word has been compounded.

Stigma, we all know, means a punctured or dotted mark. Stigmatism would, I suppose, be the act of making such marks, or being the subject of them; and astigmatism the opposite condition. But on what etymological principle does "astigmatism" imply this disparity of refraction in the vertical and the horizontal diameters of the eye? To me the word does not etymologically suggest the thing intended. I am &c.

April 26. Quærens.

The Army Medical Department.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—A movement is being set on foot by some injudicious members of the Army Medical Department to petition the Secretary of State for War for certain "benefits." Among these are the following:—

1. To have the place of the names of the Medical Officers in the Army List changed from its present location, and mixed with those of the other officers, according to the date of commission and rank. In other words, to try and hide from public gaze the names of men of so odious a Profession by blending them with the military ranks!

2. To have the relative military ranks printed after the name of each Medical officer, viz., Doctor ——, ——Regt., Lieutenant-Colonel!

3. To have a precedence at the dinner-table, *i.e.*, to be allowed to sit next to, or opposite to, a Major-General, Field Marshal, Lord or Earl, if such dined at the mess, and to help these "big wigs" to soup!

There are only two legitimate places at a mess table: those of the President and Vice-President; and, beyond these, there is no precedence at the table which would not also exist on parade; for mess is in its nature a parade, and a commanding officer can order any of his officers to be present on any date he wishes.

The absurdity of these must be apparent to every thinking man, and I hope, sir, that you will insert this letter, and otherwise use your influence (which has always been exercised for the benefit of the service) in crushing a movement likely to bring discredit on the good common-sense of the officers of the Department, many of whom, like myself, strongly censure such absurdities.

It is quite true that the "new Warrant" cannot be depended upon any more than its deceased fellow; that "forage," which was granted in the old, has been omitted in the new; that there is no guarantee that the Indian authorities will acknowledge the new one any more than they did the old; that a purveyor or general officer may deprive a Medical officer of his coals or light, or any other allowance just as readily under the new Warrant as under the old Warrant. These are sterling adventages, and the point ought to be taken up by a man like General Peel in the House, but the other "advantages" are simply likely to do a vast injury to our Department. I am, &c.

A Surgeon.

Examinations for a Medical Degree in Edinburgh.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The Medical press has always taken great interest in the education of students, and to its influence are we chiefly indebted for the recent changes in the character of the qualifying examinations. I trust therefore that the subject of this letter will receive your consideration, and the much-needed reform your advocacy.

The present high standard of the examinations at the Universities not having been accompanied by arrangements fixing suitable intervals of time between each, nor by a convenient division of the subjects, has, instead of promoting Medical education, had a contrary effect, and caused much disappointment and distress among students and their friends. Though the new system has had but a short trial, there are ample data to prove that it has hitherto failed to raise the character of Medical education, though in one division of the United Kingdom (England) it may have promoted the introduction into the Profession of youths of a higher social origin than formerly entered it.

The subjects of Medical study have made such gigantic strides of late years that the present generation of students has much more work to do than its predecessors. The prevailing rule among British universities at present is to hold two Medical examinations, one in Chemistry, Natural Philosophy, Natural History, Botany, Materia Medica, Anatomy, and Physiology, and the other in five or six purely Professional subjects. To minds of ordinary memorial power it is simply impossible to retain such a mass of knowledge as is necessary to pass a *bona fide* searching examination in so many subjects at one time. Very many make the attempt, neglecting every other duty. How many succeed? An answer to this question may be obtained by comparing the number of matriculated Medical students and of graduates at the Universities of Edinburgh and London. The latter attain the degree by an assiduous cultivation of the memory or by chance, frequently to the evident injury of the higher mental faculties. Numerous students who, from ill-health or other difficulty, have their course of study interrupted, leave the Profession in despair, or at length qualify after undergoing repeated labour at accumulated expense. The two Universities seem now to be emulating one another in the severity of their examinations, and at Edinburgh quite recently the exactions in that not very essential subject, Botany, were difficult beyond precedent in any other seat of learning in the world.

Of the severity of the examinations, however, the students do not complain; they only require that these should be held annually, and in those subjects which have been studied the previous year. How much better, for instance, would it not be if at the end of the first year examinations were held in Chemistry, Botany, Natural History, etc.; at the end of the

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second, in Anatomy, Physiology, and Materia Medica; at that of the third, in Midwifery, Medical Jurisprudence, and Pathology; at the fourth, in Theoretical and Clinical Medicine and Surgery. An arrangement of this kind prevails in all the Continental Universities. It induces regular and continuous study, counteracts the tendencies of the naturally idle, enables the industrious to acquire a thorough knowledge of their subjects, and is found to be productive of great Professional and individual advantages.

In proof of the fact that the proficiency of young Medical men has not kept pace with the increased exactions of the examining boards, I may refer to the last examination for Commissions in the Army, when not more than fourteen out of forty-five candidates satisfied the Examiners.

It is reported that Sir William Hooker, Mr. Syme, and other eminent persons have expressed an opinion that Medical education as now conducted, under the influence of the present system of examinations, is radically wrong. I am sure that those who are practically acquainted with this subject will endorse the opinion of these gentlemen. Let us hope that the attention of the authorities will soon be directed to this matter, as it is yearly becoming more urgent. The reform required does not involve a wide departure from the existing routine, and in its results would prove in the highest degree beneficial to students, gratifying to Professors, and creditable to the schools.

I am, &c.

Scotland, April 20. PATERFAMILIAS.

DR. ABBOTS SMITH ON HUMAN ENTOZOA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—After the encomium which the reviewer of "On Human Entozoa," etc., in the last impression of your periodical, has passed upon the "most careful" and "most able manner" in which such portions as are taken from M. Davaine's "Traité des Entozoaires" are translated, I ought to have little cause for complaint; nor, indeed, should I have troubled you upon this matter were it not for the circumstance that I feel compelled to protest against the insinuation so fabricated on my part which is conveyed by your reviewer's placing a note of interrogation after the word "permission."

With regard to literary pretensions, I should be one of the last (especially as having been myself a reviewer for several years) to contend against the right of criticism, but as such a charge as that which is brought against me is of an unusual character, I must, relying upon your well-known sense of fair play, request you to allow me to make the following statements in your columns, in refutation of it:—

1. That I am in a position to prove by letters from M. Davaine that that author kindly and readily gave me the permission which I have mentioned in the Preface.

2. That I can also prove, in a similar manner, the permission granted to me by Messrs. Baillière, of Paris, and the payment to them of the equivalent, as fixed by themselves, for the right of reproduction of any portions of the work, and for the privilege of using any of the wood engravings.

3. That I have never attempted in any way to disguise my obligations to M. Davaine, of whose work mine would have been styled a translation, had it not appeared probable that this statement would have misled English readers with respect to the size, etc., of M. Davaine's book, which extends over more than 900 pages (many of which are closely printed), and describes the entozoa found in animals as well as in man; whilst some portions of the book reviewed in your Journal had not formed part of M. Davaine's treatise—*e. g.*, the article on Santonine (at pp. 233—238), which was really taken from a paper written by me in the *Medical Times and Gazette* of last year, giving an abstract of fifty cases of intestinal entozoa in which I administered that drug.

In support of my third assertion, I may here refer to the acknowledgment in my preface that "I have largely availed myself" of the permission kindly granted to me, "as will be seen upon a perusal of the following pages;" and also to the fact that one of your Medical contemporaries, putting the construction which I desired to convey upon this part of my Preface, actually comments upon my "great candour" in making this statement.

Those who know me will, I believe, exonerate me from any suspicion of literary dishonesty; but, in order to avoid the semblance even of a wish on my part to mislead any one by what may appear to some to be an ambiguous statement, I intend to give directions that the words "Partly translated, by permission, from M. Davaine's 'Traité des Entozoaires'" be inserted in all future announcements of the work, and also upon the title-page if M. Davaine, with the courtesy which has distinguished his correspondence with me throughout, should give me permission to do so.

I have to thank your reviewer for drawing my attention to the error made, doubtless in the correction of my manuscript, of not acknowledging the passage from M. Pinel's work, having duly acknowledged Cruveilhier, Tarneau, Gamgee, and others whose observations and consequently whose names, do not appear in M. Davaine's treatise, no reason can be adduced for my purposely ignoring M. Pinel.

I am, &c.

April. WM. ABBOTS SMITH.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Since I took the liberty of addressing a letter to you in explanation of certain points which were commented upon by the reviewer of "Human Entozoa," in the notice contained in your Journal of Saturday last, I have received a letter from M. Davaine (dated "Palais des Tuileries, 28 April, 1863," M. Davaine being attached to the Imperial "Service de Santé,") from which I extract the following passage:—

"Je vous autorise parfaitement à dire que c'est avec mon consentement que votre ouvrage ne porte point le titre de traduction. Cet ouvrage, ne reproduisant pas le mien intégralement, ne pouvait en être considéré comme la traduction." I am, &c.

April 29. WM. ABBOTS SMITH.

COMMUNICATIONS have been received from—

ROYAL MEDICAL BENEVOLENT COLLEGE; MR. HARRY LOBB; THE CRYSTAL PALACE COMPANY; MR. W. D. WILKES, Westminster Hospital; DR. C. R. DRYSDALE; AN OLD SUBSCRIBER; APOTHECARIES' HALL; PATERFAMILIAS; DR. STRUTHERS; DR. R. LAWRANCE; DR. W. S. KIRKES; MR. HAYNES WALTON; DR. RAMSBOTHAM; ROYAL INSTITUTION; QUÆRENS; MR. F. J. ROBINSON; ANOPHTHALMOS; HARVEIAN SOCIETY; MR. R. B. CARTER; DR. DEVERGIE; OBSTETRICAL SOCIETY; MR. J. S. BRAZIER; A. G. PATHOLOGICAL SOCIETY; DR. W. ABBOTS SMITH; DR. MERRIMAN; MR. JAMES HINTON; Professor HUXLEY; Messrs. KIMBER AND ELLIS; MR. JOSEPH GOODING; SPES; DR. LOMB; MR. S. CROMPTON; DR. POWELL, London Hospital; MR. WILKES, Salisbury.

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 25, 1863.

BIRTHS.

Births of Boys, 958; Girls, 1005; Total, 1963.
Average of 10 corresponding weeks, 1853-62, 1757·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	697	711	1408
Average of the ten years 1853-62	594·3	574·6	1169·4
Average corrected to increased population..	..	..	1286
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West ..	462,388	18	25	3	5	13	10	2
North ..	618,210	13	10	19	2	18	12	3
Central ..	378,036	11	4	10	4	12	7	3
East	571,158	13	5	20	2	6	18	3
South	173,175	9	14	13	2	25	8	1
Total.. ..	2,203,989	65	58	65	15	74	56	12

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·895 in.
Mean temperature	50·2°
Highest point of thermometer	69·3
Lowest point of thermometer	33·6
Mean dew-point temperature	43
General direction of wind	N.W.
Whole amount of rain in the week	0·01 in.

APPOINTMENTS FOR THE WEEK.

May 2. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's 2 p.m.; Charing-cross, 1 p.m.

4. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital, 1½ p.m.; The Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

ODONTOLOGICAL SOCIETY OF LONDON, 8 p.m. Meeting.
ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

5. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.
ETHNOLOGICAL SOCIETY, 8 p.m. Dr. King and Professor Buck, "On the Natives of Vancouver's Island." The Père Bourien, "On the Wild Tribes of Interior of the Malay Peninsula."
ROYAL INSTITUTION, 3 p.m. Professor Tyndall, "On Sound."

6. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.
HUNTERIAN SOCIETY, 8 p.m. Mr. Thomas Bryant, "On a Case of Calculus Vesicæ in a Woman, and Extraction by Rapid Dilatation, and Recovery, with Remarks."
OBSTETRICAL SOCIETY OF LONDON, 8 p.m. Dr. Kidd, "Further Observations on Use of Anæsthetics in Midwifery." Mr. Cooke, "On a Case of Simultaneous Uterine and Extra-uterine Pregnancy." Mr. Marshall and Dr. Graily Hewitt, "On a Case of Tubal Gestation."

7. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.
HARVEIAN SOCIETY, 8 p.m. Dr. Campa, "On Some Remarks on certain Diseases attended with Impaired and Perverted Motion."
ROYAL INSTITUTION, 3 p.m. Professor Ansted, "On Geology."

8. Friday.

Operations, Westminster Ophthalmic, 1½ p.m.
ROYAL INSTITUTION, 8 p.m. Prof. Voelcker, "On the Soils of England."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday (to-day) at 2 p.m.:—

By Mr. Ferguson.—For Fistula in Ano; Vesico-Vaginal Fistula; Removal of Tumour from Leg.

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TO STUDENTS, SURGEONS, DENTISTS, AND OTHERS.

The Best House for Second-hand Instruments,
Where there is the Largest Stock in London, is Mr. WILLIAM LAWLET'S, 78, FARRINGDON-STREET, CITY.
Army and Navy Regulation Cases, Pocket Cases, from 14s. each; Dissecting Cases, at 8s. 6d. and 10s. 6d. each.

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IS THE ORIGINAL & GENUINE, WAS ESTABLISHED A.D. 1746,
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FRAS. NEWBERY & SONS, 45, ST. PAUL'S CHURCHYARD.
Prices for Dispensing—1 oz., 9s.; ¼ oz., 3s. 4d.

TOWLE'S CHLORODYNE.

Medicinal Properties:—
Anodyne, Diaphoretic, Sedative, Astringent, and Anti-Spasmodic.

CAUTION.—For the convenience and safety of prescribing Chlorodyne, in combination with other ingredients, so as to avoid decomposition (a result known to have taken place) through the use of SECRET COMPOUNDS, Mr. TOWLE begs to call the attention of the Profession to the following component parts in his Preparation:—

CHLOROFORMYL. ÆTHER. OL. MENTH. PIP. ACID. PERCHLOR. TINCT. CANNABIS INDICÆ. ACID. HYDROCYAN. TINCT. CAPSICI. MORPHIA & THEBIACA.

The proportion of Morphia—⅛ gr. Inf. ℥j. Dose—Five to Twenty Drops.

Letter from ALFRED ASPLAND, Esq., F.R.C.S. Eng., J.P. Chester and Lancaster, Surgeon 4th Cheshire Batt. V.R., Surgeon to the Ashton Infirmary.—"After an extensive trial of your Chlorodyne in Hospital, Infirmary, and Private Practice, I am able to state that it is a valuable medicine. I have found its action peculiarly serviceable in Bronchial, Spasmodic, and Neuralgic Affections. I have never found it produce headache or feverish disturbance, results which not unfrequently occur from other forms of Chlorodyne. As a sedative to allay excitement arising from the abuse of intoxicating drinks, so commonly witnessed in our Barrack Hospital, I have been perfectly satisfied with it. Its known composition will doubtless prove an additional recommendation to the Profession."

Sold by Wholesale Houses in bottles, 1 oz., 1s. 6d.; 2 oz., 2s. 6d.; and 4 oz. to 20 oz., 1s. per fluid oz.

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CHLORODYNE.

"INVENTED AND DISCOVERED IN 1844. BY RICHARD FREEMAN."
(*Extract from* Affidavit made before S. C. WARD, Esq., Chancery Record Office, Chancery-lane, London, June 16th, 1862.)

The Inventor begs to thank the Medical Profession for the liberal support he receives from them, and to assure those who have not yet tried his Chlorodyne that it is superior to any other maker's, being more certain and more lasting in its effects; and the low price which he charges for it allows the poorest sufferer to enjoy its extraordinary beneficial influence. The immense demand for it by the Profession is a convincing proof that they find it a most valuable therapeutical agent. The following are a few out of many voluntary Medical Testimonials:—

From W. VESALIUS PETTIGREW, M.D., Hon. F.R.C.S. Eng., formerly Lecturer upon Anatomy and Physiology at the St. George's School of Medicine.

"I have had the opportunity of trying the effects of Mr. Freeman's Chlorodyne, and find it an excellent Anodyne and Antispasmodic medicine."

From H. J. O'DONNELL, M.R.C.S.E. and L.M., &c., &c., Albert-terrace, London-road, S.

"I can with much confidence bear testimony to the efficacy of Mr. Freeman's Chlorodyne as a Sedative and Antispasmodic, having used it for some years in Colic, Neuralgia, Phthisis, and Asthma. *I daily administer it in after-pains*, and in all cases find it infallible. It is the most valuable medicine we have in Labour cases. I find, since I have used it, the pains seldom or ever exceed the third day, while with the former remedies my patients suffered eight or nine days. In fact, I cannot speak too highly of it."

From F. W. HOOPER, M.D., M.R.C.S. Eng., &c., &c., Medical Officer, Christ Church District, Camberwell.

"I have much pleasure in stating that, after a sufficient trial of Mr. Freeman's Chlorodyne, I am fully persuaded that it is superior to any preparation of the kind, and, from its moderate price, is a great boon to the suffering poor, who daily acknowledge its salutary benefit."

From W. G. KING, M.D., M.R.C.S. Eng., Hackney.

"I have used your Chlorodyne for some time, and can bear testimony to its efficacy and value in *all cases* in which a Sedative has been indicated."

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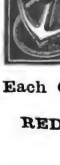
And Sold by all Wholesale Houses, in bottles, 1 oz., 1s. 6d.; 4 oz., 5s.; and 8 oz., 10s. each.

TRADE MARK



CHLORODYNE
WAS DISCOVERED AND INVENTED IN THE YEAR 1848 BY
DR. J. COLLIS BROWNE, M.R.C.S.L. EX-ARMY MED. STAFF
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REDUCTION OF PRICE.—In Bottles, 1oz., 3s.; 2oz., 5s.; 4oz., 8s.; 10oz., 15s.
To Hospitals and Charities in large quantity, a Liberal Discount.

NOTIFICATION.

THE attention of Medical Men is directed to the Piratical application, by some parties in the Trade, of the term "Chlorodyne" to various mixtures compounded of Chloric Æther Opium, Indian Hemp, and Peppermint, in Imitation of the ONLY Genuine preparation of this name.

The dangerous expedient of encouraging or advocating the assumption of a name specifically indicating a particular property or remedy—such as *Chlorodyne* is to spurious imitations and substitutions—ON THE GROUND OF CHEAPNESS, is a subject of surprise and grave regret, especially so, when the adulteration, sophistication, and tampering with Drugs, becomes so serious and important a consideration in the successful practice of Medicine.

The fact of these Piracies must fully convince the Profession of the extraordinary efficacy of the Genuine Chlorodyne; whereas the sad results and disappointment arising from the use of spurious compounds cannot be expressed.

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ORIGINAL LECTURES.

PROFESSOR HUXLEY'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

Lecture VI.

(Being the Fifth of Six Lectures on Classification, and on the Characters of the Principal Groups of the Animal Kingdom.)

Mr. President and Gentlemen,—Having now arrived at the end of the list of classes, and having endeavoured to furnish you with a statement of the structural features common to, and characteristic of, each class, it will be my next object to discuss the relations of these classes one to another, and to inquire how far they present such common characters as will enable us to group them into larger divisions.

And, to commence with the highest classes, it is clear that the *Mammalia*, *Aves*, and *Reptilia* are united together by certain very striking features of their development. All possess an amnion and an allantois, and all are devoid throughout life of any apparatus for breathing the air which is dissolved in water. In other words, they constitute what may be termed the "province" of *Abranchiate Vertebrata*, in contradistinction to *Pisces* and *Amphibia*, which possess no amnion, nor allantois (or at most a rudimentary one), and being always provided at a certain period, if not throughout life, with branchiæ, have been termed *Branchiate Vertebrata*.

The *Abranchiata*, however, form a far less homogeneous assemblage than the *Branchiata*—Mammals being so strongly separated from Reptiles and Birds that one might almost be tempted to regard them as constituting one of three primary divisions, or provinces, of the *Vertebrata*. The structure of the occipital condyles, the structure and mode of articulation of the mandibular rami, and the presence of mammary glands, appear to separate Mammals almost as widely from Birds and Reptiles as the latter are separated from Amphibia and Fishes.

These five classes, whether divided into two or three provinces, again, present so many characters, already enumerated, by which they resemble one another, and differ from all other animals, that by universal consent they are admitted to form the group of Vertebrata, which takes its place as one of the primary divisions or "sub-kingdoms" of the animal kingdom.

The next four classes—*Insecta*, *Myriapoda*, *Arachnida*, *Crustacea*—without doubt also present so many characters in common as to form a very natural assemblage. All are provided with articulated limbs attached to a segmented body-skeleton—the latter, like the skeleton of the limbs, being an "exoskeleton," or a hardening of that layer which corresponds with the outer part of the epidermis of vertebrates. In all, at any rate in the embryonic condition, the nervous system is composed of a double chain of ganglia, united by longitudinal commissures, and the gullet passes between two of these commissures. No one of the members of these four classes is known to possess vibratile cilia. The great majority of these animals have a distinct heart, provided with valvular apertures, which are in communication with a perivisceral cavity containing corpusculated blood. But the *Cirripedia* and the *Ostracoda* among Crustaceans, and many of the Mites among *Arachnida*, have as yet yielded no trace of distinct circulatory organs, so that the nature of these organs cannot be taken as a universal character of the larger group we are seeking; still less can such a character be found in the respiratory organs, which vary widely in character, and are often totally absent as distinct structures. Some years ago I endeavoured to show (a) that a striking uniformity of composition is to be found in the heads of, at any rate, the more highly organised members of these four classes, and that, typically, the head of a Crustacean, an Arachnid, a Myriapod, or an Insect is composed of six somites (or segments corresponding with those of the body) and their appendages, the latter being modified so as to serve the purpose of sensory and manducatory organs. I believe this doctrine to be substantially correct; and that, leaving all hypothetical supposition aside, the head of any animal belonging to these classes may be demonstrated to contain never fewer than four, and never more than six somites with their appendages; but until this view has received confirmation from other workers, I shall not venture to put forward any statement based upon it as part of the definition of the large group containing the four classes above mentioned, which has received from some naturalists the name of *Articulata*, from others that of *Arthropoda*, the latter being perhaps the more distinctive and better appellation.

The members of the class *Annelida* present marked differences from all the *Arthropoda*, but resemble them in at least one important partiecular, and that is, the arrangement of the nervous system, which constitutes a ganglionated double chain, traversed at one point by the œsophagus. In almost all other respects, Annelids differ widely from Arthropods. It may be doubted whether any annelid is devoid of cilia in some part or other of its organisation, and cilia constitute the most important organs of locomotion in the embryos of many. No annelid possesses a heart communicating by valvular apertures with the perivisceral cavity, none have articulated limbs, and none possess a head composed of even four modified somites.

Most Annelids are provided with that peculiar system of vessels termed "pseudo-haemal;" but, in some, that system has not yet been discovered.

In endeavouring to separate from among invertebrated animals a first large group, comparable to the *Vertebrata*, it appears to me that the resemblances between the *Annelida* and the *Arthropoda* outweigh the differences, and that the characters of the nervous system, and the frequently segmented body, with imperfect lateral appendages of the former, necessitate their assemblage with the *Arthropoda* into one great division or "sub-kingdom" of Annulosa.

But what of the *Echinodermata* and the *Scolecida*? Should both these great classes be also ranged under the *Annulosa*; or do they belong to different sub-kingdoms; or, if they belong to the same, should they constitute a sub-kingdom of their own?

I will endeavour to reply to these questions in succession. Whether these two groups belong to the *Annulosa* or not, must depend upon whether they possess any characters in common with the *Arthropoda* and *Annelida* other than those which they have in common with all animals. I can find none of any great moment. No Echinoderm or Scolecid has a definitely segmented body or bilaterally disposed successive pairs of appendages. None of these animals has a longitudinal chain of ganglia.

On the other hand, there is much resemblance between the ciliated larvæ of some Scolecids and Echinoderms and those of Annelids; and the form of the body of many Scolecids is so similar to that of one of the most familiar of Annelids, as to have earned for both them and the Annelids the common title of "worms." Nor must it be forgotten that in the Annelids there seem to be representatives of that singular system of vessels which attains so large a development as the "water vascular" apparatus in many Scolecids.

Whatever value may be attached to these resemblances, it must, I think, be admitted that, in the present state of our knowledge, it is impossible to affirm anything absolutely common to, and yet diagnostic of, all Annulosa and all Echinoderms and Scolecids. On the other hand, there can be no doubt as to the many and singular resemblances which unite the Scolecids and the Echinoderms together. The nervous system of the Echinoderm may present considerable differences from that of a Trematode Rotifer, yet, it must be recollected that the comparison is not altogether a fair one, seeing that the mouth and gullet of an Echinoderm, round which its nervous ganglia are arranged, are not, strictly speaking, the same as the parts so named in a Rotifer, but are new developments.

And it is exactly in that anomalous method of development of the Echinoderm within its larva, which is so characteristic of the whole group of *Echinodermata*, that this class exhibits its strong alliance with the *Scolecida*; the *Turbellaria*, and *Tæniada*, exhibiting the only approach to the method of Echinoderm development known in the Animal Kingdom.

A singular larva studied by Johann Müller, in one of his many fruitful visits to the seashore, and termed by him *Pilidium*, in the hands of subsequent observers, more especially Krohn, Leuckart, and Pagenstecher, has furnished ample

(a) "On the Agamic Reproduction and Morphology of *Aphis*," *Transactions of the Linnean Society*, vol. xxii.

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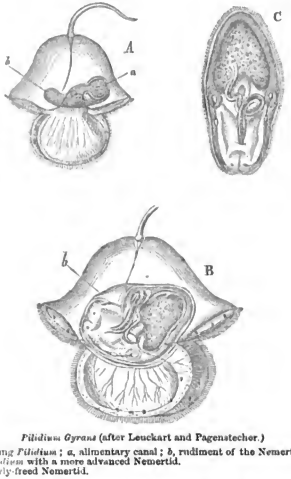
proof that a *Nermertes* (a genus of *Turbel'aria*) may be developed in a manner altogether similar to that in which an Echinoderm takes its origin.



Pilidium Gyrans (after Leuckart and Pagenstecher.)
A, Young *Pilidium*; *a*, alimentary canal; *b*, rudiment of the Nemertid.
B, *Pilidium* with a more advanced Nemertid.
C, Newly-freed Nemertid.

The *Pilidium* is a small, helmet-shaped larva, with a long flagellum attached like a plume to the summit of the helmet, the edges and side lobes of which are richly ciliated. A simple alimentary sac opens upon the under surface of the body between the lobes.

In this condition, the larva swims about freely, but, after a while, a mass of formative matter appears upon one side of the alimentary canal, and, elongating gradually, takes on a worm-like figure. Eventually it grows round the alimentary canal, and, appropriating it, detaches itself from the *Pilidium* as a Nemertid—provided with the characteristic proboscis, and the other organs of that group of *Turbellaria*.

Many Trematode, and all Tænioid Scolecida, again, present an essentially similar process of internal gemmation by which either a separate offspring arises, or an adult is developed within an embryonic form; but in those cases that appropriation of the intestine of the primary by that of the secondary form, which renders the ordinary development of the Echinoderm so striking, does not occur.

In discussing the character of the *Echinodermata*, I have described at length the ambulacral system; and, in speaking of the *Scolecida*, I have no less insisted upon the peculiarities of the "water-vascular-system." But it is impossible to compare these two systems of vessels without being struck by their similarity. Each is a system of canals, opening externally, and ciliated within; and the circumstance that the two apparatuses are turned to different purposes in two distinct groups of the animal kingdom, seems to me no more to militate against their homology, than the respiratory function of the limbs of Phyllopod *Crustacea* militates against the homology of these limbs with the purely locomotive appendages of other Crustaceans.

Thus it appears to me that the *Echinodermata* and the *Scolecida* are so closely connected that they can by no means be placed in separate sub-kingdoms, and in the course of studying the other sub-kingdoms it will be quite obvious that, unless they are to occupy an independent position, there is no place for them anywhere, save among the *Annulosa*. I have hitherto been accustomed to consider them, under the name of the ANNULOIDA, as a division of this sub kingdom; but until some structural character can be discovered by which all the *Annuloida* agree with the *Annulosa*, and differ from other animals, I am much inclined to think it would conduce to the formation of clear conceptions in zoology if the *Annuloida* were regarded as a distinct primary division of the Animal Kingdom.

LECTURES
ON
ECZEMA,
(INCLUDING ITS IMPETIGINOUS, LICHENOUS, AND PRURIGINOUS VARIETIES,)
DELIVERED AT THE
Dispensary for Skin Diseases, Glasgow.

By T. McCALL ANDERSON, M.D., F.F.P.S.
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LECTURE I. (a)

GENTLEMEN,—It is my intention to enter at some length upon the consideration of eczema, seeing that, in one or other of its protean forms, it is one of those diseases which you will most frequently encounter in practice. It is, at all events, by far the most frequent of the diseases of the skin, of which ample evidence is afforded by the statistics of Devergie. For, of 1800 cases of skin disease, he noted 600 of eczema, or one-third of the whole number. And, as he gives a considerably more restricted application to the term eczema than it is my intention to do, this proportion may be within the mark.

Another reason for fixing your attention upon this disease is, that the views I am about to propound to you—though shared in, in many respects, by my colleague, Dr. Buchanan, and several continental dermatologists, especially by Hebra, of Vienna, who has certainly the credit of being the first to put us upon this track—differ, in many important respects, from those which are adopted and taught by the majority of the Profession in this country.

It has always appeared to me that much confusion exists in the descriptions given of eczema in most standard works upon dermatology, so that I trust you will compare my remarks, not so much with the views you may have already received with regard to it, as with what is observed in nature, for I am desirous that you should follow me without preconceived opinions.

The restricted meaning which is commonly given to the word eczema has arisen, no doubt, from the adoption of the classification of Willan and Bateman, in accordance with which the elementary lesion of eczema is, of necessity, a vesicle. Defective as any classification of skin diseases must be, there can be little doubt that the anatomical classification is the most objectionable of all; for in this way are many dissimilar diseases brought together under one group, and violence is done to the symptomatology of many of them, owing to the necessity of placing them under the head of one of the elementary lesions. Thus, scabies is ranked with ecthyma and small-pox—diseases which have no connexion with one another whatever; and the first of these (scabies), though it often shows itself in the pustular form, is still more commonly met with as a vesicular or papular eruption, or as a mixture of all three.

There can be no doubt, in my mind, that the best classification of skin diseases is one founded, not upon the elementary lesion, but upon the nature of the affection. This is the basis of the classification of Hardy, and of that which is adopted, as you are aware, at this Institution. (b)

Now, to return to the subject of eczema, I feel pretty confident that those of you who study this disease carefully at the bedside without bias, will be forced to the following conclusions:—

1. That the elementary lesion of eczema is not of necessity a vesicle.
2. That it may be an erythematous state of the skin, a vesicle, a pustule, a papule, or a fissure.
3. That impetigo, lichen, and prurigo are merely varieties

(a) These Lectures have been carefully revised, and many alterations and additions made.

(b) For a very interesting paper on the "Classification of Diseases of the Skin," from the pen of my colleague, Dr A. B. Buchanan, see *Edinburgh Medical Journal*, January, 1863.

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of eczema, in which the elementary lesions are respectively pustules and papules.

4. That cases of eczema are often met with in which an erythematous state of the skin, vesicles, pustules, papules, and fissures are met with in a combined form.

To this subject I shall direct your attention more particularly after having brought under your notice the less variable symptoms of eczema.

Symptoms.—When an eczematous eruption is at its height there are four symptoms which, according to my experience, are almost always present in a greater or less degree. These are—

1. Infiltration of the skin.
2. Exudation on the surface of the skin.
3. Formation of crusts.
4. Itching.

1. *Infiltration of the Skin.*—The infiltration is due to the transudation of the serous portions of the blood through the walls of the vessels into the meshes of the skin. It is upon the infiltration that the exudation on the surface of the skin, the itching, and the formation of crusts to a great extent depend. Remove the infiltration, and the exudation and formation of crusts usually cease, and the itching is moderated, though it may not cease entirely. The infiltration is detected by pinching up a fold of the affected skin between the finger and thumb, and comparing it with a similar fold of a healthy part. The infiltrated fold is, *ceteris paribus*, much thicker than the healthy one, and, the greater the thickness of the fold, the greater the infiltration, and the more inveterate the affection of the part. It has also a doughy feel, especially if the infiltration be at all great, as compared with the elastic feel of healthy tissue. Again, on pressing an inflamed and infiltrated patch with the finger, the redness disappears for the moment, being replaced, however, by a yellowish colour; whereas, on pressing a patch of simple erythema, in which, of course, scarcely any infiltration exists, the redness is replaced for the time by a healthy white colour. There is always more or less swelling of the affected part, which is principally due to the infiltration, but the swelling is not always in proportion to the amount of the infiltration, being more marked in those situations where there is much loose cellular tissue,—beneath the eyes, for example.

2. *Exudation on the Surface of the Skin.*—The exudation may take place constantly or principally when the circulation is excited, or the part exposed to friction, as when the patient scratches it. The observer must therefore be led astray by the absence of exudation at the time the part is under inspection, but must always ask the patient if the eruption is ever moist, or, to use expressions in more general use in this part of the country, and especially amongst the poorer classes, if it ever "waters" or "leets." In a few cases of eczema, however, and particularly of the lichenous forms, there is little, if any, exudation, and consequently there are no crusts throughout the whole course of the disease. The exudation is often of a purulent nature, owing to the rupture of pustules, but more frequently serous, coming from the bottom of fissures, from the surface of excoriations, or from the rupture of vesicles. It is occasionally mixed with blood coming from the bottom of fissures, or from lacerations of the skin produced by the nails of the sufferer. It has the property of staining the under-clothing with which it comes in contact, and of stiffening it as starch does. It may be produced artificially by painting over the eczematous surface a solution of potash (say gr. x. of potassa fusa to the ℥j. of water), which, acting as an irritant, apparently stimulates the capillary circulation of the part, and thereby induces absorption of the fluid infiltrated into the tissues. This must therefore be borne in mind in the treatment of infiltrated eczematous patches, and will be again referred to.

3. *Formation of Crusts.*—The crusts, being composed of concrete exudation and exfoliated epidermis, mingled frequently with sebaceous matter, especially when the eruption is on the head, and with particles of dirt, are more or less present on the surface of every exuding eczematous patch—their size and appearance depending upon the length of time during which they have existed, the quantity and quality of the exudation, and the habits of the patient as regards cleanliness. If the patient be very cleanly, and the exuded matter washed off repeatedly, or removed by means of daily poultices, or if the exudation be very slight, the crusts seen on the affected part at any given time may be very thin, and more like scales than crusts, or they may be wanting altogether. If the opposite hold, and the patient be negligent, the crusts may become very thick and adherent, owing to continual additions to their under surfaces from successive exudations. Not unfrequently cases are met with in which, though the eczema is quite cured, the crusts remain, owing to the negligence of the patient. This, for instance, is a common case:—A poor woman brings to you her child who has had an eruption on the head for years, and nothing done for it. Lice probably wallow about in all directions, and their nits (eggs) adhere to the hair in profusion, while, scattered over the head, large yellow or brown, thick, adherent, dry, and brittle scabs are detected. The hair is cut short, the nits removed by combing and the use of spirit, the lice killed with staphisagria ointment, and the crusts removed by means of poultices, when healthy skin is found beneath. Crusts of this kind, which owe their existence to a past disease, are much drier and more brittle than recent ones, and, by a little experience, such cases can be detected before the removal of the crusts. The size of the crusts is therefore no criterion of the severity of the disease, unless the patient be under your own eye, and you see the rapidity with which new crusts form after the removal of the old ones.

Crusts due to the desiccation of purulent matter are usually thicker and rougher than those following the exudation of serous fluid. Those forming on hairy parts are, *ceteris paribus*, more apt to assume large dimensions than in situations not provided with hair, as they become glued to the hair, adhere very firmly, frequently cause much pain in the attempt to remove them, and are often concealed in great part by the hair itself. Their colour varies much; if the exudation be serous, the crusts have a greyish or brownish appearance; if purulent, as in the pustular variety of eczema, yellow; if blood be mixed with either of these, any shade of brown or black. These are the colours when the crusts are recently formed, but when of old standing they are altered, from mixture with particles of dust and other impurities.

4. *Itching.*—The itching may be of any degree, and constant or intermittent. It is always aggravated by touching the inflamed part, the slightest touch even sometimes giving rise to an irresistible desire to scratch. It gets troublesome when the circulation in the cutaneous capillaries is excited, as by the use of stimulating food or drink, or on getting warm in bed, thus preventing sleep. It is curious how patients seem to rejoice in the application of severe irritants which relieve the itching at the expense of causing much pain. They seem to derive positive pleasure from scratching the part, and often continue to do so till blood flows freely, and the itching sensation is replaced by pain from the laceration of the skin by the nails. Sometimes, along with the itchy sensation, or, instead of it, formication is complained of; that is, a feeling as if numbers of insects were crawling over the skin. This sensation is very distressing to the patient in severe cases, and I have been consulted by those whose lives were thus rendered burdensome to them, and who wandered about from town to town and from country to country in search of relief. Often, independently of the scratching, pain predominates over the sensation of itching, owing to the presence of deep fissures; and sometimes, instead of pain or itching, burning heat is complained of, especially when the patch is acutely inflamed, and when there is a copious eruption of newly-formed vesicles or pustules. This is another point worthy of recollection, as indicating the employment of emollient applications in the first instance. Scratching always aggravates the disease, and tends to bring out fresh crops of eruption. Patients know this very well, but cannot refrain from indulging in a practice which, for the moment, gives relief. Often, in mild cases, where there is not much infiltration, the disease is kept up by the scratching alone, and, in such cases, by allaying the itching and the desire to scratch by local sedatives alone, I have repeatedly effected a cure, so great a stimulus does the scratching give to the disease.

The *elementary lesions* encountered in cases of eczema may now be studied at greater length. As I have previously observed, they vary much; hence I have ranked them second in importance to the infiltration, exudation, itching, and formation of crusts—four symptoms which are almost always present to a certain extent in a fully-developed eczema, or in some part of its course. By so doing, the observer is prevented from fixing his attention too much upon the former, and being thus led away from the diagnosis of the case. The elementary lesion is of great importance, however. It may be

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1st. An erythematous state of skin.
2nd. A vesicle.
3rd. A pustule.
4th. A papule.
5th. A fissure; or a mixture of several or all of these lesions.

1. *The Elementary Lesion, an Erythematous State of Skin.*—In this case the disease commences as a simple erythema, which is shortly accompanied by exfoliation of the epidermis, but there is as yet no infiltration of the skin, neither is there any exudation on its surface. The diseased process not being arrested at this stage, infiltration of the affected part gradually supervenes, and the disease is now on the confines of a typical eczema. What have we now? We have patches of reddened, scaly, and infiltrated skin, described under the name of eczema squamosum by Hebra, who points out very correctly that this is identical with what is described in dermatological works as pityriasis rubra,—a term which has been appropriated by Devergie, and adopted by Hebra himself, for the designation of a very different affection. (c) If the inflammation advances still further, serous exudation on the surface of the skin is superadded, which concretes into crusts, and we have now to deal with a typical exuding, infiltrated, and itchy eczematous eruption (eczema erythematodes—so called from the elementary lesion being an erythema), covered more or less with crusts, and without, it may be, the vestige of a vesicle. We may thus regard eczema squamosum as the connecting link between a typical eczema erythematodes and a simple erythema. The eruption is now at its height; but, by-and-by, the infiltration begins to yield, and the disease progresses towards a cure. The exudation diminishes, and gradually ceases, the crusts fall off, the infiltration disappears, and a simple erythema only is left, as at the commencement of the process, with this exception, that the inflammation is not usually so marked. This, likewise, in a varying period of time vanishes, the erythema giving way to healthy skin, or to skin coloured more or less with pigment, which in its turn gradually disappears. You will often have the opportunity at the Dispensary of following the evolution of this form of eczema, such as I have now described it to you. The following case, however, illustrates in some measure what I have just been saying: — "Wm. B., aged 42, weaver, was admitted at the Dispensary for Skin Diseases, March 21, 1861, owing to the outbreak of an eczematous eruption, which had commenced two or three months previously near the left ankle, from which it had gradually extended till the above date, when it covered almost the whole of both legs and inner aspect of thighs, the knees, however, being unaffected. The elementary lesion was an erythematous state of skin, the infiltration of skin considerable, the exudation of serous fluid slight, and the itching excessive at times. The inguinal glands were enlarged from the irritation, and several furuncuii were scattered here and there. On each arm, occupying the lower third of upper arms and two-thirds of fore-arms, a bright red, slightly elevated, rough and scaly patch of erythema was detected, which was very itchy, but without any infiltration of the skin to speak of, or exudation on its surface. It is not necessary to follow all the reports of this case, but it is interesting, as showing the identity in naturo of the erythematous eruption upon the arms and the eczematous eruption on the legs, to know that at one period the erythema of the arms changed its characters, and became converted into an exuding and infiltrated eczema, and that the same treatment, consisting principally of applications of a solution of black soap and tar rubbed into the parts night and morning and the cold douche, which effected a cure of the typical eczema of those parts, removed also the patches of erythema of others."

Another typical case of eczema erythematodes, showing the connection between that affection and erythema, will be mentioned when I come to speak of the treatment. In many instances, as I shall afterwards point out, while the discrete commences with an erythema, the above evolution is interfered with by the development upon the erythematous ground of one or more of the other elementary lesions enumerated at the commencement, as, for example, by a copious eruption of vesicles; but more of this hereafter. An eczematous eruption sometimes assumes an appearance which may be mentioned here, although the lesion at the commencement of the process is by no means of necessity an erythematous state of skin. In this variety there is usually not a vestige of either a vesicle, a pustule, or a papule (I speak now of the fully developed eruption), but the skin is red, perfectly smooth on the surface, and brilliantly polished and shining in appearance, while the meshes of the deeper structures of the skin are loaded with infiltration. Every now and then this unhealthy cuticle exfoliates, but leaves behind it a new layer as unhealthy as the one which preceded it. I have noticed this form of eczema especially often upon the legs, and not unfrequently upon the scrotum. It is usually very itchy, excoriations occur and serum exudes, and often blood; and if the scratching is much indulged in, the eruption of course loses the appearance above described, and becomes covered with excoriations and crusts.

2. *The Elementary Lesion a Vesicle.*—As I have before observed, a vesicle is held, by the followers of Willan, to be the invariable elementary lesion in cases of eczema,—an idea which I have no hesitation in saying has been the foundation of more errors in diagnosis than any other in the whole range of dermatology. For, while a vesicle is frequently, it is by no means always, nor even in the majority of cases, the elementary lesion. The vesicular form of eczema usually commences with an erythematous eruption, and upon this ground vesicles are developed, many of which may assume a pyogenic action, and be converted into pustules, in which case we have an assemblage of three elementary lesions, thus giving the lie to the anatomical classification. The vesicles are developed at the orifices of the cutaneous follicles, are small, closely set together, usually rupture early, and the serosity concretes into crusts. It is a very common occurrence for many of them to run together, separating the corneous from the secretory layer of the epidermis over a considerable extent. In these cases, the corneous layer usually gives way quickly, so that the exudation has not had time to be secreted to such an extent as to raise the cuticle much higher than the height of an ordinary vesicle; but, where the corneous layer is very thick, as on the soles of the feet and palms of the hands, it does not give way readily; the secretion of serum goes on increasing, and large bullæ may be formed,—a circumstance which requires to be borne in mind, that the observer may fall into an error of diagnosis which I shall refer to afterwards. Although the vesicles do not usually remain long intact, the vesicular stage may be kept up by the formation of successive crops of vesicles, but, even in this case, they usually disappear after infiltration of the skin becomes pronounced and the disease thoroughly established. When the vesicular stage is gone, and the disease is at its height, it will be well for you to study carefully the appearance of the affected part in the cases which come under your observation. The infiltrated patches are red and inflamed, but the redness is not uniform, being studded with innumerable points of a deeper red, thus giving to the parts a remarkable punctated appearance,—an appearance which, when well marked, serves to distinguish the eczematous eruption from all other diseases of the skin, and which Devergie claims to have been the first to describe. These points correspond to the orifices of the glands, like the vesicles which preceded them; they are owing to the congestion of the skin being more pronounced at the glandular orifices than elsewhere, and to the occurrence of minute excoriations—the result of rupture of the vesicles. It is principally from these that the serous fluid exudes, often in great abundance, and which afterwards concretes into scabs. This stage of eczema corresponds to the eczema rubrum of some authors, the eczema madidans of others. Devergie points out that the punctated appearance, when not well marked, may be brought out more characteristically by rubbing firmly into the affected part a solution of carbonate of potash in water.

3. *The Elementary Lesion a Pustule.*—This is the so-called impetigo of authors (a convenient word to retain, as expressive of the pustular form of eczema), which should on no account be ranked as a separate disease. The pustules, like the vesicles, usually form upon an erythematous ground, but, as I have before observed, their formation is sometimes secondary, vesicles being at first developed, the contents of which gradually change from serum into pus. The pustules are often somewhat larger than the vesicles, and remain longer intact; otherwise, the pustular form of eczema runs exactly the same course as the vesicular, and, when the pustular stage is gone, and the crusts removed, we observe the same punctated, exuding, itchy, and infiltrated patches, the description of which it is unnecessary to repeat. The pustular

(c) "Traité Pratique des Maladies de la Peau." Par Alph. Devergie. Vol. II., p. 442.

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variety of eczema occurs oftenest on hairy parts at the orifices of the hair-follicles, as, for instance, on the head and chin, constituting cases of the so-called impetigo capitis and impetigo menti. Physicians in this country, following in the footsteps of Willan, have not yet been induced to regard impetigo as a mere variety of eczema,—a point which is generally conceded by both French and German dermatologists; but they are, as a rule, far too good observers not to have noticed a mixture of vesicles and pustules on many patches of eczema, and a frequent transformation of vesicles into pustules; hence the origin and meaning of the term eczema impetiginodes.

4. *The Elementary Lesion a Papule.*—This form of eczema is described as a separate disease by most authors under the name of lichen—a name which it is well to retain, as designating an eczema the elementary lesion of which is a papule. But a careful study of this affection has led me to the opinion that it would be doing violence to the natural affinities of lichen to look upon it in any other light than as a mere variety of eczema. The eruption commences in the form of small, red papulæ, which may be isolated one from the other, and scattered here and there (*lichen disseminatus*) or confluent, forming elevated, rough, and furrowed patches of various shapes and sizes, in which, owing to the coalescence of the papules, the elementary lesion is sometimes difficult to establish, and all the more so as vesicles and pustules are not unfrequently developed during the course of the disease. The affected part is very itchy, and, as the patient scratches it incessantly, the symptoms are aggravated; infiltration of the skin becomes very marked, and exudation of serum, pure, or mixed with pus or blood, takes place, which concretes into crusts. While English and French writers, with a unanimity which is quite extraordinary, describe lichen as a separate disease from eczema, few of them have failed to observe cases of the former in which the likeness to eczema is so great, that they have given to them the name of lichen eczematodes, or eczema lichenoïdes (synonymous with the term lichen agrius). But let us take a short description of this eruption from one of the standard authors. Hardy, for example, than whom a more accurate observer does not exist, writes of it thus:—"The skin becomes red, and upon this red surface small papules make their appearance, which become excoriated, and secrete a serous fluid in considerable abundance. Amongst these papules some vesicles of eczema are detected, which give way, and are followed by superficial ulcerations, from which serum exudes and concretes into crusts. From this mixture of vesicles and papules there results a state of parts which has as much the appearance of an eczema as a lichen, and which throws great difficulty in the way of a correct diagnosis.(d) Now, what have we here? We have a most accurate description of a typical exuding eczema, the only difference between it and the vesicular eczema of Willan being, that the principal lesion is a solid elevation (a papule), instead of one filled with serosity (a vesicle). I hope I have convinced you, then, that an eczema lichenoïdes is a true eczema, and not a separate disease; and, if so, let me finally point out to you that the dry lichen of authors is merely a less advanced stage of eczema lichenoïdes. The following case—and you will meet with many such—shows that, under the influence of treatment, eczema lichenoïdes may assume all the characters of the typical dry lichen of authors:—

"Catherine B., aged 14, was admitted at the Dispensary for Skin Diseases, September 30, 1861, affected with eczema lichenoïdes of a year and a-half's duration, occupying both popliteal spaces, and extending upwards for some way upon the posterior surfaces of the thighs. The patches were moist and distinctly papulated; considerable infiltration was detected; the itching was severe at times, and serous fluid exuded on scratching. There was an enlarged gland on the side of the neck. Cod-liver oil was prescribed internally; a solution of black soap was rubbed into the parts night and morning, and whenever the eruption was itchy, and the local cold douche was applied repeatedly. On October 10, ten days after the commencement of the treatment, the serous exudation had ceased, and the eruption now presented all the characters of a typical lichen as described in dermatological works. The patches were dry, rough, papulated, and the natural furrows of the skin greatly exaggerated. The infiltration of the skin and the itching, though moderated by the treatment, still continued."

(d) "Leçons sur les Maladies de la Peau," par le Docteur Hardy. Première partie. Ed. II., p. 98.

But it may be said that lichen is occasionally a perfectly dry eruption throughout its whole course. Granted, although this is the exception to the rule; but it is merely because the inflammatory process has been arrested short of the exudation stage. Cases such as these must be put upon a par with cases of vesicular eczema in which the vesicles do not burst, but become shrivelled and dry up, and in which the eruption subsides without the occurrence of exudation. It must be allowed, however, that in the lichenous varieties of eczema exudation is more frequently wanting than in the vesicular, but this, combined with the fact of the elementary lesion being a solid elevation, instead of one containing serum, is not enough to constitute a separate disease, as the eruption otherwise follows essentially the same course, and is amenable to the same treatment.

There is another variety of papulated eruption to which it is necessary to direct your attention for a few moments, one which is described in all dermatological works with which I am acquainted as a separate disease altogether, under the name of prurigo, but which is merely a variety of lichen, and consequently of eczema. This is an eruption of papulæ scattered over the skin, and identical with the papulæ of lichen, notwithstanding that most writers try to establish differences between them in point of size, colour, etc. Now, if the patient is harassed with itching, and scratches himself much, the summits of the papulæ, being torn by the nails, become covered with yellowish or blackish crusts, owing to the exudation of serum or of blood. In addition to this, red and excoriated streaks and lines covered with coagulated blood are detected here and there upon the skin, being likewise produced by the nails of the patient. This is the so-called prurigo. But if the sensation of itching is not so severe, or if the patient refrains from scratching, these lacerations are not to be seen, and the eruption is one of lichen (*lichen disseminatus*). To be more plain, the difference between a lichen and a prurigo is, that in the latter the patient scratches the eruption more than in the former, and consequently produces abrasions of the skin. This is surely not sufficient to separate prurigo from eczema, although the word prurigo may be retained to indicate this form of eczema. You will find it noted in books that in prurigo the cutaneous envelope is thickened and becomes darker in colour, owing to an excessive deposit of pigment, but you will find that this is one of the features of all long-standing cases of eczema, no matter what the form or what the elementary lesion, as it is due to the continued irritation and congestion of the skin.

The pruriginous form of eczema occurs more or less in all chronic cases of scabies and phtheiriasis—the diseases due to the presence of the itch-insect(e) and the louse respectively—and often in cases of urticaria; and I believe implicitly that a great many cases have been set down as instances of simple prurigo, when a more careful examination would have proved them to be pruriginous eruptions called out by the scratching induced by the presence of the itch-insect, or louse, or by the occurrence of an attack of urticaria.

And, lastly, you will often find the pruriginous form of eczema on one part of the body, and one or more of the other varieties of eczema on others, and in no instances more frequently than in cases of scabies.

ORIGINAL COMMUNICATIONS.

ON THE STUDY OF THE CIRCULATION OF THE BLOOD.

[Being a Paper read before the Physiological Section of the British Association for the Advancement of Science, October, 1862.]

By GEORGE ROBINSON, M.D.

Fellow of the Royal College of Physicians of London; late Lecturer on the Practice of Physic in the Newcastle-on-Tyne College of Medicine, etc.

It is now more than two hundred years since Harvey's great discovery was given to the world, with a distinct intimation on his part that, having established the vital law of the blood's incessant motion in a definite course, he left the innumerable problems connected with its mode of action in indueing the other phenomena of life to be investigated by posterity. The labour of each succeeding generation has collected additional proof,

(e) For a detailed description of these diseases see my work on the "Parasitic Affections of the Skin," pp. 104 to 145. London: Churchill and Sons. 1861.

were proof wanting, of the correctness of his opinion as to the dependence of all secondary functions on this great instrument of vitality; and at the present time we know that not only the actions of animal life, but the functions of the nervous system, and the operations of the mind itself, all depend on the general permeation of the tissues of the body by streams of its vitalising fluid. But, while fully recognising the value of the knowledge thus obtained, it is surely not altogether creditable either to English patriotism or English science that, notwithstanding the enormous advances since made in every department of natural philosophy, and the corresponding increase in the facilities for prosecuting physico-vital researches, so little has been done towards elucidating the manner in which the blood's motion acts in the production of its numerous and diversified effects. Nor should we, as Medical Practitioners, be content to regard as wholly unintelligible mysteries a series of actions and relations not only of the greatest interest in connexion with the healthy phenomena of life, but which also play a most important part in the production and removal of disease. An investigation of this extensive and important field of inquiry is therefore in every respect desirable, but as it is still surrounded by certain obstacles which have long interfered with the successful prosecution of these researches, and as that success will most certainly and rapidly be obtained by the combined efforts of men familiar with different departments of natural knowledge, I have ventured to submit to the assembled representatives of British science a few considerations and suggestions on this subject.

Much has been said and written on the hostile reception of Harvey's doctrines by his contemporaries, and it is generally assumed in a congratulatory spirit that prejudices such as he had to encounter are no longer extant among us. But with every allowance for the immense progress since made in the tolerance of differences of opinion, and the general desire now felt to make truth itself the sole test and turning point of all philosophical inquiries, I cannot but perceive even in the present day some indications of that preference of the ideal to the real, the imaginative to the demonstrative, the assumed to the existent, which led our predecessors to cling so obstinately to the unmeaning jargon of a metaphysical physiology in the face of Harvey's simple intelligible exposition of a vital mechanism and action, a natural cause and effect. To the refined ears of his contemporaries, fully satisfied with their own descriptions of invisible currents of invisible animal spirits, his reduction of the heart to a mere force-pump, and his reasoning on the hydraulic uses of the valves of the blood-vessels must indeed have sounded very harshly, and from the general neglect of natural philosophy as a part of Medical education—a neglect still too prevalent—we can perhaps scarcely wonder that his views respecting the circulation should have appeared too gross for the purposes of so sensitive and elaborate an organism as the human body. But have we never in our own time heard doubts originating in a too exclusive study of the lowest forms of animal life, as to the sufficiency of the heart for the uses which it was evidently intended to serve, or assumptions of mysterious attractions and repulsions which are supposed to supersede the necessity of such a simple instrument of Nature's choice in maintaining the incessant motion of the blood? And is there not a general belief, not only among the great mass of Medical Practitioners, but even among some of the cultivators and teachers of the Medical art, that the physics of the circulation constitute only a problem of abstract science, of remote interest even to the physiologist, but wholly devoid of utility as regards the objects of practical Medicine, and, therefore, if studied at all, forming a province of inquiry adapted rather to the natural philosopher and engineer than to the Physician?

That I have not exaggerated this disinclination to investigate the physical phenomena attendant on the blood's motion is illustrated by my own experience. It is now nearly twenty years since I first published the results of some attempts to apply the principles of hydraulics to the explanation of the mechanism of vascular effusion and absorption, and though those views have never been refuted, and the received laws of endosmosis and exosmosis are evidently only applicable to stagnant liquids, and are quite incapable of accounting for the occasionally rapid passage of fluids into and out of the blood-vessels of the living body, I still find in most of the systematic works on physiology a mere repetition of old, and but partially correct doctrines on this subject, instead of a full discussion of controverted points, and a judicious use of the laws of physical science in elucidating the phenomena connected with the circulation of the blood. But on what other principle of research than that adopted by Harvey himself can we ever hope to obtain the desired knowledge? The laws of optics and acoustics alone enable us to understand and appreciate the exquisite mechanism and arrangements of the eye and ear. The structural peculiarities of the organs of respiration, speech, motion, etc., are all subservient to, and designed in the strictest accordance with, the general principles of physics involved in each particular function. And why should the *modus operandi* of the blood-currents alone be considered an exception to that beautiful harmony of Nature which connects by one universal code of laws the living and inanimate forms of matter, accomplishing in this instance by one of the most simple and universally diffused of all natural forces those subtle changes and rapid alternations of action which invest the circulation of the blood with some of the most recondite and imposing attributes of life?

It is only requisite that the principles of hydraulics be themselves first clearly understood, and that their application be in every case rigidly regulated, modified, and controlled by a careful study and close observance of the physical and vital conditions and peculiarities of the vascular and other structures, and we may then confidently hope that some of the appreciable effects resulting from the wonderful arrangement of blood-currents in the living body will ultimately be traced to their immediate causes, and so be rendered more available for the relief of human suffering. Such labours, judiciously and perseveringly directed, could not fail to give an impulse to physiological and pathological studies that would react most beneficially on practical medicine. And in no place could such an effort be more auspiciously inaugurated than in the University of Cambridge, itself a cradle of British physical science, and which shares with its sister University the honour of an academic connexion with our immortal countryman. I therefore most respectfully venture to submit to the Council of the British Association for the Advancement of Science the propriety of appointing a sub-committee to co-operate in any way that may be thought desirable with the Royal College of Physicians of London (which is in a special degree interested in the full development of Harvey's discovery and in everything connected with his fame) for the purpose of investigating the physics of the circulation, and so rendering more intelligible the connexion existing in the living body between the motion of the blood and the performance of the secondary functions of life.

CLINICAL MIDWIFERY.

By FRANCIS H. RAMSBOTHAM, M.D.

Physician-Accoucheur to the London Hospital, etc.

(Continued from page 369.)

It occurred to me to see the following seven cases of dangerous or severe laceration in labour during the five years between January 1, 1840, and December 31, 1844:—

Ruptured Uterus.

Case 195.—On October 23, 1840, at 1 a.m., a Medical friend sent for me to Mrs. F., living in Finsbury, in labour of her second child. She had been delivered of her first by craniotomy, by a well-known Professor of Midwifery, and consulted me on the 21st as to the propriety of having labour brought on prematurely. On careful examination of the pelvis internally, I came to the conclusion that from the promontory of the sacrum to the pubes there was not more space than two inches and three-quarters; and, as she thought herself nearly eight months advanced in pregnancy, I advised that no time should be lost in an attempt to anticipate her proper period; she therefore began to take some infusion of fresh ergot the next morning. She took four doses, one every four hours. She began to feel labour pains after the second dose, and at 9 p.m. the membranes broke spontaneously. Her Medical attendant was called at 10.30 p.m. The os uteri was then almost entirely dilated, and the pains were frequent and naturally strong. Labour went on very well till 12.30, when, without any warning, in the *acmé* of a pain, the uterus ruptured itself transversely in the anterior part of the neck. She immediately cried out that something had given way within her; the usual symptoms of lacerated uterus showed themselves, and the head, which had engaged somewhat in the brim, receded. My friend discovering immediately what had happened, sent for me, and at once proceeded to deliver

by turning. When I arrived, I found he had got one foot down, but he could not extract the breech. With some difficulty I got the breech down, and the arms and shoulders; but the head would not pass, and I was compelled to perforate it behind an ear, and evacuate a part of the brain before it would escape. I was obliged to introduce my hand for the placenta, and felt the rent distinctly. The woman rallied somewhat after delivery; but soon flagged again, and she died on the 27th. On a post-mortem examination, we found the conjugate diameter of the pelvis measured exactly two inches and three-quarters, and the interior edge of both the pubic bones at the pelvic brim were quite sharp; on the right side, so much so as to pain the finger considerably when pressed hard against the part. There is no doubt that this sharp ridge had predisposed the uterus to lacerate; because by resting upon it, as it must have done during pregnancy, inflammation and softening of the substance, and perhaps thinning, must have taken place, which would so weaken the texture of the organ as to render it incapable of withstanding the powerful strain upon it during the tension of the uterine contractions. Denman indeed says that "the uterus may be worn through mechanically, in long and severe labours, by pressure and attrition between the head of a child and the projecting bones of a distorted pelvis; especially if they be drawn into points or a sharp edge."

Ruptured Uterus.

Case 196.—On November 16, 1840, at 8 a.m., I was requested by a Professional friend to see Mrs. H., living in Doctors' Commons, in labour of her sixth child. Her pelvis was narrow, and she had always suffered lingering labours. The labour progressed very favourably till twelve o'clock at night, when she was suddenly seized with a violent constant pain at the lower part of the abdomen, superseding the pains of labour, which entirely disappeared. I found her under a state of extreme depression, with great abdominal tenderness; there had been more external hæmorrhage than is usual in these cases; she had been vomiting a dark, coffee-ground-like matter, and was affected with painful hiccough. I could feel the child's head easily through the parietes of the abdomen, but no part *per vaginam*. There was a large rent evident to the touch at the back part of the cervix uteri, through which the child and placenta had both passed into the abdominal cavity. I carried my hand, without increasing the rent, easily into the abdomen, and found the feet lying against the diaphragm. Taking hold of them, I first extracted the fœtus without any difficulty, and then the placenta. I thought she would die speedily; but by the aid of opium and stimulants she rallied wonderfully, and lived more than nine days.

Ruptured Uterus under Abortion—Recovery.

Case 197.—On December 20, 1843, I was sent for by one of the district Surgeons to the Royal Maternity Charity to Mrs. W., Shoreditch. She had flooded more or less for fourteen weeks; and very considerably for some days. She considered herself seven or eight months advanced in pregnancy. I found my friend had just removed from the uterus a blighted ovum larger than a man's fist. The flooding ceased directly it was taken away, but the reason for my friend wishing me to see the case was that he felt what he considered to be a transverse rupture of the anterior part of the cervix uteri. I detected one most clearly, extending nearly across the whole front, and I could feel the posterior wall of the bladder through it distinctly. It appeared to me that the peritoneum was not implicated, yet how it occurred was a mystery. It is scarcely possible that both my friend, who is a highly practical as well as scientific man, and myself should be deceived. We each made a most careful examination, as it is natural we should under the circumstances, and neither of us had the least doubt of its nature. The woman had some pain and fever after, but she eventually recovered well. This case puzzled me a good deal: we could hardly expect that however much softened by disease the structure of the uterus might be, it would burst in expelling an ovum of the size mentioned; but we meet sometimes with perplexing cases in midwifery, for example:—Some years ago my father had sent to him from the country an uterus and ovum of about six months' development. The os uteri was thick and dilated only to the size of a sixpenny-piece, and the ovum had escaped entire, the membranes being still whole, through a rent in the cervix into the abdominal cavity. It is scarcely to be believed that the uterus would lacerate its structure while the membranes of the ovum were unbroken, yet so it was in this case. He intrusted the preparation to one of the officials at the Hospital for preservation, but it was unfortunately allowed to spoil. My father has recorded this case, the 84th, part 1st of the first edition of his "Observations in Midwifery."

Burst Perineum.

Case 198.—On June 3, 1841, at 11.30 p.m., a Professional friend sent for me to Mrs. H., a publican's wife, in Tooley-street, aged 48, in labour of her first child. The membranes broke on the morning of the 1st, but there was but little or no uterine action till the morning of the 3rd. The labour went on slowly, as might have been expected; and the head was on the perineum, which was very rigid, at 7 p.m. It began to thin first towards the anus, while the anterior part was very thick; and in the *acme* of a strong pain, while he had his hand on the part, he observed it give way close to the anus, leaving the fourchette entire. The vertex, which was somewhat protruded between the labia, receded, and passed through the new opening. The child was dead, and the skull very compressible. I arrived ten minutes after the child was born, and found the funis hanging out of the new opening. I passed it through the vulva, and brought the placenta away. I found a laceration about two inches long occupying nearly the whole of the perineum. Both the rectum and the fourchette were uninjured; the part of the perineum which remained entire was the anterior portion, about three-fourths of an inch in extent. I passed my finger through the opening in the perineum and out at the vulva, so that there could be no mistake. An opiate was given and a poultice applied. Next day she had slept well and passed urine. On the 7th the edges were slightly sloughy, the bowels had acted freely, and the motions had been retained voluntarily. The slough soon separated, healthy granulations sprang up, adhesion of the sides took place, and by degrees the part entirely healed. I do not know whether she became pregnant after.

Burst Perineum.

Case 199.—On April 7, 1842, at 7 p.m., I was sent for by a Medical friend to Mrs. B., Stepney, aged 22. She had been delivered of her first child at 4 p.m. The membranes broke early in the labour, which had been lingering. While the head was on the perineum it pressed very much back towards the anus, and, fearing the perineum would burst, he called in a neighbouring Practitioner. They were both using their best efforts to preserve the parts from injury, and, while he had his hand on the perineum, he felt that a transverse slit took place near the anus. The head passed through the vulva, but directly it was born a shoulder and elbow came through the perineum. He pushed the arm upwards and forwards, and directed it through the vulva. I found a jagged laceration in the perineum, about two inches in length, extending from the sphincter to within half an inch of the fourchette. The fourchette was entire; the sphincter was partly torn. I put in two sutures, directed the bowels to be kept in a confined state for a week, and the catheter to be used twice a-day, but they sloughed out, and a large portion of the perineum also. On the 13th, the slough which appeared on the edges of the laceration began to separate, as well as those occasioned by the sutures. No fæces ever passed through the opening, but there was always a small portion on the poultice. The sphincter had a moderately retaining power; the general health was tolerably good. The part completely healed, and the aperture perfectly closed in three months, but the vagina remained much contracted. She got quite well, and, as soon as she could be moved, went into the country.

Burst Perineum—Twins.

Case 200.—On July 20, 1843, at 4 a.m., I was sent for to Mrs. S., Islington, whom I was engaged to attend. It was her second labour. The first was very lingering, owing to the tuberosities of the ischia approximating near each other, and thus contracting the pubic arch. The infant was born dead, and a considerable sloughing of the posterior face of the vagina took place, for which I was consulted. This healed with an extensive cicatrix. In her second pregnancy she was placed under my care, as her first attendant, being a relative, did not wish to take charge of her. The first part of the second labour went on very well, though slowly; and about six hours after the membranes broke, the head was in the pelvis, with the face forwards. I could then feel both the eyes and the nose distinctly, and with each pain

the head was being pressed strongly against the band formed by the cicatrix, which appeared to be relaxing. I expected it would become a complete face case; but the vertex was directed downwards, and the forehead remained behind the pubes. After I had continued to support the perineum uninterruptedly for two hours, the band at that time having become much relaxed, the pains being very strong, and the head being so far protruded that the anterior fontanelle was external, I felt the perineum near the anus become suddenly thinned; it burst, the head receded from the vulva, and made its escape through the laceration. The body instantaneously followed. Having separated the child, I detected another presenting by the feet. The membranes almost immediately broke, and the feet came through the same aperture. I extracted the trunk and head as carefully as I could. Both children were living. The placenta were protruded into the vagina; and fearing to run the risk of increasing the laceration, I passed both funes through the vulva, intending to extract them that way. The constriction, however, was so great, that I could not bring them through it; I was therefore obliged to direct the funes back again through the newly-made opening, when, applying a slight degree of traction, I delivered them without difficulty. The portion of the perineum near the fourchette left entire was about an inch in extent. The sphincter was uninjured, and the motions were always retained at will. A poultice was applied; the urine for some days removed by catheter, and the ordinary Surgical appliances had recourse to. On the fourth day the lacerated surfaces were in a sloughy state; the slough separated kindly; healthy granulations sprung up; the perineum puckered considerably; no adhesion took place, but cicatrisation commenced at the edges. It was now evident that union of the two granulating surfaces would not take place, and in consultation with a Hospital Surgeon the frænum was divided. The healing process went on very favourably, and in eight weeks from her confinement she might be considered well. The entrance of the vagina was of course much enlarged; but she experienced no inconvenience either from pressure on the part in sitting or from prolapsed uterus. Unfortunately, in the course of a few months, unequivocal symptoms of incipient phthisis showed themselves, and I sent her to live at Ventnor. She had no other child; but while at Ventnor, in 1845, I was sent for to see her under a miscarriage; and she died in the latter part of that year of the pulmonary disease.

Laceration of the Left Labium in Labour.

Case 201.—On April 30, 1842, at 11.30 p.m., I was requested by one of the district Surgeons to the Royal Maternity Charity to visit Mrs. C., in the Hackney-road, one of the patients, who had been delivered by a midwife of her first child at 5 p.m. I found her in great agony from a swelling of the left labium, which was larger than a man's doubled fist, and livid. On the inside there was a longitudinal laceration of two inches in length, and the whole labium was filled by a firm, dark coagulum, infiltrated into its cellular structure. She had lost a great quantity of blood from the part, and had fainted, and a draining of blood was still going on. I removed a coagulum sufficiently large to fill an ordinary breakfast cup. The bleeding and pain both immediately ceased. A poultice was applied. On the fourth day, after the swelling and blackness had entirely disappeared, suppuration was commencing, and in a little more than a fortnight the cavity was filled up and the part was healed.

8, Portman-square.

(To be continued.)

CASE OF

ABSCESS OF THE SPLEEN, DISCHARGED INTO THE LEFT LUNG.

By A. A. MANTELL, M.D.,

Bengal Medical Service.

J. D., a European, and father of five healthy children, aged 62, and perfectly grey, was placed under my care on January 31 of the current year. He had just arrived in a boat from the coast, where he was employed by Government as a superintendent of a lighthouse. He was accompanied by his wife, who gave the following history of his case:—

She stated that during their thirty-seven years of married life he had always been a strong, healthy man; that as a pilot he had seen much service, and that for many years he had been a very free liver, his favourite drink being rum. He had not been subject to fever, but had had a slight attack of ague before his present illness set in. As far as she could recollect, he had never had any affection of the chest, nor had he ever complained of pains in the loins or abdomen. His appetite was always good, and his bowels invariably regular. His present illness commenced five months ago with sore throat and difficulty in swallowing; he also complained of pain in the right side of his neck.

The soreness of the throat and difficulty of swallowing continued to increase, and on December 31 last he became much worse; on the following day he was unable to masticate his food, and his speech became thick. During the whole of this period his general health was good, but he was unable to take food in the solid form.

On January 25 he coughed up some dark-coloured blood and matter of a very offensive character. From this time his breathing became difficult, a hacking cough set in, and he daily expectorated small quantities of blood and matter.

On the evening of the 30th he was still worse, expectorating large quantities of the same kind of discharge, and unable to lie horizontally, in consequence of the extreme dyspnœa. During this night he had no sleep, and his wife did not expect him to live till morning.

I saw him for the first time on the following afternoon; he was sitting in a bent posture; his countenance was dusky, and his lips livid; he was at times delirious, and breathing with much noise and difficulty; he had a slight but frequent cough, and with it expectorated an offensive sanguineo-purulent fluid, of a dark brick colour.

He was free from fever, and had a tolerably strong pulse of 84. His tongue was clean; he complained only of his throat, and pointed to it as the seat of pain; nothing, however, abnormal could be felt externally, or seen internally; there was partial paralysis of his tongue, which rendered his speech thick, and difficult to be understood. His lungs gave no evidence of disease—resonance was good on percussion, and the only abnormal sound present was a mucous râle. No enlargement of the liver or spleen could be detected; and he did not complain of pain when his abdomen was examined by pressure and percussion. Ordered nourishing diet constantly, and a stimulant mixture.

February 1.—He has passed a restless night, especially the early part of it. At times he was delirious, and on several occasions it was feared he would be suffocated by the accumulation in his chest. This morning he appears somewhat better; there is less delirium; his respiration is not so noisy; and the expectoration has somewhat abated; his pulse is 86, and firm; he walks about the room occasionally, in spite of orders to remain quiet, and once nearly fainted in consequence of the exertion. He passed urine once during the night; it was clear, and of a natural colour. His bowels not having been relieved for two days, he was ordered an aperient draught.

2nd.—He appears much better this morning, as he has slept the greater part of the night; his pulse is still 86, and of the same character. He can now lie in the horizontal position without much distress. From his improved condition prognosis more favourable. 2 p.m.—At this hour I was summoned suddenly to see him, and on arrival found that alarming hæmoptysis had set in; he had coughed up half a pint of pure blood. Nothing stopped the hæmorrhage, and in about twenty minutes he died.

Inspection Twenty-one Hours after Death.—Body pale, but well nourished considering his age. Brain not examined. On removing the trachea, pharynx, etc., the greater cornu of the hyoid bone of the right side was found in a state of caries, and the diseased part was surrounded by a small abscess, which had apparently burst into the upper part of the pharynx. The apex of the right lung was slightly adherent, and the bases of both lungs were firmly adherent to the diaphragm, especially the left; their structure was healthy, but engorged with frothy blood and serum. Heart natural, with empty cavities. Liver smaller than usual, gall-bladder containing greenish bile, and one large black calculus. On endeavouring to remove the spleen, it was found adherent to the diaphragm, and so soft and pulpy that it broke to pieces under very slight pressure of the fingers; the cause of this was an abscess which occupied its structure, and was now nearly empty; the walls of it were thin, and what remained of the parenchyma was infiltrated with fetid matter and blood

of a brick-red colour, similar to that which had been expectorated during life. The abscess had burst into the left lung, a communication being established between it and the spleen. The fatal hæmorrhage was due to rupture of a branch of the left pulmonary artery. The left kidney was hypertrophied, and the right contained an abscess the size of a hen's egg, filled with yellow matter. The stomach was lined with a thin layer of coagulated blood, which had been swallowed during the fatal attack of hæmoptysis. The other viscera were healthy.

Remarks.—In remarking upon this case, I may start by saying that its nature was not suspected during life, nor was there a single diagnostic symptom present. That an abscess had communicated with the trachea, bronchi, or lungs, there could be no doubt, but its situation was not ascertainable. The disease of the os hyoides gave rise to the only symptoms complained of by the patient, viz., pain in the neck, and difficulty of mastication and deglutition, resulting, as they must have done, from irritation or destruction of the right hypoglossal nerve. The history of the case from the beginning in no way elucidated the disease; there had been no antecedent periodic fever of any severity or duration, nor had there been any symptoms of acute or chronic splenitis. The slight attack of ague, spoken of by his wife as having occurred before his present illness, was probably a shivering fit, happening at the suppurative period, but whether this was indicative of matter forming in the spleen, kidney, or throat, it is impossible to say. In consequence of the rarity of this affection, little has been written concerning it. Abercrombie mentions in his work on "Diseases of the Stomach and other Viscera of the Abdomen," that he never saw but one case of splenic abscess, and that its nature was not detected during life; in it the only symptoms were emaciation and debility, and after death the kidneys were found diseased. He records cases met with by others in which the abscess had burst twice into the colon, once into the cavity of the abdomen, once into the stomach, once at the umbilicus, and once after a blow received in the left side, which was followed by the subsidence of the tumour, and a discharge of thick and fetid matter with the urine. Dr. Morehead, in his excellent "Clinical Researches on Disease in India," published in 1856, states that he had never seen a case of abscess of the spleen. In Copeland's "Medical Dictionary" I find the following remarks upon the disease:—"Abscess of the spleen is generally, but not necessarily fatal: some cases of recovery said to have taken place are not very conclusive. The diagnosis appears to be always difficult." Dr. Nasse, of Bonn, has recorded the history of a case in which the matter made its way from the spleen through the diaphragm into the lung, and was expectorated in great quantities, the patient afterwards recovering. As abscess of the spleen is comparatively rare, such cases must necessarily be much more so; but there is no reason wherefore abscess in this organ should be less likely to be recovered from than abscess of the liver. Rokitansky observes, that, in a favourable case, the abscess may be circumscribed by adhesive inflammation, and, being inclosed in a sac formed by obliterated parenchyma, which has been converted into fibrous tissue, may be borne for a long period; a partial absorption of the pus may take place, and, the remainder becoming inspissated, be reduced to a calcareous, greasy pulp, or even to a hard concretion. The more common termination of this disease is for the parietes of the abscess to put on inflammatory action and suppuration, by which the matter is discharged into an adjoining organ or part.

Cuttack, Bengal.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

THE LONDON HOSPITAL.

THREE CASES OF INTESTINAL OBSTRUCTION.

[Communicated by Mr. Powell, M.B. Lond., Resident Medical Officer and Registrar.]

Case 1.—Sudden Pain in the Abdomen—Vomiting—Constipation—Suppression of Urine—Death on the Eighth Day—Autopsy—Constriction of Jejunum.

H. H., aged 25, a bootmaker by trade, was admitted November 3, 1862, under the care of Dr. Little.

The patient, a spare-made man, presenting the usual cachectic appearance of his class, stated that he had always enjoyed fair health until about four years ago, when he was laid up by an attack of "inflammation of the bowels." During this illness he was unable to bear the slightest pressure on his abdomen, the bowels were not open for four or five days, and he suffered much from nausea and occasional vomiting. He was confined to bed for a month, but gradually regained his previous standard of health, and considered himself "as well as ever."

On the Wednesday previous to his admission, shortly after partaking of a hearty meal, he was seized with sudden pain in the belly, inducing a feeling of faintness and great depression. These symptoms were quickly followed by nausea and vomiting, the ejected matters consisting at first of half-digested food, and subsequently of a thin green fluid. The bowels had acted a short time before the commencement of the attack, but not since. He had noticed that he passed less water than usual. He remained under treatment at home, gradually getting worse until the following Monday, when he applied to the Hospital for advice.

When admitted he was in a state of great prostration, with feeble pulse, cold extremities, sunken and anxious countenance. Complained of great pain in the abdomen, which he was unable to refer to any particular spot, and which was not increased by pressure. Felt very sick, and shortly after admission vomited a quantity of dark-green fluid. The surface of the abdomen was flat and symmetrical, and no information was afforded by a physical examination. He was ordered warmth to the extremities, and injections of beef-tea, brandy, and laudanum. In the course of a few hours he had rallied considerably, and on the following morning expressed himself as being in less pain. He had been sick at intervals during the night; nothing whatever had passed by the bowels, and the quantity of urine passed did not amount to more than two or three ounces.

No material change took place until the next day (Wednesday), when he began to sink rapidly, and died early on the following morning, eight days from the first commencement of the attack. During the whole of his illness nothing whatever passed by the bowels, and for the twenty-four hours immediately preceding his death the urine was entirely suppressed.

Post-mortem Twenty Hours after Death.—There was nothing worthy of note in the cranial or thoracic cavities. On opening the abdominal cavity, the intestines were found adherent to its parietes and to each other in several places by bands of old lymph. On the left side a portion of the intestine was adherent to the abdominal walls. Underneath this a part of the jejunum had slipped, and was constricted against the sharp edge of the mesentery. The intestine at the seat of stricture was on the point of ulceration. Above this the gut was considerably dilated, but below much reduced in size. The parts were restored to their natural situation with ease. Bladder contracted and empty.

Case 2.—Vomiting—Constipation—Diminution of Urine—Death on the Ninth Day—Autopsy—Diaphragmatic Hernia.

Mary F., aged 18, admitted January 20, 1863. Since the age of two years she has always had delicate health, suffering from cough, and at variable intervals from attacks of sickness and indigestion. A week previous to her admission, just after a fit of coughing, she felt severe pain in the epigastrium, inducing a sensation of nausea and extreme faintness, and succeeded by vomiting and constipation. She remained under treatment at home without deriving any benefit, the constipation continuing, and the vomiting persisting unabated. During this time it was noticed by her friends that she passed scarcely any water.

When admitted she was evidently in a sinking state. The countenance was flushed and anxious, tongue dry and red, and pulse feeble and fluttering. She complained of an ill-defined, uneasy sensation, which she constantly referred to the epigastrium as its seat. Pressure over this region was painful. The abdomen was flattened and symmetrical. Shortly after being placed in bed she vomited a quantity of green viscid fluid, and continued to do so until her death, which took place on the evening of January 21. About an hour previously she passed a small quantity of urine and fæces, for the first time since the commencement of her illness.

Post-mortem Sixteen Hours after Death.—On exposing the thoracic and abdominal cavities, a portion of intestine was seen appearing in the right pleural cavity. This proved to be

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the pylorus, together with a portion of the duodenum, which had passed on the right side of the œsophagus through an opening in the diaphragm. The aperture was sufficiently large to admit the hand, and was continuous with that for the œsophagus. At a point about three inches from its commencement the duodenum was twisted upon itself, and compressed against the edge of the diaphragmatic opening. At this spot there was a dark ring extending round the gut. The colon contained fæcal matter throughout its whole extent. In the bladder were a few drachms of urine.

Case 3.—Sudden Pain in the Abdomen—Vomiting—Constipation—Sixteen Ounces of Urine Passed Daily—Death—Autopsy—Strangulation of Intestine (ileum) in a Slit in the Mesentery—Rupture of Intestine, and Escape of Intestinal Matter into the Peritoneal Cavity.

Robert M., aged 45, a porter by occupation, admitted March 9, 1863. Suddenly while at work felt a sharp pain in the abdomen, which induced faintness and nausea. The bowels had acted three times in the course of a few hours preceding the attack. He was a muscular, spare-made man, and had always enjoyed good health. When admitted into the Hospital, he complained of severe twisting pain in the abdomen, referred principally to the neighbourhood of the umbilicus, and not increased on pressure. The pulse was rapid and feeble, skin moist, and extremities cold. He vomited at intervals a quantity of thin green fluid. The abdomen was uniformly distended, and somewhat tympanitic. He was ordered warmth to the extremities, some brandy, and a dose of opium. An enema was administered which brought away some fæcal matter.

April 10.—Feels better; pain relieved; complains of thirst, and continues to vomit.

11th.—Complains of no pain. Passed some bloody slime by the bowels Shortly after this great prostration came on, with an anxious, sunken expression of countenance, thready pulse, and cold clammy perspiration.

Died on the morning of March 12. He passed from sixteen to twenty ounces of urine daily.

Post-mortem Sixteen Hours after Death.—Veins of omentum distended, and its small arteries minutely injected, at parts producing patches of vivid redness. Small intestines were distended by gaseous matter, and had lost their natural polish. A quantity of dark grumous fluid was effused into the peritoneal cavity. Two feet of the lower portion of the ileum had passed through an opening in the mesentery. The constricted portion was almost black in colour, and presented several patches of superficial ulceration. At one point the gut had given way, and allowed its contents to escape into the peritoneal cavity, giving rise to the peritonitis which caused this case to be so rapidly fatal.

GUY'S HOSPITAL.

MELANOTIC TUMOUR DEVELOPED IN A MOLE—EXCISION—SECONDARY FORMATION OF MELANOTIC TUMOURS IN THE INTEGUMENT AND NEARLY EVERY INTERNAL ORGAN.

(Under the care of Mr. THOMAS BRYANT.)

THOMAS G., aged 30, a potter, was admitted into Guy's Hospital on January 15, 1863, under the care of Mr. Bryant, with a melanotic tumour, the size of an orange, on the margin of the right axilla, and numerous tubercles, from the size of hemp-seeds to nuts, in the integument of the abdomen.

It appeared that two years previously a mole, which was situated over the ensiform cartilage, began to enlarge, and about the same time the tumour on the margin of the axilla made its appearance. He applied for Surgical advice to St. Thomas's Hospital, when the mole was removed, but as the growth immediately returned on the spot, a second operation was performed two months after, in May, 1862.

From this time the axillary tumour gradually enlarged, and at different dates smaller tubercles made their appearance in the abdominal walls.

When admitted into Guy's, the man was pale and cachectic. His pulse was very weak, and his powers were failing; tonics, wine, and good diet were administered with little benefit, as the tumours rapidly increased, and fresh ones made their appearance.

In a few weeks a dry cough appeared, followed after a time by pneumonic expectoration, and from this time he gradually sank, without any other definite symptom, dying on March 14, 1863.

It may be added that he had no head symptom.

Autopsy by Dr. Wilks.—A number of nodules were on the body, consisting of soft cancer containing pigment, none absolutely black. On removing the brain, fluctuation was felt in the left hemisphere towards the median line, and, on cutting it through, a very loose growth was found, about the size of a walnut, consisting of a distinct vascular wall for outline, and within very little more than a few threads passing across it, and within these some serum. When this flowed out, almost a complete cavity was formed. It thus appeared at first nothing more than an inflamed cyst, but there was sufficient structure in the adventitious material in the walls to show its cancerous nature, and its resemblance to other growths on the body; there was apparently, however, no pigment. The lungs were full of tumours; probably about half of each was thus occupied; many of these were very large, as large as an egg. When cut they were found mostly of a brownish hue, of different degrees of intensity and shade: some almost white, others brown, from the presence of pigment. The bronchial and mediastinal glands were similarly affected. The heart had on its front surface, and imbedded in the walls of the right ventricle, a tumour the size of a marble, which was also cancerous, and contained a small amount of pigment. The liver was full of pigmental cancer; the tubera were smaller than those in the lung, and were situated more upon the surface of the organ. The spleen contained also two masses. The lumbar glands were also diseased, and contained much pigment; as also were the mesenteric. There were also a few growths in the pelvis, and one black nodule growing from the anterior wall of the mucous membrane of the bladder. There was no disease in the kidneys.

SECONDARY MELANOTIC TUMOURS IN THE INTEGUMENT OF THE LEG AFTER EXCISION OF A MELANOTIC TUMOUR DEVELOPED IN A MOLE.

(Under the care of Mr. THOMAS BRYANT.)

Mary R., aged 30, a married woman, was admitted under Mr. Bryant into Guy's Hospital, on April 3, 1862, with multiple melanotic tumours in the right leg in different stages of development, some like millet-seeds beneath the integument, others infiltrating the skin, and others, again, which had softened down and ulcerated, leaving cancerous surfaces. These tumours had all appeared after the excision of a like growth in a congenital mole on the tibia sixteen months before her admission. The mole first began to enlarge two years previously, and after eight months' increase it was excised, these secondary tumours appearing directly after.

The glands of the groin were also enlarged when she was admitted. Under these circumstances nothing could be done by way of operation, and she left the Hospital in May, 1862.

A model of this limb may be seen in the Guy's Museum.

METROPOLITAN FREE HOSPITAL.

TERTIARY SYPHILIS WITHOUT HISTORY OF ANY PRIMARY OR SECONDARY STAGE.

(Under the care of Mr. BUTCHINSON.)

THE two following cases came under care on the same day, and as they seemed to me to present good illustrations of a state of things which we not unfrequently meet with in practice, and which has not received the attention its importance claims, I venture to record them. I refer to the occurrence of tertiary symptoms of an unmistakeable character in married persons who deny all history of primary or secondary ones. Of course, the denial of previous symptoms by the patient herself must never rank as of the slightest value as evidence, unless corroborated by other facts, of which the Surgeon can himself judge. But very often in the cases to which I refer these corroborative facts are very strong indeed. For instance, the woman may have borne several children, none of whom have suffered in any marked degree. Although not a conclusive one, this is a weighty fact against the belief that the patient herself has ever suffered from self-acquired constitutional syphilis. Still, however, the chief reason for believing that cases of the kind alluded to are not infrequently *bonâ fide*, is afforded by their common occurrence. We so frequently hear histories similar to those recorded in

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the two subjoined cases, that it is impossible not to believe there is some truth in them:—

Case 1.—Nodes and Ulcerated Throat Twenty-four Years after Marriage—No History of any Previous Symptoms—The Younger Children Free from Suspicious Symptoms.

Mrs. E., a healthy-looking woman, aged 42, came to me on February 17, on account of a large diffused node in front of the right tibia. She described the nocturnal pain as having been very severe. The node first formed a year ago, and she then attended Mr. Childs, who told her it was to be attributed to the same cause as a badly ulcerated throat from which she then suffered. She had never had sore-throat before. A portion of alveolus came away. At the time of the development of the sore-throat and node she was living very badly, owing to her husband being out of work.

On the most careful cross-questioning, I could obtain no history of any other symptoms in the least resembling those of constitutional syphilis. It will be seen that these only date back one year. I could feel no doubt that the node was syphilitic, and Mr. Childs, from the expression he used to her, evidently took the same view a year ago. She obtained most marked relief from the medicine ordered by Mr. Childs. Now for the married history. She married at 17, and was three years married before she conceived. Both she and her husband were throughout in excellent health. Her first child, born four years after marriage, died at six weeks old, after a short illness. Second birth, dead-born at seven months, after a fall; third died, aged thirteen months, of measles; fourth is living, aged eleven, and in good health; the fifth I saw, a healthy lad, aged ten; teeth good; a sixth is five, and a seventh three, and the eighth is a baby, aged ten months. The last I saw, and he appeared in excellent health. In addition to the above, Mrs. E has had two miscarriages.

Without being too definite as to how the taint was derived, I think it must be admitted that she is now the subject of a late tertiary form of syphilis, and that her younger children have not shown specific symptoms. Her youngest, born since the first manifestation of the taint, is healthy. My own suspicion is, that it is an instance of slight taint derived by fœtal contamination. The father is stated to have shown no symptoms.

Case 2.—Nodes, Ulcerated Throat, and Disease of Nasal Bones Seventeen Years after Marriage—No History of Previous Symptoms—Younger Part of Family Healthy.

Mrs. M., aged 41, came to the Hospital on February 17. She had a very large perforation of the hard palate, and diseased bone in the nares. Her nose was depressed, and she had also on the forehead large depressions without scars. Respecting these latter, she stated that she had noticed the bone falling in for some years, but did not recollect ever having had any swelling; on other parts of the head she had suffered much from painful swellings. The throat and palate had been ulcerated for seven years, and began at a time when she was pregnant with twins.

Married History.—She married at 17, being then in excellent health. Was confined a year later of a dead-born child, and was very ill at the time. Then followed a series of miscarriages; and it was seven years later before she had a living child. This child, a girl, is now aged 17, a stout, well-grown young woman, pallid, but without any evidences of special cachexia; teeth well formed; no keratitis. It should be stated that, after her first confinement, the mother regained good health, and remained well. The next was a boy, now aged 14, and healthy. The next is a girl, aged 12, delicate, but with no specific ailments. The twins come next—two boys, both living, aged 7, and in good health. The last is a girl, aged 2, whom I saw, stout, well-grown, and without any cachexia. In addition to these, still living, there have been born five others (at various positions in the family), which have died in infancy. In none of these, nor in any of the living ones, can I obtain the slightest history of symptoms allied to syphilis in infancy. All died of acute diseases. Her husband is reported to be healthy, but to have a peculiar "scaly breaking-out" on his shoulder.

In this case, as in Mrs. E.'s, given above, it is probable that the mother has obtained the taint by fœtal contamination, although the children have never themselves suffered from the disease in a sufficiently concentrated form to show symptoms. Observe that, supposing the father to have had syphilis before marriage, his first living child was not born till eight years afterwards, so that there was time for the taint to have passed into a latent and feeble form.

ISLINGTON DISPENSARY.

SUBACUTE GLAUCOMA, AFFECTING BOTH EYES SUCCESSIVELY, SUCCESSFULLY TREATED BY IRIDECTOMY.

(Communicated by Mr. SPENCER WATSON.)

ELIZABETH R., aged 62 years, a single woman, a dressmaker. She had generally had good health, and was of spare habit, with no marked diathesis. During he last twelve months she had been nursing a sick sister, and her rest had been very much disturbed. For three months past (May 15, 1862) she had noticed a gradually increasing dimness of vision in the right eye, and had observed that the flame of the candle seemed as if surrounded by prismatic colours in the form of a halo. She had had no pain till within the last six days, but pain of a pricking and burning character, with some lachrymation and conjunctival injection, then begun to alarm her. She therefore applied to my colleague, Dr. Sutton, at the Islington Dispensary, by whom she was directed to apply to me.

May 15.—The right cornea is dull and steamy, and the pupil larger than the left, and very sluggish. There is vascular injection of the sclerotic and conjunctival vessels, and increased tension of the globe. Ophthalmoscopic examination fails to give any distinct view of the fundus. Nevertheless, she can read No. 16 of Jaëger's test types, *i.e.*, letters rather less than ⅓ inch long.

June 17.—Vision has now become much worse. She can scarcely distinguish letters of the largest type. The field of vision is contracted to the form of a horizontal slit of twelve inches long and three inches high. There is constant pain in the eyeball and brow, which keeps her from sleeping, or wakes her up after a few hours' rest. The cornea is insensible when touched by the end of a feather. Up to this date the treatment has been tonics, succeeded by iodide of potassium, leeches to the temple, and atropine drops, but without any arrest of the symptoms. I had advised iridectomy some weeks previously, and to-day I removed a piece of iris from its upper and outer part.

On the following day (June 18) she had experienced great relief, and had slept soundly.

July 2.—There has been no pain for some time past. The tension is normal, but vision is not improved.

It subsequently became evident that a cataract was forming in this eye, and on October 24 I removed it by a modification of Schuft's operation, but with only partial success; for, four or five days after, a sharp attack of inflammation came on, induced probably by a too early attempt at using the eye, and the pupil became completely closed up by lymph and opaque capsule. At the same time there was some increase of tension in the globe, and occasional pricking pain. I accordingly, on December 16, preparatory to tearing through the secondary cataract, removed a second piece of iris from the inner side, with very good effect, as the tension became normal, and vision was somewhat improved, at the same time that the pain and inflammatory symptoms quite disappeared. Still, however, there remained opaque membrane across the pupil, which seriously interfered with clear vision; and on April 7, 1863, having got the pupil completely under the influence of atropine, I tore through this opaque membrane with a single needle, and with the best results, as will be seen by the following note:—

On April 27, aided by a two-inch convex lens, she can read No. 12 of the test types (great primer), and recognises features at one or two feet distance. On making an examination with the ophthalmoscope, I find the optic nerve entrance somewhat paler than usual, and shrunken, but otherwise healthy. The retina generally seemed somewhat congested.

The symptoms of glaucoma in the left eye were first noticed by the patient on July 17, 1862, when she found that vision was less distinct than usual, and that the flame of a candle or any artificial light had a coloured halo round it. This, it will be observed, was just one month after the first iridectomy in the right eye, and therefore not to be attributed to any sympathetic affection, the right eye being at this period perfectly quiescent.

October 18.—Severe pain in the left eyeball and brow came on, and the cornea appeared dull and superficially abraded in its central region; and on the 23rd the pain was constant, and of a deep, aching character. There was great sclerotic and conjunctival vascularity and increased tension of the eyeball. She can only just read the largest type (No. 20), the letters

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being ¼ of an inch long. The cornea is dull and insensible, and the iris discoloured. Pulse 104.

24th.—I performed iridectomy in the left eye, upwards and inwards. Since this date the symptoms have quite disappeared, the pain and inflammatory redness having subsided within the first day or two, and vision having steadily improved up to the present date (April 6, 1863), when I have the following note:—

April 6, 1863.—Left eye—Tension and field of vision normal; the entrance of the optic nerve is pale, and the vessels rather tortuous. With a Liconvex lens of five inch focal length, she reads No. 2 type (pearl) which is about the size of the police reports in the *Times*, and can do needlework, and even thread her own needle, without the slightest distress. The amount of deformity produced by the operation is so slight as to be scarcely observable without raising the upper lid by the finger.

LEEDS INFIRMARY.

DISEASE OF THE MITRAL VALVES—MURMUR WITH THE SECOND SOUND ONLY—CLINICAL REMARKS.

(Under the care of Dr. HARDWICK.)

JOHN K., aged 21, a miner, residing at Barnsley, was admitted into the Leeds Infirmary on December 1, 1862. He has worked in a coal-pit since he was nine years old. He admits that he has only been moderately temperate. His family history is good, all the immediate relatives being alive and healthy. He has never had rheumatism, and never suffered from illness of any kind till three and a half years ago, when his present ailment began with shortness of breath, cough, palpitation, and pain at the heart. For a long time he has expectorated much mucus, and frequently blood also, after a hard day's work. There has never been any dropsy. Since the commencement of his illness he has often been laid up for a few days with distress at his heart and dyspnœa; excepting this, he has continued to work as a miner. He is short in stature, and somewhat stoutly built. Countenance rather gorged and livid. There is no dropsy. He has much cough, and spits up a good deal of frothy mucus. Dyspnœa is marked. The lungs are abundantly resonant; mucous râles are heard at the bases. Over the region of the heart there are the scars left by cupping. The natural præcordial dulness is slightly increased in a downward direction. The impulse of the heart is somewhat heaving; action rather irregular. At the base of the heart both normal sounds can be distinctly heard. Below, and to the outer side of the nipple, these are exchanged for a long, soft murmur and a natural sound. The murmur occurs in point of time during the natural second, and almost half way through the first sound. The clear termination of the first sound is heard exactly as the apex of the heart is felt to beat between the ribs. The murmur is scarcely traceable two inches to the left of the nipple, while on the inner side of the nipple it can be heard as far as the lower end of the sternum. Midway between the point where it is best heard, and the junction of the second costal cartilage with the sternum (at which spot the sounds of the aortic valves are most distinct) the two natural sounds can be heard, then the murmur somewhat resembling a reduplicated second sound. In this position the murmur is heard at the natural interval of rest, that is, just before the first sound. The bruit is not heard at all in the back. The liver is full and slightly tender; urine thick with lithates; tongue coated; bowels regular; pulse irregular, both as to time and force. The treatment adopted was saline mixture, ℥j, with twenty drops of compound spirit of ether, to be taken every four hours.

January 5.—Much relieved. Expectoration has ceased. Ordered ferri citrat., gr. x.; tr. digitalis, gts. x.; aquæ, ℥j; t.r. die.

On January 16, when he was discharged, the following note was made. All the general symptoms are gone except some dyspnœa. Heart's action and murmur much the same.

Remarks by Dr. Hardwick.—As murmurs with the second sound of the heart, dependent on lesion of the mitral valve, are extremely rare, I thought the above case of sufficient interest to be published. It might be asked on what grounds the diagnosis rests. First, it seems clear that the disease was in the mitral valve, because the usual general symptoms were well-marked dyspnœa, lividity, general congestion, engorged liver and kidneys, irregularity of heart and pulse, etc. Also because the murmur was heard most distinctly under the nipple, while the sounds over the aortic valves at the base of the heart were distinct and clear. Secondly, the murmur was evidently with the second sound. A casual examination of the case would have readily mistaken it for an ordinary mitral murmur, accompanied by an intensified second sound, as not unfrequently happens. But a little careful attention easily proved that this clear sound was exactly synchronous with the beat at the apex of the heart, which, on account of the impulse being increased, was more readily noted. Besides, the first sound could be gradually traced down from the base, where both sounds were clear. The direction in which the murmur could be heard was also consistent, being towards the lower end of the sternum, while it was only traceable a very little way towards the back, and in this it was unlike most mitral murmurs. That the bruit was not owing to aortic regurgitation is evident from the fact that the second sound was distinct enough over the aortic valves; or, to express it in other words, the natural second sound was not replaced by a murmur, but only drowned by one at the apex of the heart.

DISEASE OF THE AORTIC VALVES, WITH REGURGITATION, CAUSED BY VIOLENT EXERTION.

(Under the care of Dr. HARDWICK.)

J. W. K., aged 15, was admitted on February 21, 1863, for slight rheumatism. He had suffered from a severe attack of rheumatism two years ago, but was not aware that his heart had been affected at that time. He had only worked a little more than a year, and during the whole of the time, notwithstanding his age, he had been a "striker" to his father, who is a blacksmith. He stated that he had frequently worked more than ten hours a-day.

He is not remarkably strong or well developed for his years. He has had no palpitation or dyspnœa, and is not aware that there is anything wrong with his heart. The action of the heart is regular, but a little more heaving than normal. There is a distinct double murmur heard over the aortic valves. The pulse is full, splashing, and visible; so characteristic of aortic regurgitation as to cause the disease to be examined for at once. He was ordered liq. ammon. acet., ʒiij; sp. ether nitric, ℥ss. 4tis horis.

February 26.—All rheumatic symptoms have disappeared. He was shortly afterwards ordered iron, and discharged in good general health on March 13.

MARKED AORTIC REGURGITATION BROUGHT ON BY VIOLENT WORK—CLINICAL REMARKS.

(Under the care of Dr. HARDWICK.)

Fred. W., aged 19, was made an out-patient, for disease of the heart, on December 16, 1862. He was a puny, delicate-looking lad, not appearing more than fourteen years of age, although he stated that he was nineteen. He had been suffering the last few months from dyspnœa and palpitation. He had never had rheumatism. On examining the heart, there was found a well-marked double murmur over the aortic valves, the second being the louder and longer of the two. His pulse was splashing and visible. On inquiry being made about unusual exertion, the patient said he had worked for above a year in the Middlesbro' Iron Works. His duty was to lift and carry heavy scraps of iron, and he was paid "by the piece." He also stated that the overlooker at length took him away from the work because, in order to earn a large wage, he was accustomed to do above a man's work, and they thought he was damaging his health.

Remarks by Dr. Hardwick.—I have reported these cases because they illustrate so well the causes of disease of the aortic valves, when so far advanced as to allow free regurgitation. The grand cause is violent exertion requiring the breath to be held, especially muscular exertion of the arms. Sometimes, as in one of the above cases, the starting-point is found to be a constitutional disease, and generally rheumatism. The fact of violent exertion being in nearly all cases the cause, explains why aortic valvular disease with regurgitation rarely occurs before eighteen, or at least sixteen, years of age, and why it is almost entirely confined to men in the prime of life, the period when muscular exertions are most called for and practised. The two cases quoted above, although exceptions as to age (the patients being mere boys), are very good examples of the cause, since the hard labour to which each was subjected for a long time was unwarrantable. The same explana-

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tion shows why the disease is comparatively unfrequent amongst women. All this is a great contrast to what we find in mitral disease, which is occasionally seen as early as six or seven years of age, and is common enough in women. The reason is clear, then, why aortic regurgitation is generally met with in sawyers, workers in iron, especially strikers, those constantly employed in lifting heavy weights, etc. I may mention, as another good illustration of the manner in which this disease is produced, a case that came under my notice a few weeks ago. On examining a man for life insurance, who was in easy circumstances, about five feet six inches in height, and not very muscular, I found marked aortic regurgitation; and on my mentioning that such disease was usually produced by violent exertion, he voluntarily stated that he had been in the habit of throwing 56 lb. weights to show his strength, and that he had "puzzled many a strong man" by whirling one of these weights round his head as any one would wave a hat. Besides violent muscular exertion in the strong, less severe efforts in the weak, or those unaccustomed, will produce the same results; and more especially if the aortic valves have been slightly damaged by previous endocarditis.

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Medical Times and Gazette.

SATURDAY, MAY 9.

PHYSICIANS' FEES—GIBBON v. BUDD.

It has so happened that within the last few months the question of the honorary character of Professional fees has been raised and argued in the courts of law with regard both to barristers and Physicians. The members of the Bar may consider that by the solemn judgment of the Court of Common Pleas in Kennedy v. Brown, all questions as to their legal right to remuneration have been definitively set at rest. It is now settled law not only that a barrister cannot maintain an action by virtue of an implied contract, on the principle that the labourer is worthy of his hire, but also that an express agreement between him and his client respecting his remuneration will not be binding. We cannot congratulate the Physicians on having attained an equally satisfactory adjustment of the law in regard to their fees. An important decision has indeed now been pronounced on the subject by the Court of Exchequer, in the case of Gibbon v. Budd. The members of the Royal College of Physicians are no longer in the doubt into which they appear to have been thrown by the injudicious tinkering of this portion of the law attempted by the Medical Act, 1858; but even that doubt was better than the present certainty.

It may be interesting to take a brief view of the state of the law as to Physicians' fees before the Act. This will be found in the marginal note to Veitch v. Russell, 3 Q. B., 928, concisely summed up as follows:—"A Physician has in general no legal right of action for his fees, but he may have it by actual contract, the onus of proving which, in an action for such fees, is on the plaintiff." Thus the difference between the situation of a Physician and a barrister was that the former could bind himself and his patient by an express agreement, while the latter was and is under an absolute incapacity to contract in the matter of his Professional remuneration. In neither case could any implied contract be presumed. The honorary character has attached to Physicians' fees from time immemorial, and in Chorley v. Bolcot, the first case in point in the Reports, the argument on behalf of the plaintiff seems to have rested entirely on a quotation from Tacitus, put forward to show that the "medici" at Rome could recover their fees by action. Lord Kenyon, after throwing a doubt on the fact of the "medici" being a class corresponding to our Physicians, goes on to say,—"But, at all events, it has been understood in this country that the fees of a Physician are honorary, and not demandable of right. And it is much more for the credit and rank of that honourable body, and *perhaps for their benefit also*, that they should be so considered. It never was yet heard of that it was necessary to take a receipt on such an occasion, *and I much doubt whether they themselves would not altogether disclaim such a right as would place them upon a less respectable footing in society than that which they at present hold.*" This state of the law was in fact satisfactory both to the Profession and the public, and no change was wished or called for. In the Medical Act, 1858, however, the following provision was introduced:—

"Every person registered under this Act shall be entitled according to his qualification or qualifications to practise Medicine or Surgery, or Medicine and Surgery, as the case may be, in any part of her Majesty's dominions, and to demand and recover in any court of law, with full costs of suit, reasonable charges for Professional aid, advice, and visits, and the costs of any medicine or other Medical or Surgical appliances rendered or supplied by him to his patients. Provided always that it shall be lawful for any College of Physicians to pass a bye-law to the effect that no one of their fellows or members shall be entitled to sue in manner aforesaid in any court of law, and thereupon such bye-law may be pleaded in bar to any action for the purpose aforessid commenced by any fellow or member of such College."

This provision having become law, the obvious course for the Royal College of Physicians to adopt was at once to pass a bye-law in the terms provided for by the Act; and, had they done so, the present complication could never have existed. But while recognising the advantages of a continuance of the honorary system by making a bye-law preventing any *fellow* of the College from suing under this section, that body has (why we know not) left its *members* first of all to get the interpretation of the clause settled by a lawsuit, and then to enjoy the consequent benefits which we shall presently advert to.

The action of Gibbon v. Budd was, as our readers will remember, brought by a Physician to recover £21 for fees, and was tried before Baron Bramwell at Guildhall, when a verdict was found for the plaintiff for that amount, subject to the reservation of a point as to the construction of the above section of the Medical Act. Mr. Lush, Q.C., subsequently obtained a rule *nisi* for a new trial, or to set aside the verdict and enter a nonsuit, on the ground that a Physician could not recover fees without a special contract.

"On Thursday week, in the Court of Exchequer, Mr. Serjeant Parry and Mr. H. T. Cole, in showing cause against the rule, contended that the Medical Act required that all persons practising the Medical Profession should be registered according to their qualifications. The plaintiff was duly registered, and, as a member of the College of Physicians, he had a right to the remedy specially provided by the 31st section of the Act.

"Mr. Lush, Q.C., and Mr. Dowdeswell, in support of the rule, contended that the statute was not an enabling statute, intended to confer upon a Physician the right to sue; but, on the contrary, imposed upon him a liability to register before he could sue at all; but he was still obliged to make a special contract before he could maintain an action. The law with regard to a Physician's right to recover his fees was in precisely the same state now as it was before the passing of

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the Medical Act, except that he must be registered. If he failed to show a contract, he had no remedy left to him. The Act made no difference, and gave no right that he had not before. The Act did not compel Medical men to register, but invited them to do so, pointing out that if they did not they should not recover their fees in courts of law. Unless the Act of Parliament created a liability which without the Act would not exist, then Physicians had no right to recover. Their rights are not enlarged by the 31st section. They have a right to sue according to their registered qualification. A Physician always could recover fees if he made a contract, and that was his position now. There still must be an actual promise to pay.

"Their lordships were unanimously of opinion that the plaintiff was entitled to recover, and discharged the rule.

"Rule discharged accordingly."

Thus we have a decision by the full court that members of the Royal College of Physicians are entitled to recover their fees without express contract. We have previously in these columns called attention to the results that must inevitably follow. The public will now become universally aware that a change has come over the character of the remuneration of Physicians. Independently of the consequent loss of caste, we repeat our former assertion, that a diminution in the pecuniary gains of the Profession must be expected. Physicians' fees will now be assessed according to the views of common juries; and what those views are, every general Practitioner who has ever had occasion to bring an action for his charges knows but too well. The words of Lord Kenyon, which we have quoted above, apply now as well as they did in his day. We would press those words upon the attention of the College of Physicians, and invite them to stop the consequences we have alluded to by at once extending their bye-law to the whole of their members, and restoring to the remuneration of all Physicians its former honorary character.

THE ARMY MEDICAL DEPARTMENT.

There can be no doubt whatever that the Army Medical Department is very unpopular at the Medical schools—spite of the amended edition of the Warrant of 1858 which has just appeared—and it is not to be wondered at that the more accomplished of our young Medical men hold themselves aloof from the public service.

We have been told, upon undoubted authority, that it is no idle threat of the Commander-in-Chief, that a Medical officer should be made to pay the expenses of any recruit passed by him if subsequently rejected. Not only has this order been carried out, but it is still being acted upon. Its application also we understand is not circumscribed within very narrow limits—such, for instance, as cases of manifest negligence upon the part of the recruiting Surgeon.

A Medical officer is the *only* person connected with recruiting who receives no extra pay of any kind for the performance of the most responsible and essential part played in the enlistment of a soldier; but this consideration does not protect him. We do not believe that the Commander-in-Chief has any authority to enforce this claim. We cannot find that any published documents vest him with it, and we verily believe that if it were resisted it would be found that the Horse Guards authorities are quite powerless. The 59th clause of the Mutiny Act is very clear indeed upon this subject.

The mortality in the Army Medical Department is about 30 per 1000. Service in it entails expatriation, and often the performance of menial and unprofessional offices, such as those connected with branding soldiers; and there is a high probability of eighteen years' service in the subordinate position of Assistant-Surgeon for any one now entering the Department!

That noble spirited public servant, General Outram, might well have given us some words of sympathy, and left us his prophecy that the next war would settle these things *terribly* in favour of the army Surgeon.

Heaven preserve us from war, say we; but in the present troubled state of our foreign relations, we defy any one to say how soon it may appear, and it will then be patriotism alone which will take men into the army, for there are no other temptations held out to members of our Profession.

THE WEEK.

ARBITRATION AND AWARD IN THE CASE OF ADAMS AND PROPERT.

We have received the following for publication, and heartily rejoice that the affair has been brought to a satisfactory and honourable settlement:—

"We, the undersigned, having been delegated with full and unrestricted authority to arbitrate in the matter in dispute between Mr. John Propert and Mr. William Adams, arising out of the late trial of 'Russell *v.* Adams,' are of opinion that the subjoined document, signed by Mr. John Propert, should be considered as a satisfactory and an honourable settlement of the question at issue between these gentlemen.

"Forbes Winslow, 23, Cavendish-square.

"Francis Hird, 17, Clifford street.

"London, May 5, 1863.

"'I am willing to admit that I ought to have complied with the request conveyed to me in Mr. Macrell's letter, dated December 30, 1861, and have conferred with that gentleman, as Mr. Adams' legal adviser, in relation to the charge of breach of promise brought by Miss Russell against Mr. Adams, previously to my forming any opinion of my own respecting its truth. I now recognise if I had done so much annoyance to both Mr. Adams and myself would have been obviated.

"'I also regret that anything done by me should have led others to suppose that I advised or originated the legal proceedings taken by Miss Russell against Mr. Adams. I was, no doubt, misled by certain *ex parte* statements, but was influenced by no personal feelings of animosity to Mr. Adams, but solely by a desire to protect the daughter of a deceased member of the Medical Profession alleged to have been cruelly treated.

"'Whilst solemnly declaring that the motive governing me in these painful proceedings was strictly benevolent in its character, I nevertheless freely allow that, having been deceived by erroneous information, I unwittingly exposed myself to the imputation of acting imprudently towards Mr. Adams, whom I now conscientiously believe to be innocent of the infamous charge which Miss Russell attempted to establish against him in a court of law.

"'John Propert.

"'6, New Cavendish-street, May 5, 1863.'"

PARLIAMENTARY.

The great events of the week have been the discussion on Mr. Gladstone's proposal to impose on the charities of the United Kingdom the payment of income-tax; the surpassingly able speech in which, on Monday night, he supported his proposition, and his quiet withdrawal of the measure when he discovered that neither eloquence nor casuistry would induce his hearers to accept it. Mr. Gladstone's speech was a masterpiece, which, perhaps, he himself has never excelled. But its fundamental errors were patent. Exemption from a tax is not equivalent to a donation from the State, for the State may have no right to impose the tax; and the income-tax is not a tax on the entire property of the country, but a tax on certain individuals only. All will fully concur with much that Mr. Gladstone advanced with regard to the motives which lead men to bequeath large sums to charities; all fully admit that to designate such motives as charitable is to prostitute the term, and few will require convincing that the management and results of numbers of so-called charities merit the splendid invective which he hurled against them. But these arguments are beside the question. The income-tax being a tax on persons, it is the people relieved in our Hospitals, educated in our free schools, and maintained in our alms-houses on whom the burden would fall. That a grasping, hard-fisted miser of the sixteenth century tried to save his soul and redeem his name from utter detestation by leaving his property at the last moment to found a Hospital, is no

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reason why the State should now, in the nineteenth, reduce the number of sick in that Hospital, by taking some hundreds yearly from its funds. Deathbed legacies to charities are, as Mr. Gladstone says, not to be encouraged, and ought therefore be laid under contribution. Granted; but let the contribution be in the shape of a heavy legacy duty, not a tax which will vary from year to year with the necessities or fears of Government. Before the money comes into the coffers of the charity, mulct it as heavily as you please, but when once it has been the source of sustenance to the helpless, health to the sick, and education and shelter to orphan children, it must be sacred from the tax-gatherer. If certain charities do not fulfil the intentions of their founders, if they are sources of idleness and improvidence, and if their revenues are misapplied, the plan is clearly to reform them; but this will not be done by deducting sevenpence in the pound from their annual incomes.

In the course of his speech, Mr. Gladstone acknowledged that the objections urged to the impost told most strongly in the case of Hospitals, and he went so far as to hint that Parliament might grant a subsidy to those charities to recompense them for their diminished income. It had been shown by Lord R. Cecil and Mr. Malins, in the preliminary debate of Thursday, the 30th ult., that, in the case of St. Bartholomew's, the sum proposed to be taken would support forty in-patients all the year; but, as the patients generally did not remain longer than four or five weeks, the effect would be that in the twelve months 400 in-patients would be excluded by such taxation from its wards. Add to St. Bartholomew's the case of eight or nine other great Hospitals, and there would be no fewer than 4000 patients shut out from the London Hospitals alone in consequence of this measure. Every argument, however, which applies to Hospitals would equally apply to educational and other eleemosynary institutions. That the latter are mismanaged in a manner which Hospitals are not, calls for the interference of Parliament, but moral imperfections are not punishable by taxation, either in the case of individuals or corporations. The repugnance with which Mr. Gladstone's measure was generally regarded was evidenced by the enormous deputation, headed by the Duke of Cambridge and the two archbishops, and including men of all shades of political opinion, which besieged the minister in Downing-street on the morning of the 4th.

"On Thursday, the 30th ult., in answer to a question by Mr. M'Evoy, Sir R. Peel stated that considerable inconvenience arose in Ireland from the committal of dangerous lunatics to county gaols by the magistrates instead of to asylums, particularly in the counties of Donegal and Wexford. When the new lunatic asylums were completed an alteration in the law would be effected.

"On Monday, the 4th inst., the Naval Medical Supplemental Fund Society Winding-up Act Amendment Bill was read a second time, after a short debate.

"On Tuesday, in reply to a question by Mr. Moffat, the Chancellor of the Exchequer said that the report of the commission of international inquiry on the sugar duties which lately met in Paris was virtually completed.

"Debates on Mr. Walters' resolution on Education and Mr. E. Bouverie's motion on the Act of Uniformity divided the evening."

On Wednesday night, the house went into committee on the Security from Violence Bill. A return to the sensible old system of brute punishment for brutalised men, notwithstanding Sir G. Grey's opposition, speaks well for the good sense of the house. We agree with Mr. Marsh, that corporal punishment is one of the very best of punishments, because nobody likes it. Occasionally, people are found breaking windows to get sent to gaol; but nobody ever breaks a window to get a flogging. Even hanging may appear a desirable mode of death; and we have lately had more than one case of murder where the ostensible reason given by the criminal was that he wished to be hanged, but we never heard of a crime being perpetrated in order to qualify for the cat. We have no doubt that the maximum punishment of 150 lashes at three separate whippings of not more than fifty each, to which the house agreed, will be an effectual quietus to the garotters.

THE ELECTION OF A PHYSICIAN AT THE DERBYSHIRE GENERAL INFIRMARY.

At a special general meeting of the Governors of the Derbyshire Hospital, a sharp discussion arose on the question of whether a young Physician or an established General Practitioner would be the most eligible person to perform gratuitous services, for the advantage of the town and neighbourhood. The form the question took was, whether the Physicians to the Infirmary should be reduced to one, and the Surgeons increased to four. The true point at issue, we opine, was, whether the town and neighbourhood of Derby could afford practice for two consulting Practitioners in Physic. Some of the speakers, as was probably to have been expected, indulged in those odious things—comparisons. The following is an elegant extract from a Mr. Gisborne's speech:—

"For my own part, I believe that the general Practitioner, if he be a man of some experience, will perform the duties of the office better than some young recruit, for the bulk of young Physicians have had very little experience—they are not tried like young Surgeons, and the consequence is that they are as verdant as a leek."

The meeting ultimately came to the conclusion that the number of Medical officers should remain as before.

ST. GEORGE'S HOSPITAL.

A vacancy having occurred in the Surgical staff of the Hospital, by the death of Mr. H. C. Johnson, Mr. Henry Lee, who it will be recollected not long ago left King's College Hospital, will now be elected full Surgeon at St. George's. Many of Mr. Lee's friends thought that there was a certain risk in his changing his sphere of labour, but the result proves that his judgment was sound. We understand that several gentlemen have been ready to come forward as candidates for the office of Assistant-Surgeon, vacant by Mr. Lee's resignation. The only names, however, which have publicly transpired are those of Mr. Brodhurst, Mr. Naylor, and Mr. Hornidge. It has been usual for the Governors of St. George's Hospital to fill up the vacancies as they occur from men of their own School—a principle which we believe is still very strongly advocated at that institution; but on the present occasion the friends of Mr. Naylor (the senior candidate among the St. George's men) have advised him, on account of his health, not to add the arduous duties of Assistant Surgeon to his other already numerous Professional engagements. It is not a little curious that within two years of Mr. Hawkins' and Mr. Cutler's retirement from St. George's, Mr. H. C. Johnson and Mr. Gray should have been removed by death, and that Mr. Athol Johnson and Mr. Naylor should have hesitated to undertake the duties on account of their state of health. Under the circumstances, the Governors have thought it right to recruit their staff by candidates from the general ranks of the Profession, and we understand that Mr. Brodhurst, although not a St. George's man, will meet with very general support, both from the Governors and from the Medical staff.

TERMINATION OF THE AFFAIR OF PROPERT AND ADAMS.

It is with the most sincere pleasure that we announce the entire and full termination of this unpleasant business. In another paragraph it will be seen that two gentlemen—than whom none others could be better fitted for the task, and whose award was sure to meet with universal acquiescence—have investigated the matter on behalf of the litigants, and have come to a decision. As a fitting and graceful consequence, we are glad to say that Mr. Propert has called on Mr. Adams,

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and expressed his regret in the most frank and honourable manner at the anxiety to which Mr. Adams had been subjected. This is as it should be. To be deceived by distressed women, *humanum est*. There is nothing to be ashamed of in that. Nay, it is on the whole indicative of a better disposition than the hard and callous temper of some men who boast that "they are never taken in." But to acknowledge a mistake frankly, when fully convinced of it, is also a sign of a generous temper, and the fact of making such an acknowledgment not only wipes out past grievances, but elevates the person making it to a higher position than before. Meanwhile, we may announce that the subscription to defray Mr. Adams's law expenses is proceeding vigorously, and that we believe Mr. Propert will contribute handsomely towards it. A committee has been formed, which embraces the names of the most eminent members of our Profession in town and country, with Mr. J. B. Walker, of 17, Cliftongardens, W., as Honorary Secretary and Treasurer.

DECAPITATION.

We have all heard the story of the beheaded nobleman whose *caput mortuum* is said to have pronounced the words, "Thou liest," when the executioner presented it to the bystanders as "the head of a traitor," and as physiologists we may have sought the foundation of the story, if foundation it had, in a reflex contraction of the facial muscles after death. The following account of some experiments in the Paris slaughterhouses is furnished by the correspondent of the *Times*. It is curious, as illustrating the time during which excitomotory phenomena will continue in the facial and other muscles of decapitated animals. The idea that sensation is equally persistent is out of the question, although such appears to have been the conclusion of the experimenters.

"The Conservator of the Paris slaughterhouses, being of opinion that the mode of slaughtering oxen by knocking them on the head with a heavy metal instrument must cause the animal excessive pain, endeavoured to discover another mode to avoid this suffering, and at the same time to preserve the slaughtermen from the danger to which they are exposed in the performance of this disagreeable duty. He thought that enervation would accomplish his object, and his opinion was founded on the doctrine taught by physiologists, who assert that the separation of the spinal marrow at once destroys animal life. Experiments were tried on more than 100 oxen, and it was demonstrated that although the ox was more quickly put to death, his sufferings were not the less excruciating, inasmuch as his entire vitality was preserved, and that death did not ensue until after an agony of fifteen or sixteen minutes. These experiments were repeated on calves and sheep, and, in place of merely cutting the spinal marrow, the head was separated from the body, in order to observe the degree of vitality which would still remain in each of the separated parts. A calf was suspended, and a butcher's boy cut his head off with a knife. This operation was accomplished in a quarter of a minute. The head was immediately placed on a table, and it lost two ounces and a half of blood in the space of six minutes. During the first minute all the muscles of the face and neck were agitated with rapid convulsions, and during the two following minutes the convulsions assumed another character. The tongue was stretched out of the mouth, which opened and closed alternately; the nostrils opened, as if the animal experienced a difficulty of breathing. The convulsions became more active when the tongue or nostrils were pricked with a needle. When the hand was applied to the mouth or nostrils, respiration was felt to be continued by the air entering and coming out. When a finger was brought within an inch of the eye, in the direction of the pupil, the eye was quickly closed, as if it wished to avoid the touch of the finger, and the same result followed at several intervals. At length the eye did not close until the eyelid was touched. It was remarked that the eye remained closed as long as the finger remained in contact with it. These phenomena became gradually weaker, and ceased entirely after four minutes. Even then, when the spinal marrow was pricked with a needle, the convulsions recommenced in the entire face, tongue, and eyes. After the sixth minute all contraction ceased. While these experiments were being performed, the body, which remained suspended, was greatly agitated. The agitation ceased gradually, and was replaced by contractions, which continued more than an hour. But this was always observed, in whatever manner the throat was cut. Forty calves and fifty sheep were decapitated, and they all presented the same phenomena. The director of the Paris slaughterhouses convinced himself by these experiments that an ox suffered more by being decapitated than by being struck down with a heavy bar of iron; and that the bar, by producing an immediate stupefaction, prevents the animal from suffering, while the bleeding, immediately effected, deprives him of life before the head recovers sensation."

ACTION AGAINST A DENTIST FOR THE ADMINISTRATION OF CHLOROFORM.

A curious trial has recently taken place at Philadelphia. The plaintiff, thrown from a car upon his head, was taken up insensible, but was able to resume his occupations next day. About three months after this, he went to Dr. Winslow, a dentist, for the purpose of having several teeth extracted. Chloroform was administered in large quantities, during intervals, for three-quarters of an hour. On leaving, he staggered like a drunken man, and afterwards he became worse, his articulation being indistinct, paralysis of the left side coming on on the fourth day. After a prolonged period, he was enabled to partially resume his employment as a driver, and brought this action for the loss this sickness had caused him. Dr. Longshore, who had attended him during this illness, gave his opinion at the trial that the paralysis was induced by the chloroform, adding that chloroform is never administered without some degree of paralysis resulting, although this is only usually temporary. Dr. Harreson stated that he knew of a case in which paralysis was caused by chloroform. Indeed, so dangerous is the use of this agent, that it is not employed at the Pennsylvania Hospital. For the defence, it was set up that Dr. Winslow was a graduate, twenty years in practice, and eminently skilled in the use of chloroform. Paralysis is never a result, whatever the quantity administered; and it probably resulted in this case from the injury to the head previously received. Professor Gross testified that chloroform was regarded by the Profession as a proper agent for the relief of pain. Since 1842, he has given it to all classes and at all ages, without any ill effect, and believes the paralysis in this case did not arise from its use. In one case, the Professor had administered eight ounces of chloroform, the patient being kept under its influence during three hours. It is, of course, a dangerous agent, and so is laudanum, etc. Judge Hare, in charging the jury, laid down the principles of Medical responsibility in very clear terms:—

"If a Medical Practitioner," he said, "resorts to the acknowledged proper sources of information, if he sit at the fect of masters of acknowledged high reputation, and does as they have taught him, he has done his duty, and should not be answerable for the evils which may result from errors in the instruction he has received. Medical opinion varies from time to time. What is taught at one period may be discovered to be erroneous at another; but he who acts according to the best known authority, is a skilful Practitioner, although that authority should lead him, in some respects, wrong. If, however, you should decide that chloroform was an improper agent, or that it was erroneously administered in this case, you will then have to consider whether the paralysis was the result of its administration. . . . If the patient were, from previous circumstances (as the injury of the head), predisposed to paralysis, it might well happen that the extraction of the teeth without the chloroform, or the use of chloroform without the extraction, would bring on the attack. Even if this were the case, still it would not be just to make the defendant liable for consequences which he could not foresee, which were not the ordinary or probable results of what he did. He was only bound to look at what was natural and probable, to what might reasonably be anticipated. Unless some such guard is

thrown around the Physician, his judgment may be clouded, or his confidence shaken by the dread of responsibility at the critical moment, when it is all-important that he should retain the free and undisturbed enjoyment of his faculties, in order to use them for the benefit of his patient."

The verdict was for the defendant.

LOCAL REPORTS ON SMALL-POX.

I. *The Epidemic in St. Marylebone.* By R. D. Thomson, M.D., F.R.S., Medical Officer of Health to St. Marylebone, and President of the Metropolitan Association of Medical Officers of Health.

From the migratory character of the inhabitants of this extensive district, disease of an epidemic nature is very liable to be introduced among its people. As a proof of the fluctuation of its population, it is sufficient to quote the fact that, although during the ten years 1851—61 the births exceeded the deaths by 10,649, the population only increased during that period by 3984. It is not to be wondered at, therefore, if, with this mixture with strangers, small-pox is scarcely ever absent from the parish. But, instead of isolated cases occurring at the present time, we find it spreading in every direction. In the early and middle parts of 1862, the average number of cases of small-pox occurring at eleven Medical and Charitable Institutions was 1 per month; but, in September, 10 cases were attended at one Dispensary in the southern parts of the district. The cases seemed after this to decline, but in December 3 were returned; and in January, February, March, and April, the numbers were, respectively, 11, 11, 21, 41; while the deaths amounted to 4, 2, 1, 8. It must be remembered that these do not include private persons affected with the disease, but simply those who have applied for relief at the public Institutions, the returns being most liberally forwarded every week to the Medical Officer of Health by the resident Medical Officers. The Medical Officer of Health is thus enabled to point out where vaccination and re-vaccination is more immediately required; although the origin of the contagion has been usually traced to foreign sources. Several patients have been sent to the Small-pox Hospital, but latterly this means of safety has failed, by the Hospital being full. The guardians are now looking out for a temporary Hospital; bills have been issued urging the people to have their children vaccinated and themselves re-vaccinated, with the threat that if the Vaccination Act is not complied with, legal measures will be adopted, as the assistant-overseer has been appointed to carry out the law. The vaccinations by the district vaccinators have increased from 213, 230, 244, in January, February, March, to 405 in April, which nearly reaches the number of births in that month. For some years the clergy and masters of schools have agreed that before admitting a child to school it shall be examined to ascertain if the vaccine cicatrix is present. This may account for the fact that the disease has proved hitherto mild among children under ten years of age, and that many of the returns of sickness are of persons above that age, while the deaths are almost exclusively among the unvaccinated. A method has been partially adopted in this district which adds considerably to the number of vaccinations. The vaccinators obtain from the District Registrar the addresses of the children born, and report to the Medical Officer of Health those who refuse to have their children vaccinated. By him a letter is addressed to the parents, stating the law, and the penalty for its infringement, and that if resisted a prosecution will be instituted, he being authorised by the local authority to take such steps. Few refuse to listen to this appeal.

II. *On Small-Pox in St. George, Hanover-square.* By R. Dauitt, M.R.C.P., etc.

Having been requested to contribute a short account of the quantity of small-pox, I may first say with thankfulness that I have not seen one case in private practice, and that the following figures are mainly derived from returns and other documents which came to me as Medical Officer of Health.

The entire number of cases of which I have learned the existence in the Hanover and Mayfair sub-districts, *i.e.*, the old upper part of St. George, Hanover-square, north of Piccadilly, from December to April 25, is 24.

No death from small pox had occurred in this part of the parish since December, 1860, when the porter at Lansdowne-house died of it. In the four quarters ended Lady-day, 1859, there had been 1 death, and 5 cases not fatal. In the similar period ended Lady-day, 1860, 33 cases were known to have occurred, including 14 in public practice, and 2 fatal cases. In the year ended Lady-day, 1861, were 10 cases, besides two heard of in private practice, one of which mentioned above was fatal. Up to Lady-day, 1862, four cases; no death. There were no fresh cases heard of till December, 1862, when one case in private practice was heard of in Park-lane, and shortly afterwards a woman came with the eruption on her to a house in Robert-street, Grosvenor-square. She was immediately sent to the Small-pox Hospital.

In January, 1 mild case occurred in Hart-street. In February, 2 cases in the house in Robert-street, 1 of a young man who came ill with small-pox to South Moulton-street; 1 in Mount-row; and 1 case of a man who had been sent to the Fever Hospital, and took small-pox there; 2 cases heard of in private practice in Bruton-street. In March, 5 cases, one of which was a child, in the house in Robert-street, which died. Up to April 25 there had been 5 more cases in public practice. Besides these, an infant, three weeks old, which had been born in Charing-cross Hospital, was discharged with the small-pox on it, and died in this parish. An epileptic patient, aged 30, died of it in Piccadilly on April 25; and 2 cases were heard of in private practice in Mint-street.

Out of these 24 cases, 11 were 14 and under; 7 adults. Ages of the remainder not known. 12 had been vaccinated, 5 had not been; of these one was a child of 10 months, who died in Robert-street, and whose parents had only lived there three weeks; 1 was a child who had had small-pox already; and 1 the newly born infant.

The estimated poor population in the Hanover and Mayfair sub-districts, amongst whom 17 of the 24 cases occurred, is 13,000, out of a total population of 33,000.

To show the impediments to vaccination, it may be mentioned, that in March a messenger was sent to inquire after 126 children, born and registered in Mayfair in 1862, whose vaccination had not been registered. Of the 126, 31 had been vaccinated by Mr. Jay, the able public vaccinator, 36 by some one else, 22 had not been vaccinated, 29 had gone away, and 6 had died.

Every precaution is taken against the spread of the disease by the guardians of the poor and the sanitary committee. A proper carriage has been for years used for the conveyance of the sick, and a detached building fitted up for their reception. Every means is adopted to encourage vaccination, such as sending round to inquire from house to house, especially for children born in the parish. The schools, containing nearly 2000 children, are visited, and the unvaccinated sifted out. As a specimen, in one school 323 children were lately examined, and 7 of the number were found unvaccinated. These were either newcomers, or from amongst the lowest and most improvident class. The *girls* were clean; many of the *boys* and *infants* very dirty, and several with diseased skins. I quite endorse the sentiment, that with a fluctuating population like that of the lower orders in great towns, universal vaccination is hopeless, and that, even if it were attained, the population is so dirty that it would hoard up the germs of small-pox till a favourable season calls it into activity.

Out of our whole number, 2 were sent to the Small-pox Hospital, 7 were received into the small-pox wards in the workhouse, and 1 into each in turn. These wards have received altogether 56 patients from February 7 to April 29—viz., 8 as above, 46 from Belgravia, whose history will be given by Dr. Aldis, 1 nurse in the workhouse, and 1 infant born there.

P.S.—Five patients have been received from Pimlico between April 29 and May 7.

REPORT ON THE PHYSIOLOGICAL ACTION OF PODOPHYLLIN.

By FRANCIS ED. ANSTIE, M.D., M.R.C.P.,

Assistant-Physician to the Westminster Hospital, and Lecturer on Toxicology to the School.

(Continued from page 223.)

Experiment VIII. was a repetition of *Experiment* VI. Forty minims of the alcoholic solution, containing three grains of

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podophyllin, were injected into the peritoneum of a healthy young cat at 1 p.m.

Symptoms of alcoholic intoxication were produced, and reached their climax in about an hour and a-half, thenceforward subsiding.

3.5 p.m.—The cat vomited, and this was repeated several times: the animal also uttered cries.

3.14 p.m.—The cat passed solid fæces, and directly afterwards a semifluid evacuation.

4 p.m.—Purging has been almost incessant since it was first noticed. The motions are quite fluid, and latterly have consisted of mucus deeply stained with what appears to be bile.

4.30 p.m.—The cat has just passed a motion which is stained with blood, and consists otherwise entirely of gelatinous mucus.

8 p.m.—The purging has continued at intervals till a short time since, but it has now ceased. The cat has become violently convulsed; the convulsions recur every two or three minutes. Respiration loud and panting. Circulation 120.

8.30 p.m.—The convulsions have ceased, and the animal lies quite insensible on its side, breathing very laboriously about ten per minute.

9 p.m.—Respiration has ceased; the heart beats feebly.

9.3 p.m.—Heart stopped.

On post-mortem examination the peritoneum was found free from inflammation. Throughout the small intestine, and to a less degree in the large, the mucous membrane was highly congested, and thick, bloody mucus was effused on its surface. The liver was natural in appearance; gall-bladder empty.

Experiment IX.—Eight minims of the alcoholic solution, containing half a grain of podophyllin, were injected into the peritoneum of a full-grown rat at 12.58 p.m. The animal was strong and lively.

1.15 p.m.—The animal develops strong symptoms of alcoholic poisoning. Left to itself, it crouches with its eyes closed; roused up, it moves slowly, dragging the hind quarters.

From this time the symptoms of alcoholic poisoning steadily developed, and by 3.50 the animal was lying on its side insensible, and occasionally convulsed. Respiration 64. Circulation 130. At this time the rat began to pass pellets of fæces every two or three minutes; the latter ones were mixed with mucus and a little blood.

At 4.10 p.m. the respiration, which had been growing more and more feeble, ceased, and circulation was arrested two or three minutes later. The rapidity with which the animal succumbed was evidently chiefly due to the influence of the alcohol.

Post-mortem examination showed that the peritoneal cavity was free from any traces of inflammation.

The large intestine was occupied by two or three pellets of semi-solid fæces of the usual colour, with a little mucus, and exhibited no inflammatory colour. The small intestine appeared vividly congested, and contained thick mucus in considerable quantities. Liver of natural appearance.

Experiment X.—This was a repetition of the last experiment. Eight minims of the alcoholic solution were injected into the peritoneum of a rat (not quite so large or strong as the last) at 1.14 p.m.

In this case the symptoms of alcoholic poisoning were even more rapidly developed in an extreme degree. At 3.2 the animal was lying on its side unconscious. Respiration 75; circulation 160; frequent clonic convulsions. Respiration became quite changed in character in the course of another hour; by 4 p.m. it had become gasping and very slow, and the temperature had sunk very low; the convulsions had now ceased. In this condition the animal remained with hardly any change for about two hours longer, when the breathing ceased, and the heart ceased shortly afterwards.

Post-mortem examination showed appearances almost exactly identical with those observed in the last experiment, though no actual purging had taken place during life.

Experiment XI. was a test experiment with alcohol. Eight minims of sp. vin. rect. (P. L.) were injected into the peritoneal cavity of a rat, full grown, and about as large as the subject of the last experiment. The animal very rapidly became stupified, and developed, in succession, paralysis of the hind-quarters, insensibility of the surface, complete unconsciousness, and convulsions. Death took place in eight hours, respiration ceasing a minute or two earlier than circulation. Post-mortem examination showed no inflammatory changes either in the peritoneal cavity or in the alimentary canal.

The conclusions which result from the experiments so far detailed are as follows:—

I. Podophyllin, when injected into the peritoneal cavity of dogs, cats, or rats, has no irritant action upon the serous membrane unless it remain unabsorbed, lying for some time in contact with it.

II. Podophyllin, when injected into the peritoneal cavity, passes (except the excess, *vide Experiment* V.) into the blood, and exercises a special influence of an irritant kind upon the mucous membrane of the intestines (usually of the small intestine only.)

III. As a secondary result of this irritation, or perhaps as a mere consequence of the squeezing of the gall-bladder by the abdominal muscles in repeated efforts at defecation, bile is occasionally poured out in large quantities, but this is by no means necessary.

IV. Neither poisonous doses, nor those which produce what may be called a medicinal effect, appear capable of exciting any inflammatory process in the liver.

V. For all these reasons it appears pretty certain that podophyllin, in the animals above mentioned, does not act directly on the liver; and that the catharsis produced is due to increased secretion from the intestine, consequent on the specific irritation of its mucous membrane.

(To be continued.)

REVIEWS.

Clinical Medicine. Observations Recorded at the Bedside, with Commentaries. By W. T. Gairdner, Physician to the Royal Infirmary of Edinburgh, and Lecturer on the Practice of Medicine. Edinburgh: Edmarstone and Douglas. 8vo. 1862. Pp. 741.

Dr. Gairdner's work does not profess to be a systematic treatise on the practice of Medicine. It is rather, as the author observes in his preface, an attempt to render into written words the substance of clinical teaching, the very facts observed, the very ideas suggested by the facts, and as nearly as possible the very doubts, difficulties, successes, and failures actually encountered by a teacher of some years' experience in communicating with his pupils at the bedside in cases of more than ordinary interest. In this attempt, we are bound to say that Dr. Gairdner has been eminently successful. He is unquestionably a most careful observer and able exponent of nature, and his descriptions are so graphic that the reader may readily fancy himself at the bedside, and taking part in the consultation on each individual case. The work is a collection of lectures and memoirs, prepared from time to time, and now published with but slight alterations. In some instances, the same subject is treated of in fragmentary portions of different lectures delivered at long intervals. This plan possesses the merit of exhibiting the exact impressions which the author intended to convey to his hearers at the time, and makes the lectures of particular value to his old pupils; but we venture to suggest that the work would be more prized by the general reader and the busy Practitioner with a little condensation and re-arrangement in this respect.

The work contains some excellent remarks on the mode of studying clinical medicine and on case-taking, which are evidently the words of a profound thinker and of a sound Practitioner. They would have formed an appropriate introduction, instead of being placed at the end of the book. It is Dr. Gairdner's practice to dictate at the bedside the more important facts bearing on the history and progress of a case, and not to leave the disentangling of the intricacies of mingled fact and theory which generally enter into a patient's story to the ready pen of an assistant. He objects to any fixed method in recording cases, as tending to interrupt unreserved communication with the patient, and as imparting a dry and pedantic character to the Physician's inquiries. It too often happens that amidst the paraphernalia of a complicated method the true nature of a patient's disease is entirely overlooked. Speaking of the difficulty sometimes experienced in arriving at the truth in a patient's story, Dr. Gairdner observes:—"There is but one method of getting over these difficulties—*gain the heart of your patient*, and you have gained the key to his case; fail in this,

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and you may labour in vain with all the systems and all the notes in the world to help you. Nay, it is precisely when your patient is most perverse, or fanciful, or stupid, that your note-book and your fixed and formal questions do most mischief. The least appearance of art on your part—the faintest trace of what may be construed as impertinent curiosity or skilful management, suffices to baffle your inquiries. The patient's mind is on the rack, and he either takes refuge in sullen silence, or indulges in answers made to suit what he fancies to be your particular whim. He is all attention to your words, and gives much more consideration to them than to his own feelings. If you are busy with your pen or pencil, so much the worse."

Space will not permit us even to allude to many of the important subjects ably discussed in this volume. We would particularly commend, however, to the student and practitioner the chapter on Cardiac Murmurs. We have never before seen this difficult topic treated in so able, lucid, and practical a manner. The student will find here the entire subject in a nutshell, and put in such a manner that he cannot fail to understand it. The descriptions of cardiac murmurs, and the observations on thoracic disease generally, are illustrated by numerous ingenious and most instructive diagrams.

Another chapter contains some interesting observations on aneurisms, and particularly on contraction of the pupil and laryngeal spasm as symptoms of aneurism of the arch of the aorta. Cases are recorded showing the latent character sometimes assumed by pneumo-thorax, while the "tactile sensation," and the "*râle crépitant sec à grosses bulles*" of Laennec are recognised among the physical signs of emphysema.

Continued fevers are discussed at great length, and the author advocates the specific distinctions between typhus, enteric fever, and relapsing fever. In reference to this point, the following remarks deserve attention:—

"No one can pretend to have had access to all, or nearly all, the fever cases of London, during however short a period. But in Edinburgh, Dr. Begbie and myself probably have seen, or have had the means of knowing about, very nearly all the fever cases; and therefore when I declare to you, that within my experience for ten years past no instance has occurred of a decided origin of enteric fever in a group of typhus cases, or of typhus fever in a group of enteric cases, I am entitled to say that I have obtained very strong evidence in corroboration of the view that these two diseases are, in reality, different diseases, and not mere varieties of the same disease."

Some interesting observations are made on the mental state of patients suffering from enteric fever. Cases are recorded where this resembled a sort of reverie, or cataleptic stupor, with dilated pupils, and contrasted strongly with the typhomania and contracted pupils of typhus.

Dr. Gairdner's remarks on the treatment of disease are thoroughly sound. He does not aim at striking into a new path, and he pushes no extreme. While he receives with reserve and applies with caution the dicta of past experience, he does not consider himself at liberty to give an arbitrary denial to conclusions founded on the long-continued observation of distinguished Physicians. Accordingly, he has not lost faith in blood-letting as a remedy for pneumonia, but he believes it to be very useful in fit cases, although very apt to be made a bad use of in incautious hands. In the treatment of pneumonia, he puts great trust in antimony, in doses of from $\frac{1}{4}$th to 1 grain. Even in cases of great debility he does not look upon it as contra-indicated, although he then combines it with diffusible stimulants. It is important to observe that he regards the ordinary physiological effects of antimony as quite opposed to its therapeutic action, and that whenever they occur he makes it a rule to suspend the remedy or diminish the dose. In the treatment of pneumonia, as well as of other acute diseases, he strongly condemns the indiscriminate employment of large quantities of alcoholic stimulants. He gives alcohol, not as food, but as an adjuvant to food. While agreeing with the late Dr. Todd in thinking that alcohol may diminish the frequency of the pulse, and restrain the tendency to delirium in acute disease, he demurs to the inference that delirium and other bad symptoms, if increased under small doses, are to be kept down by giving much larger quantities. He regards flushing of the face and increased feverishness as a contra-indication to alcohol, rather than a reason for increased administration. Hence he has never had occasion "to sluice the head well with cold water, or to use any of the other means recommended in Dr. Todd's fourteenth lecture, in order to distinguish 'the coma of alcohol' from 'the coma of disease,' in cases of accidental over-stimulation."

In the treatment of scarlatina, all local applications to the throat are objected to, and the patient is recommended to inhale the steam of hot water from the beginning to the end of the fever.

The various remedies for cholera are discussed, and all heroic treatment is shown to be worse than useless. The treatment indicated by the pathology of the disease, as well as most commended by experience, consists in supplying fluid to the blood by the intestines, the skin, and the lungs. This is effected by making the patient drink cold water in abundance by the mouth, by enveloping the body in wet cloths covered by a sufficiency of blankets, and by surcharging the air of the apartment with vapour. This plan of treatment was advocated so long ago as 1832 by Mr. John G. French, of London.

Some excellent remarks will be found on the treatment of delirium tremens, which the author regards as a spontaneously curable disorder. The ordinary routine practices by opium, stimulants, digitalis, or Cayenne pepper are strenuously condemned, and the author trusts mainly to good nursing and attention to diet, having recourse to opium in small doses in protracted cases only, and always discontinuing it if the pupils become at all considerably contracted under its use. Thirty cases under the author's care, with only one death, and that from double pneumonia, bear witness to the success of the treatment. Dr. Gairdner exposes a popular error adopted by several recent writers, viz., that delirium tremens is often due to the individual *having stopped drinking*. He shows that the truth is exactly the other way, and that the disease does not depend on the ceasing to drink, but that the ceasing to drink depends on the commencement of the disease.

Thoracentesis, according to the plan of Dr. Bowditch, of Boston, is recommended in cases of pleuritic effusion with much distension. The remarks on this subject, together with a letter from Dr. Bowditch, giving the results of his extensive experience of the operation, are well worthy of attention.

In the treatment of dysentery, Dr. Gairdner has obtained great advantage from large emollient enemata, containing from five to ten minims of creasote, and repeated twice or thrice daily.

Lastly, Dr. Gairdner is a strong advocate for Dr. Christison's plan of treating renal dropsy with saline diuretics. So far from acting injuriously on the kidneys, he maintains that when diuretics fail, it is only in rare instances that other remedies will be found of material service. He observes:—

"Looking to the accumulated evidence of my own experience and that of others on this subject, I confess I am quite at a loss to understand the modern bias in favour of diaphoretics and purgatives, as opposed to a diuretic treatment, except upon the ground of a theoretical prejudice, adopted without due consideration of the facts of clinical experience."

We have said enough to convince our readers of the great merits and thoroughly practical nature of Dr. Gairdner's work. It is one which adds materially to the author's high reputation as a pathologist and clinical teacher, and reflects great credit on the Edinburgh School of Medicine. The University of Glasgow has been fortunate in securing the services of so able a clinical professor.

Handbuch der Praktischen Medicin. Von Dr. Hermann Lebert.

Handbook of Practical Medicine. By Dr. Lebert, Professor of Clinical Medicine in Breslau. Two vols, 8vo. Tubingen. 1862. Third Edition.

The works of Professor Lebert have been so long and so favourably known in England, that the task of introducing to our readers the third edition of his "Practical Medicine" will be very simple. Indeed, the book speaks for itself in more ways than one, for its career has been both short and brilliant. It is scarcely three years since the first edition was brought out, and although consisting of two immense volumes of above 1000 pages each, not only has a third edition been called for, but the work has already been translated both into the Russian and Dutch languages—facts which speak in its favour more plainly than words. As it would be out of the question for us to attempt even to give an idea of the contents of two such enormous volumes as now lie before us, we think it will be more interesting to our readers if we devote the space at our disposal to a brief *resumé* of Lebert's

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views on small-pox—a subject which appears to be the chief Medical topic of the day.

First, as regards the pathology of the disease. The inflammation, he says, begins in the rete mucosum, and superficial layer of the cutis vera; but that is merely the secondary result of the blood-poisoning. The blood itself he finds to have undergone a peculiar change. It is of a dark, dirty colour, has very little tendency to coagulate in the vessels after death, and a very great tendency to stain the tissues with which it is in contact—for example, the endocardium, and inner coat of the arteries. Dr. Newkomm, Lebert's assistant, has also found a peculiar large form of crystals in the blood of small-pox, the true nature of which has not yet been ascertained. Next, as regards the condition of the internal organs, Lebert remarks that in two-thirds of his cases, which appear to be tolerably numerous, enlargement and softening of the spleen was present. The organ was of a dark red colour, and showed the Malpighian corpuscles unusually distinct. This condition of the spleen was noticed in children as well as in adults.

In about one-half of the cases examined the solitary glands of the small intestines were found enlarged, but not ulcerated. In nearly all the cases the brain and cerebral membranes were congested, and, at the same time, there was an unusual amount of fluid in the ventricles and under the arachnoid. The quantity of fluid in the pericardium was also observed to be in general increased. The lungs were almost invariably congested, and in several of the cases pulmonary apoplexy was found. Pneumonia, on the other hand, was very rare, although the contrary has been observed to be the case at Berlin.

Ecchymosis of the pluræ, pericardium, and of the mucous membrane of the stomach was also occasionally noticed.

In one-fourth of the cases only were pustules to be found in the larynx, trachea, and bronchi, although they were constantly present in the gullet. And what was still more remarkable, in only three cases were pustules seen in the œsophagus. Lebert concludes, from his own observations, that chicken-pox, cow-pox, and small-pox are merely different grades of the same disease, and consequently that a person may be infected with true small-pox either from a case of chicken or cow-pox. Moreover, he says that the more general the epidemic, the greater is the relative proportion of mild cases. Small-pox is contagious in all its stages, but less so during incubation than in the progress or in the decline of the eruption. The infection is communicated either by the inhalation of contaminated air, or by contact. He looks upon small-pox as the most infectious of all diseases, and says that, in the Zurich Hospital, he frequently found that the convalescents from typhus took small-pox, while the convalescents from small-pox rarely took typhus.

As regards treatment, we need only make one observation, namely, that, in order to prevent pitting, Lebert adopts the simple plan of covering the face with nicely-adjusted strips of common sticking-plaster (leaving, of course, the openings of the mouth and eyes free). He keeps the plaster on for five or eight days, and thinks it acts as an abortive by virtue of the pressure it exercises on the pustules.

A Systematic Handbook of Volumetric Analysis, or, the Quantitative Estimation of Chemical Substances by Measure. By Francis Sutton, F.C.S. Pp. 278. Churchill and Sons. 1863.

In no department of human knowledge have such wonderful changes been wrought during the last few years as in that usually denominated chemistry. To the advance of chemistry are due innumerable new sources of wealth, comfort, and happiness. It has fed, lighted, warmed, and clothed us by products that were entirely unknown even by name to our forefathers, and, in so doing, it has had a greater influence on the progress and direction of civilization than all the other sciences combined.

As a rule, chemical processes have been hitherto so complicated and tedious, that none but the thoroughly initiated have dared to attempt them—a circumstance which has proved an insurmountable obstacle to their general adoption in many branches of inquiry, and perhaps in none more so than that of practical medicine. The requirements of the times, however, having at length imperatively demanded their simplification, here, as everywhere else, necessity has been found to be the mother of invention; and thanks to Gay-Lussac, Liebig, Bunsen, and others, we are now in possession of the volumetric method of analysis, which is of such simplicity that almost any well educated Medical man, without the possession of special chemical knowledge, may apply it with, comparatively speaking, little loss of time or much trouble. In the work before us, Mr. Sutton has begun by giving a very good description of the various kinds of apparatus necessary in volumetric analysis, and after the apparatus and the requisite standard solutions (a) have been obtained, we imagine that almost any one would, with the book in his hand, in the course of a few evenings, so far master the subject as to be able to make a tolerably good quantitative analysis of the urine, the chapter devoted to which includes the estimation of almost every constituent likely to be required. It includes, for example, the analysis of urea, uric acid, sulphates, phosphates, chlorides, sugar, albumen, solid matter, and saline constituents, together with the estimation of the free acid, ammonia, and specific gravity. In order to prevent disappointment, we must request our readers to bear in mind that the work gives nothing more than a description of the methods of analysing the urinary ingredients; it says nothing about their physiological and pathological bearings. These, therefore, must be learned elsewhere.

We would at the same time venture to remind our younger readers (many of whom will probably purchase the book, which we cordially recommend to their attention, as being the most complete work of its kind in the English language) that there is no royal road to a knowledge of chemical analysis, and that, notwithstanding these improved methods of research, brains as well as books are still required for their successful application.

A Yachting Cruise in the Baltic. By S. R. Graves, Commodore of the Royal Mersey Yacht Club. London: Longmans, 1863.

This very pleasant volume has a special claim on Medical reviewers, for, although its author is a layman, he has been assisted in its production by Dr. Moore, of Dublin, and by the Rev. Professor Haughton, of Trinity College, the former having furnished translations of several documents from the Swedish and Danish languages, and the latter having revised the book as it passed through the press.

From the Carlisle Station to Glasgow—from Glasgow away over the salt water to Copenhagen and Gothland—catching glimpses of Thorwaldsen's masterpieces, the Ethnological Museum, and the Princess Alexandra and her sisters, listening to the Dannevirk, and joining in the festivities of a Danish wedding—then away to Stockholm, St. Petersburg and Moscow, the interest of Mr. Graves' book never flags. The author is neither a mere saunterer through galleries nor a mere amateur sailor; he has picked up all sorts of information as to the people, their manners, and institutions; he has visited the Hospitals, and obtained minute accounts of their management and success. A perusal of the description given in the appendix of Frederik's Hospital, Copenhagen, and of the Seraphim Hospital, Stockholm—the latter taken from an address by Professor Sautesson, and both translated by Dr. Moore—will well repay the Professional reader. The Foundling Hospitals of St. Petersburg and Moscow furnish also a theme of great interest. In the former is a *salle* for the reception of prematurely-born infants. "It is under the care of Dr. De Burgo-Clave, and is furnished with beautifully clean cradles, made of double cases of copper, through which circulates water at any temperature required by the Physician. The little outcasts, wrapped in warm flannels, sleep away their time in these cradles, watched by skilful Physicians and nurses, and find in the charity of Holy Mother Russia a shelter which their unnatural and sinful parents would not, or perhaps we should say, could not give."—p. 223.

Although giving a very favourable description of the management of the Foundling Hospital of Moscow, Mr. Graves believes that these institutions do more moral harm than physical good. Of 42,555 children born in the maternity charity connected with the hospital, 2979 of whom

(a) The author has, in Part III, described the mode of preparing the different standard solutions, but we would recommend our readers to purchase them ready-made, as it is difficult and laborious to prepare them correctly. The cheapest way for the Medical man is therefore to buy them from the Professional chemist. We may also here mention that although we are treating the work from a Medical point of view, the chief part of it is devoted to the analysis of substances used in commerce, agriculture, and the arts.

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were born in wedlock, only 86 were taken home by their mothers. A full and perfect register is kept at the Hospital, but children are very rarely reclaimed. The author asks, "Can it be that maternal feeling is less acute in Russia, or does the knowledge that the care taken of their children in this great infantine sanatorium is so superior to home training, cause Russian mothers to smother their natural solicitude for their children's welfare? Be it which it may, this institution can only be regarded as a wholesale system for the encouragement of vice, and the destruction of those maternal feelings for offspring without which woman becomes undeserving of the name."—P. 285.

We have not room for further quotation, but we heartily commend "The Cruise" to our readers. It will fill up most pleasantly a good many spare half hours. It is the very book for a sunny parlour window after work is over.

PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

It would seem impossible to write anything about Medica intelligence from this neighbourhood just now within referring to the case of Dr. Waters, of Chester. The plaintiff is now expressing great anxiety for the full elucidation of the parentage of the poor little infant who has the misfortune to be Mary Whalley's child. She offers, in fact, a reward of £100 for the discovery of its father. A meeting of the Profession was held at Birkenhead last night, which was well attended, and at which resolutions were passed with reference to Dr. Waters similar in their import to those of the Liverpool meeting.

As to the meeting at the Medical Institution here, I do not remember ever to have attended one at which there was more cordial unanimity, or a more hearty sympathy with the purpose in hand. The personal acquaintance with Dr. Waters which several present were fortunate enough to have, and which enabled them to speak from their own knowledge of the utter improbability of such a man being obnoxious to such a charge, helped, I doubt not, to deepen the assurance which appeared to be felt by all, that a wilder and wickeder lie was never fabricated than that which formed the basis of the action of Bromwich v. Waters.

Had it been possible to have reported all that was said at the meeting, the feeling of disgust at the Medical evidence for the plaintiff would have been even more strongly marked than it appears to be in the account in your columns. I feel no doubt that the three gentlemen who lent themselves to this attack upon Dr. Waters have forfeited no small amount of the respect of their Professional brethren in this place.

The inveteracy of the persecution to which Dr. Waters has been subjected may be inferred from the fact mentioned by Dr. Vose in his opening address, that for months detectives have been employed in hunting up the details of Dr. Waters' life, to find, if possible, some more material that might render the charge against him credible; but, as always happens when a really innocent man is attacked, the very intensity of the efforts made to convict him serves the more clearly to set his character in its true light. There is evidently a secret history of the proceedings on the part of the plaintiff's backers, which it would be interesting, if not very edifying, to trace. I hope we, as a Profession, shall not forget the great credit due to Mr. Welsby, Dr. Waters' leading counsel, and to those who instructed him, for the tact and firmness with which the case was conducted. The wisdom of accepting a verdict for forty shillings only, in the action for slander against Miss Bromwich, was well shown in the fact that this concession elicited from Baron Bramwell the expression of his entire and hearty concurrence with the verdict of the jury; while at the same time it formed a practical proof that Dr. Waters' purpose was not to make money, or retaliate upon those who had so cruelly wronged him, but simply to vindicate his honour. His actions for slander were, in fact, brought to *compel* his accusers to have their allegations brought to a public trial, and to prevent them from backing out of the contest, which there is good reason to believe they would have been glad enough to do had Dr. Waters been willing to allow them.

With regard to the manner in which Serjeant Shee conducted the plaintiff's case, I do not know what may be the feeling among lawyers, but I think that the licence of counsel and moral right—not, to say decency—must be widely different, if it be considered within the limits of etiquette for an advocate, who is compelled by the answers of his own witnesses to abandon the hypothesis upon which his case in great part depended, to extemporise another on the spot, and enforce it by rhetoric instead of evidence; and further, to personally insult an antagonist whom he knows to have no possibility of defending himself. Yet all this the learned serjeant did. He quietly dropped the hypothesis that the pretended victim had been drugged, and adopted the equally revolting one that the alleged crime had been perpetrated while the woman was unconscious from the effect of her hysterical fits. During the peroration of his speech, he frequently brought his closed fist within a few inches of Dr. Waters' face. It must have been, however, some mitigation of the force of his denunciations, to remember that they came from the man in whose forensic conscience Palmer was an injured innocent.

One question which some have raised in connection with this trial—whether it is right or desirable to make uterine examinations without the presence of a third person—is, as far as I have been able to ascertain, practically answered in the affirmative by those in this town who have most to do in that line of practice; and it is found that, in a large proportion of cases, the patient herself prefers that no one but her Medical man should be present at these examinations. Speaking of this case to a non-Medical gentleman, who has for many years occupied a public position here, he said "Medical men ought to be protected to the farthest extent in the treatment of cases of this nature, otherwise there will be many diseases going unremedied, because Medical men will be afraid to undertake them." I think that this is pretty much the state of feeling in reference to this question among most sensible people. In fact, if a Medical man is not to be trusted to make any necessary examination without the supervision of some one else, I do not see why he should be trusted to see any female patient alone.

To turn now to the more strictly Medical part of my letter, I regret to say that fever is just now beginning to take a more decided hold than it has hitherto done on some of the worse parts of the town. In Toxteth-park there is a great deal, and this day as many as thirty-six cases were admitted from the Liverpool district into the Workhouse. Small-pox has lately increased; but the number of cases previously was so small, that though the difference in the proportion of cases existing now, when compared with that of last year, is considerable, the absolute number is not large for such a town as this. I believe there are at present not more than a dozen pauper patients in Hospital with this disease, and several of these are unvaccinated sailors. These unvaccinated men come mostly from the coast of Africa, but some from our own colonies. From Nova Scotia there are one or two now under treatment, and they state that vaccination is by no means a prevalent custom out there. With regard to the enforcement of vaccination among our own poor, I was told the other day by one of the district Medical officers here, who is very energetic in the vaccine part of his duties, that, do what you will, it is highly probable that a great many children pass unvaccinated, and will do so, unless there be some law rendering it imperative that the vaccination of every child should be registered within a certain time after its birth. As it is now, it may be possible to fine the parents if a child remains unvaccinated after the age of three months; but, unfortunately, it is at present nobody's business to find out if children are unvaccinated, and nobody performs that business with his usual efficiency.

At the last meeting of the Medical Society, Mr. Neill gave some interesting details of a case in which the alcoholic extract of the "Calabar bean," or "ordeal bean," had been used for the purpose of contracting an obstinately-dilated pupil. A young gentleman, who had received a blow on the eye from a stone, came under Mr. Neill's care about three weeks after the receipt of the injury. Blood had been effused into the anterior and posterior chambers of the eye. This had been absorbed; but the pupil remained about four times its natural size, and vision with that eye was much confused, and the pupil did not act under the stimulus of light. Veratria had been rubbed in, but without producing any benefit. A drop of the fluid extract, which was stated to be of strength to about five grains of the powdered bean, into the injured eye. In ten minutes the pupil had act, in thirty minutes it was equal in size to that of

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eye, and at the end of an hour it had contracted to a mere pin-point. The patient could read without difficulty, no constitutional symptoms were produced, and the other eye was not affected. The next day the contraction had very much gone off, but not so as to allow the pupil to return to its former condition. The patient was continuing the use of the remedy on alternate days, and with progressive benefit. Mr. Neill thought this agent would prove very useful in cases where it was expedient to dilate the pupil for purposes of exploration, etc., and would prevent the disagreeable confusion of vision which remains while the pupil is dilated after the use of belladonna or atropine.

GENERAL CORRESPONDENCE.

THE CASE OF BROMWICH v. WATERS.

LETTER FROM DR. FRANCIS H. RAMSBOTHAM.

[To the Editor of the Medical Times and Gazette.]

SIR,—I must again ask you for a few lines in your journal for the purpose of replying to the letter of Messrs. Kimber and Ellis.

My being in Edinburgh when I last wrote to you, and not having my note-book at hand, must explain an inaccuracy into which I inadvertently fell, and for which I beg to apologise to those gentlemen.

I was under the impression that a week at least had elapsed from the time when I was first applied to in the Chester case and the day when I saw the young woman professionally; but my memory having been refreshed by reference to letters and some very imperfect memoranda, I believe I am correct in stating that on February 4, a gentleman, whose face appeared familiar to me, and whom, indeed, I at first took for an old pupil, called on me, and asked me some Medical questions. He requested me to make an appointment to meet a certain Physician, which I did by naming two o'clock on February 6. It is quite possible that he may have said something about its being a case of seduction, but I have no recollection of that, and he certainly did not mention the name of Dr. Waters. However, I have a perfect recollection of his asking me what my fee would be for this consultation, by which I naturally concluded that my connection with the case would terminate at that interview. On arriving at the house, instead of the Physician I expected, I met Dr. Lee, who told me he had seen the patient a few days before. There were present in the room an elderly lady, whom I afterwards knew to be Miss Bromwich, and the gentleman who had called on me, and we were requested to adjourn to the next room—a bedroom—where the young woman was. I made an examination, and expressed my surprise to Dr. Lee at finding the uterus so healthy. On our return in a few minutes to the sitting-room, the question was put to me, in what state I found the uterus; when I replied, perfectly healthy, or words to that effect. I was then informed of the nature of the charge, which until that time I was not acquainted with. I am pretty sure that I recommended at that interview that the case should be abandoned, and was answered, that it had gone too far for that course being taken. I said, also, that my evidence would be of no service to them; the reply to which was, that I could speak to the state of the uterus when I examined, and therefore it would be useful, or, they must have me, or something to the same purport. At any rate, if what I have stated did not take place at that time (which I firmly believe), it did on a subsequent occasion. I considered, as I had spoken to a matter of fact, there would be no use in objecting to appear as a witness, if called upon to do so.

In regard to my willingness to give evidence, my letter inquiring when the trial was likely to come on, which Messrs. Kimber and Ellis have published, was written nearly six weeks subsequent to my examination of the young woman; and as it appeared to me, after that examination, that I should most likely be required to proceed to Chester, I thought any show of disinclination to do so would be worse than useless.

Again, in reference to what my opinion of the case may be at this time, I wrote to Mr. Kimber, on February 10, in reply to a full detail of Whalley's version of the story which he sent me, "But this is only one side of the question; when the other is heard, circumstances may appear which will very much modify our judgment."

I trust Messrs. Kimber and Ellis will acquit me of any intention to state what is not true, and.

I am, &c.

FRANCIS H. RAMSBOTHAM.

8, Portman-square, May 4.

OBITUARY.

MR. HENRY CHARLES JOHNSON.

MR. HENRY CHARLES JOHNSON, whose loss the Profession have to lament, died at the early age of 54. He had long suffered from some disease of the kidneys, and it was known among his friends that for years he had been the subject of renal calculus.

Mr. Johnson entered upon his public career in the year 1833, when he was appointed Lecturer on Anatomy at the then newly-instituted School at Kinnerton-street, in connexion with St. George's Hospital. He was appointed Assistant-Surgeon after an unusually sharp contest, on December 15, 1843, and became full Surgeon to the Hospital on February 4, 1853.

Of an unusually amiable disposition, Mr. Johnson appears to have made a very large circle of friends, and to have enjoyed the confidence and esteem of a very large number of patients among the upper classes of society.

His numerous Professional engagements prevented him from devoting much time to the literature of his Profession; and it is somewhat remarkable, in this age of letters, that Mr. Johnson has not left any contribution to Medical science which bears his name.

It says much for the esteem in which Mr. Johnson was held, that, although it was generally known during the last year of his life that he was unable to perform his duties at St. George's Hospital, yet that both those who formerly supported him, and those who had opposed him, united in their endeavours to make his position at the Hospital as agreeable as possible.

Mr Johnson had expressed a wish to die Surgeon to St. George's; and while his colleagues cheerfully undertook his duties, the Board of Governors were always unanimous in their willingness to extend his leave of absence. He died, retaining his post, on April 28.

LEGAL INTELLIGENCE.

COURT OF EXCHEQUER, MAY 4.

(*Sittings in Banco, before the* LORD CHIEF BARON, *Mr. Baron* MARTIN, *Mr. Baron* BRAMWELL, and *Mr. Baron* WILDE.)

CLAY v. ROBERTS.

This was an action, by a Physician at Manchester, for libel, complaining of certain letters in the *Lancet* which imputed to him that he met homœopathists in consultation.

The declaration averred that, by the etiquette of Physicians and the Medical Profession generally, it was improper and disgraceful to meet homœopathists in consultation, and that it was injurious to the character and practice of Physicians to have it supposed that they did so. It then went on to set out the allegations complained of, and connected the plaintiff with them.

The defendant pleaded, among other pleas, as to so much of the declaration as was founded on the allegation that by the etiquette of the Profession it was considered disgraceful to meet in consultation homœopathists, that it was not so considered.

To this plea there was a demurrer.

Mr. Keane, for the plaintiff, was called upon to support the declaration. He contended that as the articles in the *Lancet* were only consistent with the desire of the writer to impress upon the public that the plaintiff's conduct was improper and disgraceful, he was estopped from denying it to be so, and that although the word disgraceful was not to be found in the libel itself, yet the substance in the imputation in it was that, according to Medical etiquette, the conduct imputed to the plaintiff by it was disgraceful.

The Lord Chief Baron said the defendant thought it disgraceful when he published the libel, and he did not think so now. Why should he not traverse the allegation?

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Mr. Keane: If he has altered his opinion he should apologise, and not put the plaintiff to costs.

Mr. Thomas Jones appeared for the defendant, but was not called upon, the Court being of opinion that the plea was a good answer to so much of the action as it related to if made out. —Judgment for the defendant.

REPORTS OF SOCIETIES.

HARVEIAN SOCIETY OF LONDON.

FEBRUARY 19, 1863.

Dr. FULLER, President, in the Chair.

THE paper for the evening was read by HARRY LOBB, Esq., on the

USES AND VALUE OF GALVANISM AND ELECTRICITY IN GENERAL PRACTICE.

The author commenced by stating that it was not to be supposed that galvanism was only useful in the hands of the specialist, but that there was a wide field open to its use in general practice; and after some remarks upon the resemblance of the nerve and galvanic currents, proceeded to describe the apparatus he recommended for general use, consisting of, first, the electro-magnetic and magneto-electric machines for producing energetic interrupted currents, for stimulating and revulsive effects; and, secondly, the Pulvermacher galvanic battery for the generation of the continuous galvanic current. These are all that is necessary for general practice, producing the ordinary results in electro therapeutics, and can be highly recommended for their portability, cleanliness, and non-liability to get out of order. Mr. Lobb then demonstrated the action of each apparatus, describing the necessary conductors, and their application to the eye, the teeth, the uterus, the muscles, nerves, etc. He also described the method of employing the electric bath as a general stimulant, stating how valuable electricity was in diagnosing the seat of obscure diseases; that frequently the organ in fault was found to be quite remote from the suspected one. He gave the following explanation of the term "Faradisation," now frequently met with in the writings of Medical electricians:—"The term Faradisation was applied by Dr. Duchenne, of Paris, to the application of electricity derived from the secondary or finer wire of the electro-magnetic battery to the treatment of disease, out of honour to our distinguished countryman, Professor Faraday, who observed that whenever an insulated wire was brought within the influence of a wire along which a current of electricity was flowing from the positive to the negative plate of the voltaic battery, a current in the opposite direction was induced in the secondary wire of a higher degree of intensity than the current in the primary wire. Making use of this fact in conjunction with the previously-discovered one, of the increase of intensity caused by winding the insulated wires in a helix round a core of soft iron, the electro-magnetic battery was invented, and it is the application of the induced current derived from the secondary or finer wire of this battery to which the term 'Faradisation' has been applied." Mr. Lobb then proceeded to the therapeutics of galvanism, first explaining the great value of electricity in all cases of chronic rheumatism, stating that he had frequently cured rheumatic paralysis of long-standing in one or two sittings. He always applied, first, a sharp current upon the skin over the affected muscles, by means of dry metallic conductors, then stimulated each paralysed muscle to contract with the aid of moist conductors. The treatment by galvanism of the following diseases were then explained in order: Neuralgia by means of the continuous galvanic current; constipation, mixed, continuous and Faradisation; chlorosis, amenorrhœa, dysmenorrhœa, mixed; its value in Midwifery practice to arrest hæmorrhage, to stimulate the uterus to contract, to excite premature labour, or expel a polypus; its uses in chest affections, asthma, aphonia, in indigestion; in affections of the nervous system, paralysis, functional, reflex, and organic; anæsthesia, chorœa, delirium tremens; in muscular debility, spinal curvature, knock-knees, and bow-legs; confidently prognosticating that before many years the orthopædic Surgeons would set aside the use of the knife and of irons, and depend upon electricity for a cure. Its value in inveterate ulcers and carbuncle, and its probable application in malignant disease, concluding with the method of its administration in drowning, chloroform accidents, and poisoning. Mr. Lobb then described several cases lately treated by him in the London Galvanic Hospital, particularly some cases of dropped hands, the result of poisoning by lead, which he had been the means of rapidly curing, also a very interesting case of torticollis, and a very uncommon instance of complete rheumatic paraplegia, quite cured by the continuous galvanic current in three months. The author hoped that the time was not far distant when every educated Practitioner would be as familiar with the application of galvanism in the treatment of disease as he now was with the administration of drugs; each aided the other, and their judicious combination was now producing results hitherto undreamt of; numerous cases formerly abandoned as incurable were now amenable to treatment, and advancing science was continually adding to their number. Mr. Lobb concluded a very interesting and suggestive paper by requesting the members to investigate the subject, and experiment upon the value of galvanism as a therapeutic agent, promising ample reward for labour.

MEDICAL NEWS.

UNIVERSITY OF ST. ANDREW'S.—The following gentlemen having passed the necessary Examinations were, on April 28, admitted to the Degree of Doctor of Medicine:—

Alfred Butler, London; Hugh Campbell, London; Charles Allen Chease, Smethwick; James George Davey, Northwoods, near Bristol; Peter Hood, London; Christopher Francis Hutchinson, Bridlington; Walter Walker Lennox, Hamilton; Charles Hilis Macintosh, Torquay; John Wadham Robinson, London; George Taylor, Derby.

The following gentlemen also passed the necessary Examinations, and will receive the Degree next year:—

Josiah Sidney Smith, Tiverton; James Walsh, R.N.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary Examinations for the Diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 5th inst., viz.:—

Edward Chaffers, Enfield, near Accrington, Owen Grimbly, M.D. St. Andrew's, and L.S.A., Banbury, and Benjamin Whitehead Parker, L.S.A., Farington, Lancashire, students of St. Thomas's Hospital; John Bunyan Foster, Huntingdon, Duncan Francis Sinclair, Halstead, Essex, and Richard Shillitoe, Hitchin, Herts, of University College; Paynton Pigott, Great Wilbraham, Cambs., and John Babington Williams, Sydney-street, Brompton, of St. George's Hospital; Henry Parr Mallam, L.S.A., Oxford, and Walter Henry Cope, L.S.A., Buckingham-street, Strand, of the Charing-cross Hospital; Walter Thomas Beeby, M.D. St. And., Kilburn, and Ebenezer Atherton, Bingley, Yorkshire, of Guy's Hospital; Belling Harvey Budge, Bodmin, Cornwall, and Francis Drake Pearse, L.S.A., Kingsbridge, Devon, of St. Bartholomew's Hospital; Francis Molineaux Fawcett, Yarm, Yorkshire, and Francis Albert Davey, Bath, of King's College; Walter Colman, Wymondham, Norfolk, of the London Hospital; George Herbert Clifton, Burwell, Cambs., of the Middlesex Hospital; Joseph Foster Armstrong, South Shields; and Thomas Cooke Parson, of Bristol.

The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 29th ult., and when eligible will be admitted to the Pass Examination:—

William Bell, T. H. Spilsbury, G. E. Shuttleworth, and W. T. P. Wolston, students of King's College; George Weller, J. H. Gray, William Taynton, and Ebenezer Shedd, of the London Hospital; S. F. Leach, George Rendle, and H. B. Smith, of Guy's Hospital; Frederick Ruffe and W. D. Dunn, of Birmingham; T. B. Burton and P. G. Philips, of St. Mary's Hospital; N. W. Fairies and F. M. Beckett, of St. Bartholomew's Hospital; William Lickfard and H. A. Reeves, of the Middlesex Hospital; F. H. Hodges, of Bristol; Peter Harding, of University College; and C. G. Paull, of Glasgow.

THE FELLOWSHIP.—At a meeting of the Council of the Royal College of Surgeons on the 4th inst., Mr. John Burton St. Croix Cross, of the 11th Hussars, was admitted a Fellow, having been elected at a previous meeting; diploma of membership dated August 11, 1837. Mr. William Tarrant, of the Charing-cross Hospital, has just passed the Preliminary Examination for the Fellowship, having been admitted a Member on April 17, 1860.

Admitted on the 6th inst.:—

Wm. Wilcox, Cardigan, South Wales, Edwin Turner, Dudley, Worcestershire, Charles Edward Covey, Basingstoke, John Legge Currie, Bungay, George Hunt Orton, Narborough, near Leicester, Matthew Trevan, L.S.A., Padstow, Cornwall, and Caleb Samuel Hilton, M.D. St. Andrew's, and L.S.A., Preston, Lancashire, students of St. Bartholomew's Hospital; Elijah Baxter Forman, Derby, Frederick Long, East Dereham, Frederic Thomas Hindle, Askerne, near Doncaster, and Thomas Jackson, Whitehaven, of Guy's Hospital; Charles Augustus Greaves, L.S.A., Derby, John

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Palmer Way, L.S.A., Southsea, Hants, and Edward Sutcliff, Camberwell, of St. Thomas's Hospital; Charles Edward Cockerton, Aberystwith-terrace, Islington, and James Flack, Shoreditch, of the London Hospital; William John Alkin, Manchester, of the Charing-cross Hospital; Edwin Holbeson Green King, Portsmouth, of King's College; James Lawton Andson, Moseley, near Manchester, John Ward, M.D. St. Andrew's, Glossop, Derbyshire, Thomas Elmes, Limerick, John William Taylor, M.D. St. Andrew's, and L.S.A., New Malton, Yorkshire, and William Smith, Spilsby, Lincolnshire.

At the same meeting of the Court, Dr. Thomas Alexander O'Flaherty, of H.M.S. *Britannia*, at Portland, passed his Examination for Naval Surgeon; this gentleman had previously been admitted a Member of the College, his diploma bearing date July 19, 1859.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, April 30, 1863:—

Frederick Sutton, Marton Vicarage, Gainsborough, Lincolnshire; Henry Stubbs, Brierley-hill; John Morton, Holbeach, Lincolnshire; Fred. Gordon Brown, Finsbury-circus, E.C.; John Reddrop, Tiverton, Devon; John William Taylor, New Malton, Yorkshire; John David Frankish, Christchurch, New Zealand; Thomas Edward Mason, Deal, Kent; Albert Weaving, Oxford; Charles Phineas Langford, Higham, Norfolk.

The following gentleman also on the same day passed his First Examination:—

Thomas Sanders, University College.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BUSS, H., M.D., has been appointed Surgeon to the 1st Administrative Battalion of the Tower Hamlets Royal Volunteers.

CAMPBELL, DUGALD, M.D. Univ. Glasg., has been elected Medical Officer to the Parochial Board of the Parish of Alva, Stirlingshire.

CLOUSTON, THOMAS S., M.D. Edin., has been appointed Resident Physician and Superintendent to the Cumberland and Westmoreland Lunatic Asylum, Garlands, near Carlisle.

COX, ARTHUR, M.R.C.S. Eng., has been appointed Medical Attendant to the Watford and Kilsby District of the London and North-Western Railway Friendly Society.

EARLE, J., M.R.C.S. Eng., has been appointed Medical Officer to the Altrincham Union Workhouse.

ELLIS, GEORGE VINER, F.R.C.S. Eng., has been appointed Examiner in Anatomy and Physiology at the University of London.

FARRE, FREDERIC J., M.D. Cantab., has been appointed Examiner in Materia Medica at the University of London.

HALL, J., M.D., has been appointed Assistant House-Surgeon to the General Hospital, Nottingham.

LARMUTH, MARK O., M.R.C.S. Eng., has been appointed Medical Officer to the Salford Union Workhouse.

MURRAY, W. PETTES, L.R.C.S.E., has been appointed Resident Surgeon to the Birmingham and Midland Counties Lying-in Hospital and Dispensary.

PARKES, EDMUND A., M.D. Lond., has been appointed Examiner in Practice of Physic at the University of London.

RINGER, SYDNEY, M.B., has been appointed Assistant-Physician to University College Hospital.

BIBSON, FRANCIS, M.D. Lond., has been appointed Examiner in Practice of Physic at the University of London.

STURGES, O., B.A., M.D., has been appointed Physician to the Chelsea, Brompton, and Belgrave Dispensary.

WATSH, R. P., M.D., has been appointed to the Commission of the Peace for the County Fermanagh, on the recommendation of the Earl of Erne, Lieutenant of the County.

DEATHS.

CHAVASSE, HOWARD S., M.R.C.S. Eng., at Sutton, Coldfield, Warwickshire.

CLARKSON, JAMES, L.R.C.S. Edin., Assistant-Surgeon R.N., on February 7.

COLEY, RICHARD MALLET, M.D. Oxon., at Cambray-place, Cheltenham, on April 25, aged 47.

CROZIER, Dr. A. W., of the 104th Regiment, on March 7, at Deyrah.

LUCAS, FRANCIS NORMAN, M.D., at sea, on the voyage homeward from Queensland, aged 29.

STEEL, JOHN, L.R.C.S. Edin., at Bradford, Yorkshire, on April 25.

UNIACKE, Dr. JAMES, of Cork, on April 24.

THE CASE OF STONE *v.* STONE AND APPLETON.—In this case a rule for a new trial has been refused.

THE SOURCE OF THE NILE. — Captain Speke has telegraphed to Sir Roderick Murchison, through the Foreign Office, that "on the 27th of March he was in north latitude 14 deg. 30 min. on the Nile; that all was well, and the Nile" (it is to be presumed its source) "settled."

ROYAL COLLEGE OF PHYSICIANS.—An address of congratulation on the marriage of their Royal Highnesses the Prince and Princess of Wales has been presented through the Home Office to the Queen, and graciously accepted; and on Wednesday, the 29th ult., Dr. Watson (President), Dr. Budd (Senior Censor), Dr. Alderson (Treasurer), and Dr. Pitman (Registrar), had the honour to present an address on the auspicious event to the Prince of Wales at Marlborough House. The addresses, which bore the corporate seal, were as follows:—

"TO THE QUEEN'S MOST EXCELLENT MAJESTY.

"Most Gracious Sovereign,—

"We, your Majesty's most loyal and dutiful subjects, the President and Fellows of the Royal College of Physicians of London, crave permission to lay before your Majesty our humble but fervent congratulations on the marriage of their Royal Highnesses the Prince and Princess of Wales.

"We hail their auspicious union, which has filled the land with rejoicing, as promising a renewal of the inestimable blessing which this nation has long enjoyed in the bright example of your Majesty's domestic life.

"We further rejoice in it, through the hope and belief that to your Majesty it has already brought much joy and consolation, and will remain a source of felicity.

"With thankfulness, therefore, and with trust, we pray that Divine Goodness may support your Majesty under your heavy trials, may guard your Majesty's health, and largely increase the happiness of your Majesty and all your Royal Family."

"TO HIS ROYAL HIGHNESS THE PRINCE OF WALES.

"May it please your Royal Highness,

"The President and Fellows of the Royal College of Physicians of London humbly but ardently desire to congratulate your Royal Highness on your most auspicious marriage. We firmly believe that at no former period of English history has the heart of the whole nation been so warmly attached to its Sovereign as it now is to our most gracious Queen, and to all her Royal Family. Hence the universal joy, the irrepressible ardour, with which the nation welcomed the arrival of the Princess whom Fame had truly reported to be in every way worthy of your Royal Highness's choice. Therefore, in common with all her Majesty's subjects, we rejoice in a union which promises all that could be desired for your Royal Highness and the Princess of Wales, as well as for the best interests and future prospects of the realm; and we pray that Divine Providence may shower down its choicest blessings on both your Royal Highnesses, and grant you uninterrupted health and happiness through a long life, cheered by the devoted affection of a loyal and contented people."

BARNES *v.* HORNE AND WIFE.—In this case, tried at Guildhall before Mr. Justice Williams, the plaintiff, a young Surgeon, sought to recover damages for a very serious slander alleged to have been uttered by the female defendant, who had accused him of having treated her unskilfully during her confinement. The defendants pleaded that what had been stated was true. The jury found for the plaintiff—Damages, £5.

GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.—Certificates having been produced to the Committee of the conviction of Evan Thomas, at Liverpool, for perjury, and of the conviction of Robert Wrixon, at Reading, for forgery, the Registrar was directed to erase the names of those persons from the Medical Register.

UNIVERSITY COLLEGE, LONDON.—The Council held their monthly meeting on Saturday. Mr. Sydney Ringer, M.B., Professor of Materia Medica, was appointed Assistant-Physician at the Hospital. The attention of the Council was called to the urgent need of public support for the Hospital, and to the fact that the committee at their last meeting were indebted to the treasurer for a loan of £600, to enable them to make payments on account to butcher and baker.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the College, held on the 5th inst., the following gentlemen were elected examiners for the ensuing year:—*Examiners for Letters Testimonial and Fellowship*—Christopher Fleming, Jerome Morgan, George H. Porter, Benjamin Wills Richardson, M. Harry Stapleton, Edward E. Stoker, Jolliffe Tufnell. *Examiners in Midwifery*—Henry Croly, Robert Johns, E. J. Quinan. *Examiners in General Education*—Thomas Byrne, John Murray, G. F. Shaw.

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VOLUNTARY ABSTINENCE.—Martha Batten, a prisoner in Reading gaol, refused to take food for eighteen days. She gave in on seeing the stomach-pump. On a former occasion she fasted seventeen days. She is now in a lunatic asylum.

APOTHECARIES' HALL OF IRELAND.—The examination for the annual prize of five guineas, granted by the Council to Apothecaries' apprentices, for the best answering on a given subject in Pharmaceutical or Pathological Chemistry, was held at the Hall on Monday and Tuesday, the 4th and 5th inst. The Prize was awarded to Mr. Alexander Duke, and an Honour-certificate was given to Mr. John O'Dwyer, for distinguished answering.

THE NEW GARDEN ACT.—An Act of Parliament for the better protection of gardens in cities and boroughs has just been printed. It is now enacted that gardens in squares and other places of fifty years' standing may be freed from neglect or encroachment, and vested in the Metropolitan Board of Works, or other corporate authority, or vested in a committee of rated inhabitants, for keeping the same as a garden or pleasure ground, otherwise the same may be vested in a board or parish to be kept as an open place or street, in such manner as may appear most advantageous. Protection is to be given to open spaces from encroachment. Bye-laws are to be made for the management of gardens, etc., and before they come into operation they are to be submitted to one of the judges of the common law courts or to the justices in quarter sessions.

ILLEGAL MEDICAL PRACTICE IN FRANCE.—The Medical Profession in France seems to have greater confidence in the efficacy of penalties in suppressing illegal practice than is entertained in this country. Petitions have recently been presented to the Senate, calling for amendment in the Act inflicting such penalties. This law dates back some sixty years, and its deficiency consists in not having declared the *maximum* and *minimum* of the fine to be imposed, leaving the magistrate free to fix its amount according to his view of the circumstances. But the Court of Cassation, in the numerous appeals which have been made to it, has always declared that in the absence of this fixation of *maximum* and *minimum*, no fine other than that for ordinary police contraventions, the *maximum* of which is fifteen francs, can be enforced. This obviously makes the whole prosecution a farce; and the law has more than once been about to be amended, when political troubles have happened to intervene and prevent this. The petitioners hope for better things under the present *régime*.

BRITON MEDICAL AND GENERAL LIFE ASSOCIATION.—The ninth annual meeting of the shareholders and policy-holders of this Association was held on April 30, at their chief offices, 429, Strand, W.C. George H. Barlow, M.D., occupied the chair. The retiring directors, Dr. G. H. Barlow, Mr. George Chapman, and Mr. Wilson Anscell, were re-elected. A dividend at the rate of 6 per cent. per annum, free of income-tax, on the subscribed capital of the company, payable on Thursday next, was then declared. The Chairman announced that the bonus was being calculated, and they anticipated it would be very favourable for shareholders and policy-holders. Dr. Richards proposed—"That the thanks of the meeting are due and are hereby given to the town and provincial Medical officers for their valuable services during the past year." The Rev. Dr. Major seconded the motion, which was carried unanimously. Dr. Lloyd, in returning thanks, considered it an honour to represent a company which was conducted so prudently, honestly, uprightly, and energetically. (Hear, hear.) A hearty vote of thanks to the chairman for presiding brought the meeting to a close.

THE DEATHS IN THE LAST QUARTER. — The late mild winter has been very unhealthy. The Registrar-General's last Quarterly Return states that,—"If the deaths in last quarter are compared with the mean number of two corresponding quarters in 1861-62, the increase for England was nearly 6 per cent; for London and the North Midland Counties, 5 per cent.; for the South-eastern and South Midland Counties, and Yorkshire, 7 per cent.; for the Eastern, South-western, and West Midland Counties, about 12 per cent, while for the North-western division the increase (0·3 per cent.) is hardly appreciable; and for Lancashire, which constitutes the most important part of it, is found an actual decrease of the mortality. If the sixteen most important cotton districts of Lancashire are taken, there was an increase of deaths in five, a decrease in the remaining eleven. The increase was greatest in Chorlton (16 per cent) and Oldham (21 per cent.) The decrease was great in Wigan, Warrington, Leigh, and Bury, in which places it was 17 and 18 per cent., greatest in Preston and Burnley, where it was 20 and 24 per cent. This is a brief statement of the facts, whatever may be the solution of the problem which it suggests." So much for the effects on health of the cotton famine.

THE WAKLEY TESTIMONIAL.—At a meeting held at the house of Mr. Hancock on the evening of the 20th ult., the Hon. Secretary (Mr. D. O. Edwards) presented a report on the past proceedings. This report stated that some Practitioners of the metropolis had thought it desirable that some testimonial should be presented to Mr. Wakley, as an acknowledgment of his great public services. This proposition was widely accepted by the Medical Profession, and 200 influential gentlemen formed themselves into a general committee for the purpose of carrying it out. It was resolved that a suggestion should be made for the limitation of the subscription to two guineas individually, which had the effect of materially curtailing the amount. A meeting was held, at which highly complimentary resolutions were passed, and subscriptions were received. The auditors' report was read, vouching the accounts. The following resolutions were then passed:—1. "That the report read be adopted, and that the funds collected be offered to the University of London, to be vested in trustees, and for the purpose of founding an annual Medal Prize, to be called the Wakley Medal, and to be given to the candidate for the M.B. degree of the University of London, who shall show the greatest proficiency in Medical Jurisprudence. 2. That the Chairman, Treasurers, and Secretaries be requested to confer with the authorities of the University of London on the above subject. 3. That the members of the General Committee and all others who have promised subscriptions be requested to forward the same, and that further subscriptions be received up to May 30, after which date the lists will be colsed. Subscriptions may be paid to the above account at Messrs. Drummond and Co., Charing-cross, or to the Treasurers, Dr. Forbes Winslow, Cavendish-square, and Mr. Godrich, Thistlegrove-house, West Brompton. 4. That the thanks of the meeting be given to the Treasurers and Secretaries for their exertions in promoting the movement, and that those thanks are especially due to Mr. Godrich and Mr. D. O. Edwards, by whose exertions it has been chiefly advanced. 5. That the thanks of the meeting are due, and are hereby tendered, to Mr. Hancock, the Chairman of the present meeting, for his courteous and dignified conduct in the chair."

SMALL-POX IN MARYLEBONE.—On Tuesday afternoon a lodging-house keeper, named Onslow, of 61, Marylebone-road, attended before Mr. Yardley to lodge a complaint against the workhouse authorities of St. Marylebone for refusing to admit his servant, Anne Calvert, who was suffering from small-pox, into their infirmary. On the magistrate remonstrating with the overseer, the latter replied that he was sorry to say it was not the only case, for just as he came to the court-room another person requested an order from him to admit his son, who was also suffering from small-pox. The Hospitals were all full, and they did not know what to do. In company with the committee appointed by the guardians, he went to Highgate, Hampstead, Hornsey, and other suburban places, in order to see if they could not get some empty house or houses in which to place patients suffering from the disease, but as soon as they mentioned the nature of their business to the agents or landlords, they at once refused to let their premises. The number of cases was fearfully on the increase in the parish, and, unless the patients were isolated, the spread of the disease might be dreadful. Some steps he thought ought to be taken in the matter by the Government. That morning it was brought under their notice that ten persons were suffering from the disease in one room. That day, in company with their committee, he was in the Small-pox Hospital when a deputation from Clapham came and begged that admission might be given to some of their parishioners. This could not be granted them, as the place was full. It was not a matter of money. They had just paid £3 15s. for a room for one week. The only place they were likely to get in their own locality was near the vestry of the church at St. John's-wood. Near it, on one side of the path, was the clergyman's residence, and on the other that of the beadle and bell-ringer. The latter was thought a proper place by Sir James Hamilton, but it was objected to on the ground that it would drive the people from the church. Accordingly no place whatever had been found,

They had advertised for houses, but without the least success either in town or suburbs. They had now sent round to the other parishes in London to know if they would join them in erecting an iron Hospital in some of the outskirts. Their Small-pox Hospital only received four patients.

UNIVERSITY OF LONDON.—EXAMINERS FOR 1863-1864. —*Classics*—Rev. Charles Badham, D.D., and Rev. Joseph William Blakesley, B.D. *Mathematics and Natural Philosophy*—Wm. Henry Besant, Esq., M.A., and Edward John Routh, Esq., M.A. *The English Language, Literature, and History*—Rev. Joseph Angus, D.D., and Joshua Girling Fitch, Esq., M.A. *The French Language*—Professor Charles Cassal and Antonin Roche, Esq. *The German Language*—Professor Kinkel, Ph.D., and C. H. Schaible, Ph.D. and M.D. *The Hebrew Text of the Old Tetament, the Greek Text of the New Testament, and Scripture History*—Rev. Samuel Davidson, D.D., and William Aldis Wright, Esq., M.A. *Logic and Moral Philosophy*—Professor James F. Ferrier, LL.D., and Edward Poste, Esq., M.A. *Political Economy*—William B. Hodgson, Esq., LL.D., and Richard Holt Hutton, Esq., M.A. *Experimental Philosophy*—Professor George Downing Liveing, M.A., and Balfour Stewart, Esq., M.A., F.R.S. *Chemistry*—Professor William Allen Miller, M.D., F.R.S., and Professor Alex. Wm. Williamson, Ph.D., F.R.S. *Botany and Vegetable Physiology*—Joseph Dalton Hooker, Esq., M.D., F.R.S., and John Lindley, Esq., Ph.D., F.R.S. *Geology and Palæontology*—Professor John Morris, F.G.S., and Professor Andrew C. Ramsay, F.R.S. *Law and the Principles of Legislation*—Herbert Broom, Esq., M.A., and Professor Joseph Sharpe, LL.D. *Practice of Medicine*—Professor Edmund Alexander Parkes, M.D., F.R.S., and Francis Sibson, Esq., M.D., F.R.S. *Surgery*—Thos. Blizard Curling, Esq., F.R.S., and John Hilton, Esq., F.R.S. *Anatomy*—Professor George Viner Ellis and Professor Peter Redfern, M.D. *Physiology, Comparative Anatomy, and Zoology*—George Busk, Esq., F.R.S., and William Scovell Savory, Esq., M.B., F.R.S. *Midwifery*—Wm. Tyler Smith, Esq., M.D., and Charles West, Esq., M.D. *Materia Medica and Pharmaceutical Chemistry*—Professor Alfred Baring Garrod, M.D., F.R.S., and Frederick J. Farre, Esq., M.D. *Forensic Medicine*—Professor Wm. Augustus Guy, M.B., and Wm. Odling, Esq., M.B., F.R.S.

ROYAL INSTITUTION OF GREAT BRITAIN.—ANNUAL MEETING, FRIDAY, MAY 1, 1863.—The Duke of Northumberland, K.G., F.R.S., President, in the chair. The annual report of the Committee of Visitors for the year 1862 was read and adopted. The amount of contributions from members and subscribers in 1862 amounted to £3079 13s.; the receipts for subscriptions to lectures were £563 14s; the total income for the year amounted to 4630 8s. 1d. On December 31, 1862, the funded property was £29,341 2s. 2d.; and the balance at the bankers, £804 3s. 4d., with six Exchequer Bills of £100 each. A list of books presented accompanies the Report, amounting in number to 161 volumes, making, with those purchased by the managers and patrons, a total of 558 volumes (including periodicals) added to the library in the year. Sixty-two lectures and twenty-one evening discourses were delivered during the year 1862. Thanks were voted to the President, Treasurer, and Secretary, to the Committees of Managers and Visitors, and to Professor Faraday, and the other Professors, for their services to the Institution during the past year. The following gentlemen were unanimously elected as officers for the ensuing year:—*President*—The Duke of Northumberland, K.G., F.R S. *Treasurer*—William Pole, Esq., M.A., F.R.S. *Secretary*—Henry Bence Jones, M.A., M.D., F.R.S. *Managers*—Sir William George Armstrong, F.R.S.; the Rev. John Barlow, M.A., F.R.S.; Sir John Peter Boileau, Bart., F.R.S.; George Busk, Esq., F.R.C.S., F.R S; George Dodd, Esq., F.S.A.; Sir George Everest, C.B., F.R.S.; John Peter Gassiot, Esq., F.R.S.; Sir Henry Holland, Bart., M.D., D.C.L., F.R S.; Sir Roderick I. Murchison, K.C.B., D.C.L., F.R.S.; James Nasmyth, Esq.; William Frederick Pollock, Esq., M.A.; Robert P. Roupell, Esq., M.A., Q.C.; the Lord Wensleydale; Charles Wheatstone, Esq., D.C.L., F.R.S.; Colonel Philip James Yorke, F.R.S. *Visitors*—Hon. and Rev. Samuel Best; George J. Bosanquet, Esq.; Archibald Boyd, Esq.; John Watkins Brett, Esq.; Bernard Edward Brodhurst, Esq.; John Charles Burgoyne, Esq.; Montague Chambers, Esq., Q.C.; George Frederick Chambers, Esq.; Christopher Darby Griffith, Esq., M.P.; Captain Frederick Gaussen; Kenneth Macaulay, Esq., M.P., Q C.; Edmund Packe, Esq.; the Earl of Rosse, F.R.S., Chancellor Univ. Dublin; the Earl Stanhope, D.C.L., F.R.S. Pres. Soc. Antiq.; George Tomline, Esq., M.P. General Monthly Meeting, Monday, May 4.—William Pole, Esq., M.A., F.R.S., Treasurer and Vice-President, in the chair. The Secretary announced that His Grace the President had nominated the following Vice-Presidents for the ensuing year:—Sir Wm. G. Armstrong; William Pole, Esq., M.A., F.R.S., Treasurer; the Rev. John Barlow, M.A., F.R.S.; Sir Henry Holland, Bart., M.D., D.C.L., F.R.S.; Sir Roderick I. Murchison, K.C.B., D.C.L., F.R.S.; the Lord Wensleydale. John Graham, M.D., and Cosmo Howard, Esq., were elected Members of the Royal Institution. The following Professors were re-elected:—William Thomas Brande, Esq., D.C.L., F.R S, Hon. Professor of Chemistry; John Tyndall, Esq., F.R.S., Professor of Natural Philosophy; Edward Frankland, Esq., Ph.D., F.R.S., was elected Professor of Chemistry. The presents received since the last meeting were laid on the table, and the thanks of the members returned for the same.

BOOKS RECEIVED.

The Report of the Northampton General Lunatic Asylum for 1862.

. A visit with thirty-five patients to Llandudno, in North Wales, for change of air and scene, was undertaken and carried out by Dr. Wing, the Medical Superintendent, with the best results. He writes:—

"It was delightful to see those who had (some of them for many years) been restricted to a narrow range, climbing the mountain or wandering along the beach, collecting specimens illustrative of natural history, or objects of interest and curiosity; contemplating the magnificent scenery; enjoying the bracing effects of the sea bath, or the invigorating breeze, while gliding on the surface of the water in the sail boat; exercise on foot, in running excursions into the neighbourhood; riding on horses, ponies, or donkeys; drives in vehicles of various descriptions; pic-nic parties; railway trips to localities of historical or scientific interest, or of scenic beauty, including the ancient town and castle of Conway, the city of Bangor, and the Menai Straits, with the wonderful tubular suspension bridges, parts of the Isle of Anglesea, and the mountain of Pen-Maen-Mawr, of which several made the ascent. Minor enjoyments were not lost sight of, shopping and marketing were gratifications to some, especially the ladies. The house commanding a near and uninterrupted view of the sea, the telescope was brought into frequent requisition, and many observations were taken of the passing vessels."

Edinburgh Veterinary Review for May, 1863. Edinburgh: Maclachlan and Stewart.

. Prof. Gamgee continues the exposition of his views on Morbid Condition of Horses' Feet. They are worth the study of every man who is dependent upon the organs in question.

Edinburgh Medical Journal for May, 1863. Edinburgh: Oliver and Boyd.

. Contains a full account of the discussion on the case of Bromwich v. Waters which took place at the Medico-Chirurgical Society of Edinburgh. Prof. Simpson introduced the case, and gave the evidence on both sides with a running commentary. Dr. Ramsbotham, who was present, stated the motives and reasons for his appearance as a witness which his letters to the public journals have contained. One of the most remarkable passages in the case was the evidence, obtained by commission, of Dr. Gully, the Hydropath and Homœopath. Amongst other extraordinary statements, he said that, from the small size of the vagina, etc., he believed Whalley to be a woman of small sexual desire; and, he added, that, having examined as a phrenologist her bump of amativeness he had come to the same conclusion. Dr. Simpson asserted, on the authority of Dr. Moir, who was present, that Dr. Lee is known to consult professionally with Dr. Gully. We hope there is some mistake here.

Dictionary of Chemistry and the Allied Branches of other Sciences. Part III. By Henry Watts, B.A., F.C.S. London: Longmans and Co.

. This number commences with the conclusion of Arsenic, treats of the important subjects of Atomic Weight, Atomic Volume, and when we say that the initials W. O. are appended to these articles, our readers will understand that they contain the cream of matter. The article "Beer," by the Editor, is remarkably full and clear, and, with regard to adulteration, is comforting rather than otherwise.

The Englishwoman's Journal for May, 1863. London.

Pharmaceutical Journal for May, 1863. London; John Churchill and Sons.

Dental Review for May, 1863. London: J. W. Davies.

Catalogue of the Library of Murray's Royal Institution, Perth. By M. W. J. 1863.

Address of the Hon. William B. Reed to the Democratic Central Committee at Philadelphia. London: N. F. Mackintosh. 1863

NOTES, QUERIES, AND REPLIES.

Be that questionedly much shall learn much.—*Bacon.*

Dr. Aldis's Report on Small pox will appear next week.

J. M. A. B.—Consult a Physician, follow his advice, and do not read Medical books.

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The Forthcoming Election of Pensioners at the Royal Medical Benevolent College, Epsom.—We wish to appeal to those of our readers who are subscribers to this charity, on behalf of Mr. Stratford A. Eyre, who is one of the nine candidates for the five vacancies announced. The published account of the candidates sets forth that

"Mr. Eyre, M.R.C.S., was a Surgeon in the army from 1812 to 1819, and in general practice in London from 1820 to 1857, when, from ill health, he was compelled to relinquish it, although, from the expense of bringing up a large family, he had laboured under a very pecuniary pressure. The income required by the laws will be subscribed by his relatives."

We may add that from private information we can testify to the services rendered by Mr. Eyre to his country. When Hospital-mate of the 15th Infantry, on the 30th of March, 1814, at La Croix, in Lower Canada, he was with 102 men of his regiment under fire from nine o'clock in the morning until four in the afternoon. The attack of the Americans was successfully resisted, but of the 102 English officers and men present, 58 were killed and wounded, and for his services on that occasion Mr Eyre received the appointment of Assistant-Surgeon to his regiment. Mr. Eyre's subsequent career both in the army and in private life has been unblemished. Misfortunes have overtaken him as they do the best and bravest, and he now asks from his Professional brethren an asylum for the remainder of his days. We trust that his appeal, backed as it is by the highest names in our own Profession and in the army will not be in vain.

Deterioration of the Population of France.—The Paris correspondent of the *Times*, writing in reference to this year's conscription of 100,000 men, notices the fact of the increasing number of recruits rejected on account of physical imperfection.

"This ogre, called the conscription, swallows up year after year the flower of the youthful rural population. Those who are left behind are comparatively short in stature, feeble in frame, and infirm. It is stated on authority which has not, I believe, been contested, that, out of 1000 youths registered as the contingent to be furnished by certain cantons, 753 were rejected by the Revision Board as unable from physical defects to bear arms. Napoleon I. used to boast that he had 100,000 men to spend every year, and his incessant wars, and incessant call upon the population to supply them, have produced what we now witness. To this, I fear, as to the laws on the division of property, is attributed the fact that the population for the last ten years has stood still, where it has not actually diminished, while that of other European countries has increased."

A writer in the *Siècle* on the same subject lays the imperfection of the population "to the excessive labour in manufacturing districts, and the want of gymnastic exercises in public schools. While the mind of the pupil, he observes, increases with Greek and Latin, it enables him to attain the modest distinction of *Bachelier des Lettres*, the body, which also needs cultivation and force, is completely neglected. True, the gymnasium is found in the Lycemm, but it is like the dead languages which the pupils are forced to acquire, they have no more relish for it than for Sophocles. He contends that all bodily exercises, gymnastics, fencing, swimming, riding, etc., should become not merely a neglected accessory, but the indispensable complement to education."

THE YEAR BOOK OF THE NEW SYDENHAM SOCIETY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I find from perusing your weekly letters that collateral matter comes under admission to your Journal. I therefore trouble you with a question respecting the new Sydenham Society. Hitherto an annual contribution as little as (I think) deservedly appreciated has been circulated amongst the subscribers; and my object in addressing this letter to you is to ascertain if the year-book is to be continued. A circular was issued some time since respecting this book, in order, I suppose, to know the feelings and opinions of members regarding it. I presume, from its being still sent out, that it has met with favour among our brethren. All persons with whom I have had any converse on the subject have invariably and without hesitation denounced the work. Perhaps the merits of this year-book may be more fully discussed by the publicity given to the subject.

I am, &c.
Watford. A MEMBER.

THE CALABAR BEAN AS A NEW OPHTHALMIC AGENT.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—During the last fortnight I have been making experiments at the Kent County Ophthalmic Hospital, with a view to the estimation of both healthy and diseased eyes a solution of extracts of different strengths of the Calabar bean, as advised by Dr. Argyle Robertson in a paper read before the Edinburgh Medical Society, February 4, 1863, and these experiments have been attended with the most satisfactory results, contraction of the pupil occurring shortly after its application to the same extent as dilatation of the pupil occurs after a solution of atropine has been dropped into the eye. Mr. Becker the House-Surgeon, will in the course of a short time forward to you a detailed statement of the cases; but, as there is great difficulty in procuring the Calabar bean, perhaps you will publish this letter at once. So far as I have given it a trial, I quite think with Dr. Argyle Robertson "that in the Calabar bean we possess an agent that will soon rank as one of the most valuable in the ophthalmic pharmacopœia.

I am, &c.
JOHN WOOLCOTT, F.R.C.S.,
Surgeon to the Kent County Ophthalmic Hospital.

11, Brook-street, Grosvenor-square, Mid-Middlesex, May 4.

DR. FOWLER'S "MEDICAL VOCABULARY"—INVITED PLAGIARISM.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—A few days after the announcement of the referees' award in this matter, my publisher applied to Mr. Churchill, asking that the objectionable preface to the second edition of Dr. Mayne's work might be withdrawn from circulation.

To this most reasonable solicitation you will be surprised to hear that Dr. Mayne has replied through his publisher in the following words:—"I cannot comply with the request of Mr. Fowler."

I am therefore again constrained to beg the indulgence of a space in your pages, to publicly ask Dr. Mayne to accord me that reparation which, as a man of honour and a gentleman, he must feel that I am entitled to.

I have disproved, *to the satisfaction of the referees*, every statement which Dr. Mayne committed himself to in respect of the dates of announcement and publication of my "Medical Vocabulary."

Despite his production, after a period of four months, of certain alleged proofs in substantiation of the imputed plagiarism, I have also conclusively shown that the serious charges brought against me are totally devoid of foundation.

The Profession will therefore, I am sure, consider me justified in now asking of Dr. Mayne to cancel such cause to be expunged every disproved allegation of his in the aforesaid preface which relates to myself.

I am, &c.
ROBERT FOWLER, M.D. Edin.,
Author of "*The* Medical Vocabulary."

145, Bishopsgate-street Without, May 4.

THE VALUE OF AN ERLANGEN DIPLOMA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you have the kindness to let me know how the Medical Act affects a licentiate of Apothecaries' Hall of Ireland duly registered, but holding the German Medical diploma of Erlangen? Can he write himself Doctor? Can he write himself M.D.? Can he put either or both of these titles on his door or window? May he do so if any part of charge in virtue of it? or what general authority does it give him under the sanction of the law? One does not wish to act illegally, nor yet to forego any advantages that may be gleaned from a diploma which has cost money, time, and care. I understand some cases have been decided in England bearing on my queries; if you would furnish me with the facts of them I would be much your debtor, and feel greatly obliged.

I am, &c.
John's Bridge, Kilkenny, May 1. J. T. C.

[*.* No qualification gives a right to practise, or any substantial privilege, unless it be registered. The question of using the title of Dr. is, we think, an open one.—ED.]

AN ASSISTANT'S PRIVILEGES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

INFORMATION WANTED.—SIR,—I will feel obliged in the extreme if you will answer in the next issue of the *Medical Times and Gazette* the following question:—A gentleman, after being cured of gonorrhœa, by me (for he told me not to let my master know of it), and paying liberally for same, which, of course, I put into the till of my employer, subsequently called on me to write for him two or three prescriptions for separate venereal affections, which I did, not copying from any prescription in my master's day-book, neither did I directly or indirectly copy from any prescription belonging to him; in fact, using nothing but his pen and ink. To whom does the fee paid for writing the same belong, master or your humble servant.

AN ASSISTANT!
May.

. If the assistant had been a curate, and if some newly-married man, during the honeymoon, had sent him a teapot or a bag of sovereigns, plus the fee already paid to the rector, out of gratitude for the happiness conferred, depend upon it the rector would make his discoveries every farthing. "An Assistant" should have no secrets from his master, and should leave it to the master's generosity.—ED.

"ASTIGMATISMUS."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Your correspondent "Queerus" seeks the derivation of "Astigmatism." I would so recently introduce the word into your pages, but to describe and explain one of the attendant disturbances of vision. Astigmatism might be defined as a condition in which the eye possesses differences of refractive power in its different meridians. Let us suppose the horizontal to be the meridian of greatest, and the vertical the meridian of least refraction, rays from any luminous point, falling upon the cornea in the horizontal meridian, will then have a nearer focal union than rays from the same point falling in the vertical meridian. Between the forms of vertical rays and the forms of horizontal there will be a line, the focal interval of which, studied with the ophthalmoscope, enlarged, and the eye is called astigmatic because it has no focus, point, or stigma in which *all* the rays falling on the cornea from a single point can be united.

I am, &c.
Stroud, Gloucestershire, May 4. R. B. CARTER.

THE VACCINATION ACT.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—You relate a very graphic and heroic adventure of exploration with l'Officier de Santé in search of the vaccine, ending in the difficult problem, how to bring contemporary vaccine to a great *sans*, under Vaccination law. The revelation arrived at, however nugatory, is most creditable to your united investigation, and if it may not bring such defaulters to book, it the more strongly inculcates the practice of vaccination where the field is open to it. After all our national and Parliamentary exertions to forward vaccination, shall those means to an end be as though they had been given—a farce, a dead letter,—which is the fact at present? There was a great mistake and blunder in making an Act and appointing no public functionary, as matter of duty, to see to its enforcement. In Boards of Guardians, so far as the parties concerned, could see it by the Relieving Officers or the Registrars, and the Registrars could attend to other classes; but the Registrars, who have equal or more trouble with this than with births and deaths, are only allowed a paltry threepence per case, and that only when they have a return to the notice issued. That the enforcement of the Act would be a great public benefit in the way of preventing and keeping out small pox, as well as rendering each case of vaccination more sure, cannot be gainsayed; and that by regularity it would furnish Medical men severally with fresh lymph, always at hand, must also be palpable. What now is the fact? ignorance, prejudice, and apathy, as you say, among the poor, and, by reason, and if

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is only when a fright of small-pox comes that they press forward for vaccination; and what then is the result? A crowd is vaccinated in a hurry, many never appear a second time at the appointed place, and vaccination necessarily suffers in the estimation of the very parties who are themselves mostly to blame for its inefficiency.

Begging that these remarks may not be deemed intrusive, and that you may further, with your ability and pen, this desirable object of making the Vaccination Act a worker and no longer a sleeper,

I am, &c. AN OLD SURGEON.

P.S.—I believe I am right in remembering that Denmark, from the beginning, had a compulsory vaccination, and that it has been more free, in consequence, from small-pox than any other country.

HEALTHY VACCINE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I beg humbly to draw attention through the medium of your valuable periodical to a peculiar but interesting advertisement that has been set forth to the Medical Practitioners of the parish of Islington by the Medical officer of that said parish, which is to the following effect:—"That a vaccine depot will be instituted at the Medical officer's offices, where vaccine lymph may be obtained by Practitioners, and for it a return of vaccine lymph is to be given by the Practitioner; thus, if he receives two charges, he is expected to return double, and so on."

Now, Mr. Editor, the question which arises in my mind, and which has been so often hinted at in your valuable articles is, that what we want, more especially at this time, is pure vaccine lymph, and, what is more, to know the source from which that lymph is obtained. Now, I ask how is this to be ascertained for certain when we are to have a general vaccine depot, where promiscuous vaccine lymph is given by any Practitioner in the parish, and no doubt the greater amount of it by those whose lot it is to vaccinate the poorer classes of suffering humanity? In private and in public practice the great object is to see the child, and know the history of its parents. Will the Medical officer guarantee that he will have full information of this, or will he not rather have to trust entirely to the Practitioner, whose time is already so fully taken up that he cannot enter into details concerning every child that is brought to him as public vaccinator. Will not it rather have a tendency to cause abortive vaccination, irritable vesicles, and a decomposed lymph, and, in place of giving vaccination a fair trial, make a mockery of it, and so depreciate it both in the eyes of the public and the Profession? I am, &c.

FREDERICK DAWSON, Jun., M.R.C.S.E., L.S.A., L.M.

1, Union-place, and 3, Englefield-road, Islington, N.

THE BULB OF THE OVARY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In a review of Dr. Savage's "Illustrations of the Surgery of the Female Pelvic Organs," which appeared in your last impression, the writer expresses his belief that I have confounded the venous plexus, known as the "pampiniform," with the structure to which, some years ago, I gave the name of "bulb of the ovary." I venture to think that I have done nothing of the kind. Long before I commenced the series of dissections from which resulted the plates which illustrate Dr. Savage's book, I was well acquainted with the pampiniform plexus, as it is described in anatomical works and in the dissecting rooms. I subsequently found, and was, I believe, the first to describe, a structure which lies along the inferior margin of the ovary and for some distance under the Fallopian tube, in every way similar in character to that which is placed on each side of the orifice of the vagina, and which is so intimately associated with the name of Kobelt. In the bulb of the ovary, as in that of the vagina, the venous structure is surrounded by bundles of organic muscular fibre; these contract, and produce a state of erection, which, in the former case, helps very much, in my opinion, to retain the ovary in a position favourable for the application of the fimbriated extremity of the Fallopian tube during ovulation. This suggestion was contained in the communication I made to the Anatomical Society of Paris. I did not imply, as Virchow seems to have understood, that I considered the erection of the bulb of the ovary as the *sole* means by which this wonderful mechanism was brought about, and which still remains partially unexplained. I only inferred that it was an element in the process which, up to that time, had not received any attention from physiologists. It has done so, however, since; for Dr. Savage, in his preface, correctly states the facts when he says that M. Rouget's *first* mention of the "bulb of the ovary" was long after my communication to the Anatomical Society of Paris; and when he adds that M. Rouget's "illustration is an imitation of the organ" as shown in the drawing which M. Leveillé had previously made from my dissection.

Indeed, Dr. Savage's preface is so clear on all these points, that a competent critic should scarcely have permitted himself to assume that any confusion between the pampiniform plexus and an erectile structure was possible. As, however, the reviewer of the book in question has done so, I beg that you will kindly insert this letter in the next number of your valuable Journal. I am, &c. J. REEVES TRAER, F.R.C.S.

47, Hans-place, S.W., May 4.

The following is the passage in the review to which Mr. Traer refers in the above remarks:—"We believe, however, that the existence of this plexiform mass of veins" (called by Mr. Traer bulb of ovary) "has been long recognised by anatomists under the name of ovarian or pampiniform plexus." So have we learnt, and so have we taught; but what do anatomists really say? "The arteries penetrate the ovary along its attached border; the veins correspond, add the ovarian veins form a plexus near the ovary, named the pampiniform plexus."—"Quain's Elements of Anatomy," by Sharpey and Ellis. From the extreme branches (of the blood-vessels in the ovary) the blood is returned by the veins which pass to the base of the ovary where they are very numerous.—Fig. 370, *b*—which shows the plexus of veins in connection with the lower border of the ovary in transverse section. "They form near the ovary, and between the folds of the broad ligament a plexus termed ovarian or pampiniform."—Fig. 369, *d*—which represents a dense plexiform mass occupying the situation where Mr. Traer has placed the "bulb of the ovary"—*Cyclop. Anat. and Physiology*, art. "Uterus," p. 552. It appears therefore that anatomists include in the term "pampiniform plexus" the whole of the veins emerging from the lower border of the ovary and lying between it and the spermatic and utero-ovarian veins. Since M. Rouget recognised an "enormous venous mass" beneath the ovary, we know not how he could have "overlooked the bulb of the ovary" as he is said in the preface to Dr. Savage's work to have evidently done.

COMMUNICATIONS have been received from—

Dr. DUGALD CAMPBELL; Dr. H. BUSS; Mr. FREDK. DAWSON, Jun.; Mr. C. CARTER BLAKE; Mr. T. STOKES; Mr. R. B. CARTER; APOTHECARIES' HALL; Dr. GEORGE JOHNSON; UNIVERSITY OF LONDON; Dr. A. A. MANTELL; Dr. GEORGE E. DAY; Dr. W. LANDER LINDSAY; Dr. RAMSBOTHAM; Dr. C. TAYLOR; Dr. A. MITCHELL; Dr. W. S. KIRKES; A MEMBER; Dr. MICHAEL FOSTER, Jun.; Dr. R. FOWLER; J. T. C.; Mr. C. C. ATKINSON; THE ROYAL INSTITUTION; J. M. A. B.; Dr. J. FAYRER; Mr. J. R. TRAER; AN ASSISTANT; UNIVERSITY OF LONDON; Mr. F. J. WILSON; ROYAL MEDICAL AND CHIRURGICAL SOCIETY; Mr J. C. ROOPE, F.R.C.S.; Mr. JOHN WOOLCOTT; ROYAL COLLEGE OF PHYSICIANS.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 2, 1863.

BIRTHS.

Births of Boys, 1002; Girls, 973; Total, 1975.
Average of 10 corresponding weeks, 1853-62, 1800·6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	705	669	1374
Average of the ten years 1853-62	596·7	573·5	1170·2
Average corrected to increased population..	..	..	1287
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	8	19	5	4	8	10	2
North ..	618,210	16	2	22	4	5	19	1
Central ..	378,058	7	3	7	2	5	4	1
East	571,158	24	4	17	2	7	16	4
South ..	773,175	11	20	23	..	23	9	1
Total.. ..	2,803,989	68	47	74	12	48	58	9

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·909 in.
Mean temperature	47·8°
Highest point of thermometer	68
Lowest point of thermometer	31·4
Mean dew-point temperature	39·1
General direction of wind	N.W.& N.E.
Whole amount of rain in the week	0·18 in.

APPOINTMENTS FOR THE WEEK.

May 9. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's 2 p.m.; Charing-cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Max Müller, "On the Science of Language."

11. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

12. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 7½ p.m. Prof. George Busk, F.R.S., "On Human Remains from Brick-earth near Chatham." Professor J. Marshall, F.R.S., "On a Microcephalic Human Brain." W. Bollaert, "On Past and Present Populations of the New World."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. Newton Heale, "On the Physiological Anatomy of the Lungs." Dr. Dickinson, "On a Fœtus without Heart or Brain."

ROYAL INSTITUTION, 3 p.m. Professor Tyndall, "On Sound."

13. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

14. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Professor Ansted, "On Geology."

15. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Dr. Odling, "On the Molecule of Water."

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NINTH ANNUAL REPORT

OF THE

BRITON MEDICAL AND GENERAL LIFE ASSOCIATION,

PRESENTED AT THE GENERAL MEETING OF SHAREHOLDERS AND MEMBERS,

Held at the Chief Offices of the Association, 429, Strand, London,

On THURSDAY, the 30th day of APRIL, 1863.

The Directors experience unqualified satisfaction in meeting the Shareholders and Members of the Association, and laying before them the following statement respecting its progress and position:—

In the past year the Directors have received 2810 proposals for assuring £653,238. Of these, 174 for assuring £49,048 have been declined, 563 proposals for assuring £93,735 have not been carried out, while 197 were under consideration at the close of the year. The remainder have been completed, and 2023 Policies issued, assuring the sum of £459,540, and producing in annual Premiums the sum of £15,275 13s. 6d.; being an increase of over 50 per cent. on the returns of the previous twelve months.

Nine Annuities have been granted, for which the Association has received £1177 9s.

The following Table exhibits the progress of the Association during the last Five Years:—

Year.	No. of Proposals.	Amount proposed.	No. of Policies.	Amount Assured.	Annual Premiums.
1858	1976	395,815	1342	262,815	£8,328 14 8
1859	2370	430,265	1751	314,240	£9,751 16 7
1860	2405	466,788	1805	348,160	£10,023 12 6
1861	2512	482,950	1839	349,990	£10,084 15 3
1862	2810	653,238	2023	459,540	£15,275 13 6

The Claims have been 97 in number, and amount (less £500 re-assured) to £26,373 11s. 7d., which sum includes 12 claims for £2375, admitted, but not due at the close of the accounts.

The Balance Sheet and Cash Account which are submitted herewith, show the total income for the year to have been £90,780 13s. After the payment of Claims, Annuities, Dividends, Re-assurances, and all other outgoings, the balance on the year's transactions in favour of the Association is £40,469 10s. 4d. The sum has been duly carried to the Assurance Reserve Fund, which now amounts to £146,526 2s. 11d.

The Accounts have been duly audited, and the Report of the Auditors is as follows:—

TO THE DIRECTORS OF THE BRITON MEDICAL AND GENERAL LIFE ASSOCIATION.

GENTLEMEN,—We have carefully examined the Books, Accounts, Securities, and Vouchers in connexion with the Balance Sheet and Statements submitted, and we beg to report the same correct and satisfactory in every respect. The large increase in the Company's transactions renders the accounts extremely voluminous; but we are glad to bear testimony to their accuracy, and to the extreme care which characterizes the keeping of the Books.

We are, Gentlemen, your obedient servants,

HENRY ALGOOD, WILLIAM BROOKS, } *Auditors.*
JOHN BROWN, C. B. ROWLAND, }

London, April 25th, 1863.

A Dividend at the rate of £6 per cent. per annum, free of Income-tax, is recommended.

The Directors who retire by rotation, in accordance with the Deeds of Settlement, are Dr. G. H. Barlow, Mr. George Chapman, and Mr. Wilson Ancell, who, being eligible, offer themselves for re-election.

During the past year the amalgamation between the "New Equitable" and the "Briton" has been finally completed, and the united Companies, with the special permission of the Board of Trade, have adopted as a title the "Briton Medical and General Life Association;" this name representing the two interests upon which the business of the Institution mainly depends.

The Directors have also entered into arrangements whereby they have acquired the assets and Life business of the Unity General Assurance Association. From the large additional connexion thus secured, much advantage is anticipated. This arrangement having been made late in the year, there has not been time to show the entire results of the transaction in the present Balance Sheet, but the Directors have every reason to be gratified with them so far as they have already been developed.

This being the period appointed by the Deed of Settlement for the valuation of the Assets and Liabilities of the Association, with a view to the declaration of a Bonus, the Directors have instructed their Consulting Actuary, Arthur Scratchley, Esq., M.A., to make the necessary investigations. The extensive transactions of the Company render this operation one of considerable magnitude and difficulty, and it has consequently been found impossible to conclude it in time to embody the results in this Report. The Directors, however, confidently anticipate a most favourable conclusion to the labours of their Actuary.

The Directors feel great pleasure in welcoming the Shareholders and Members to the new Offices of the Association. The former premises were found too small to accommodate the staff required to carry on the extended operations of the Company; and the Directors, after due consideration, deemed it advisable to embrace the opportunity which afforded of securing a long lease of the noble and commodious building in which the business of the Association is now conducted.

The two great features of the Briton Medical and General Life Association are—that it asserts, more completely than any other office, the important principle of doing justice to the Medical Profession, whose services to the cause of Life Assurance are pre-eminent; and that it introdced into the practice of Life Assurance the novel and equitable plan of making ordinary Life Policies payable during the lifetime of the Assured. Wherever this plan has been made known it has been approved, and the Directors believe it will be found peculiarly applicable to the personal assurances of Medical and all other professional men, or of those whose incomes in any way depend upon the exercise of their mental or physical powers.

In reviewing generally the progress of the Association, the Directors feel they may justly and fairly congratulate the Proprietors on the position it has attained.

The present income of the Association may be estimated at over £110,000 per annum. The funds in hand amount to £180,000. The new business is progressing at the rate of nearly £16,000 per annum.

The Association has over 2000 active Agents residing in the United Kingdom and abroad, who are daily contributing to its prosperity.

From the foregoing it will be seen that the future prospects of the Association are most encouraging, and that the success the Directors anticipated has been to a large extent achieved. The Directors, however, invite the earnest co-operation and assistance of the numerous friends of the Society still further to advance its interests, and more steadfastly to promote those great and just principles which it was founded to establish.

By Order of the Board,

GEORGE H. BARLOW, *Chairman.*
FRANCIS WEBB, *Deputy-Chairman.*
JOHN MESSENT, *Secretary.*

London, April 30th, 1863.

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THE ADAMS DEFENCE FUND.

FIRST LIST OF SUBSCRIPTIONS.

	£	s.	d.
Ackland, Wm. Henry, Esq., Bideford ..	1	1	0
Beale, Lionel, M.D., Grosvenor-street ..	1	1	0
Bennet, Dr. Henry, Grosvenor-street ..	1	1	0
Bennett, J. R., M.D., Finsbury-square	1	1	0
Bluck, Chas., Esq., Warminster	1	1	0
Bowman, Wm., Esq., Clifford-street ..	5	5	0
Bristowe, J. S., M.D., St. Thomas's-street	1	1	0
Brown, Augustus, M.D., Barnsbury-park	2	2	0
Bull-cik, Henry, Esq., Isleworth ..	0	10	6
Burton, Miss, per Dr. Cape	1	1	0
Bury, George, Esq., Wimbledon	1	1	0
Cape, Lawson, M.D., Curzon-street ..	5	5	0
Clark, W. O., Esq., Nottingham-terrace	1	1	0
Chavasse, P. H., Esq., Birmingham ..	1	1	0
Churchill, J., Esq., New Burlington-st.	1	1	0
Clapton, Edwd., M.D., Wellington-street	1	1	0
Coates, Martin, Esq., Salisbury	1	0	0
Collins, W. J., Esq., Albert-terrace, Regent's-park	1	1	0
Cotton, R. P., M.D., Clarges-street ..	1	1	0
Coulson, W., Esq., Old Jewry, per "Lancet"	5	5	0
Crookes, J. F., Esq., Faversham.. ..	1	1	0
Crosby, T. Boor, Esq., Finsbury-place ..	1	1	0
De la Garde, Phillip, Esq., Exeter ..	1	1	0
Engale, Thos., Esq., Euston-square ..	0	5	0
F. T——, per H. Obrd, Esq., ...	0	10	0
Flint, Richard, Esq., Stockport, per J. Propert, Esq.	1	1	0
Gill, S. Lawrence, M.D., Bow-road, per "Lancet"	1	1	0
Ditto second subscription ..	1	1	0
Guppy, T. Stokes, M.D., Falmouth ..	1	1	0
Harris, Jas. Penn, Esq., Liverpool ..	3	3	0
Hillman, W. A., Esq., Argyle-street ..	1	1	0
Hood, Peter, Esq., Lower Seymour-street	1	1	0
Husband, W. Dalle, Esq., York	1	1	0
Huxley, E., Esq., Old Cavendish-street, per Spencer Wells, Esq.... ..	1	1	0
Jackson, H., Esq., Finsbury-circus ..	1	1	0
Juler, Cundell, M.D., Connaught-terrace, per "Lancet"	0	10	0
Lewis, Waller, M.D., General Post Office	1	1	0
Loud, Edwd., Esq., Manchester.. ..	1	1	0
Mansford, J. S., Esq., Clifton-gardens ..	2	2	0
Massent, John, Esq., Briton Life Office	2	2	0
Morgan, W. F., Esq., Bristol	1	1	0
Obrd, H., Esq., Melcombe-pl., Dorset-sq.	1	1	0
Omerod, E. L., M.D., Brighton	5	0	0
Peacock, T. B., M.D., Finsbury-circus ..	1	1	0
Propert, John, Esq., New Cavendish-st., per "Lancet"	10	10	0
Russell, Jas., Esq., Birmingham ..	1	1	0
Saunders, E., Esq., George-st. Hanover-sq.	5	5	0
Seccombe, Edwin, Esq., Brook-street ..	1	1	0
Shute, Gay, Esq., Greenwich	1	1	0
Smith, C. M., Esq., Shrewton	10	10	0
Smith, F., M.D., Park-st., Grosvenor-sq.	5	5	0
Starkin, Jas., Esq., Savile-row	2	2	0
Stevens, J. N., Esq., Plymouth	1	1	0
Terry, Henry, Esq., Northampton ..	1	1	0
Thompson, Henry, Esq., Wimpole-street	1	1	0
Tomes, John, Esq., F.R.S., Cavendish-sq.	2	2	0
Townley, Jas., M.D., Kennington ..	2	2	0
Toynbee, Joseph, Esq., Savile-row ..	2	2	0
Webb, Fred. A., Esq., Maida-hill ..	1	1	0

JOHN B. WALKER, Hon. Sec. and Treasurer, 17, Clifton gardens, Maida-hill, W.

Medical Men Remunerated in every Case Submitted to them.

STAR LIFE ASSURANCE SOCIETY,

48, MOORGATE-STREET, LONDON.

Directors:

CHAIRMAN—CHARLES HARWOOD, Esq., F.S.A., Judge of the County Court of Kent, and Recorder of Shrewsbury.

DEPUTY-CHAIRMAN—JOHN CHURCHILL, Esq.

The STAR LIFE ASSURANCE SOCIETY was founded in the year 1843.

ANNUAL REVENUE, £120,000.

CLAIMS PAID.—The total claims arising from death which have been discharged by the Society amount to £300,000.

BONUSES.—Three distinct calculations have been made with a view of appropriating the surplus sum or profit arising from the operations of the Society: at the last, made at the beginning of the year 1859, the Actuary reported that, after putting by £189,379 18s. 10d. as a reserve for future contingencies, there was £97,347 15s 9d. available for division.

ASSETS.—The Assured have the security not only of the Capital Stock, but of a large invested sum, amounting to MORE THAN HALF-A-MILLION, which, with the well-known character of the Directors of the Society, is a substantial guarantee that all claims will be met with readiness and punctuality.

The following Table will best illustrate the progress of the Society:—

Year.	Number of New Policies issued.	Sums Assured thereby.	Annual Premiums therefrom.	Total Accumulations from all sources.
		£	£ s. d.	£ s. d.
1856	603	294,451	6,597 18 3	202,110 7 2
1857	572	221,122	7,733 9 5	238,035 1 7
1858	658	235,350	8,582 0 9	274,767 15 4
1859	812	294,495	10,172 19 6	309,444 5 2
1860	902	336,293	11,312 15 9	366,330 3 0
1861	1,115	361,950	12,968 3 11	414,231 5 9
1862	1,067	375,197	12,962 7 9	*484,976 14 0

JESSE HOBSON, F.L.S., Secretary.

* Since this Report was closed, the Accumulated Fund has so increased as to raise it above Half-a-Million.

MAGNETO-ELECTRIC MACHINES for MEDICAL ELECTRICITY,

extremely powerful, and beautifully finished, £1 15s.

LARYNGOSCOPE, of the most improved construction, in case complete, £1 17s. 6d.

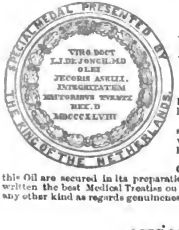
OPHTHALMOSCOPE, with powerful Condensing Lens, 14s. 6d.

At C. BAKER'S OLD-ESTABLISHED INSTRUMENT WAREHOUSE, 212 and 244, HIGH HOLBORN (opposite Day and Martin's).

To the Surgical and Medical Professions.—W. F. Durroch, Manufacturer

of Surgical Instruments to the Royal Navy, Greenwich Hospital, Guy's Hospital, &c. &c., begs to inform the Profession that he continues to manufacture SURGICAL INSTRUMENTS of every description, and that he has attained the highest reputation by the approval and patronage of the most eminent Practitioners and Lecturers for the improvements made in various articles. Gentlemen favouring him with their orders may rely on having their Instruments finished in the best and most modern style. Surgical Instruments made to Drawings and kept in repair. Established 1798.

No. 28, St. Thomas's-street East, and No. 1, Dean-street, near the Hospitals in Southwark. Late Manufacturer to the leading Houses in the Trade.



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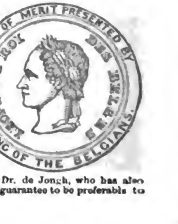

SELECT MEDICAL OPINIONS.

Sir HENRY MARSH, Bart., M.D., Physician in Ordinary to the Queen in Ireland:—"I consider Dr. de Jongh's Cod-liver Oil to be a very pure Oil, not likely to create disgust, and a therapeutic agent of great value."

Dr. BARLOW, Senior Physician to Guy's Hospital:—"I have been well satisfied with the effects of Dr de Jongh's Cod-liver Oil, and believe it to be a very pure Oil, well fitted for those cases in which the use of that substance is indicated."

Dr. LANKESTER, F.R.S., late Lecturer on the Practice of Medicine, St. George's School of Medicine:—"I consider that the purity and genuineness of this Oil are secured in its preparation by the personal attention of so good a Chemist and intelligent a Physician as Dr. de Jongh, who has also written the best Medical Treatise on the Oil with which I am acquainted. Hence I deem the Cod-liver Oil sold under his guarantee to be preferable to any other kind as regards genuineness and medicinal efficacy."

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ORIGINAL LECTURES.

PROFESSOR HUXLEY'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

Lecture VI.

(*Being the Fifth of Six Lectures on Classification, and on the Characters of the Principal Groups of the Animal Kingdom.*)

If we now turn to the other column of classes of invertebrate animals (*supra*, p. 259), the four first on the list, viz., *Cephalopoda*, *Branchiogasteropoda*, *Pulmonata*, and *Pteropoda*, have a number of well-marked characters in common. In all, the nervous system is composed of three principal pairs of ganglia—cerebral, pedal, and parieto-splanchnic—united by commissures. All possess that remarkable buccal apparatus, the odontophore,—whence I have ventured to propose the name of *Odontophora* for the group. The circulatory and respiratory organs vary a good deal, but none are provided with double lamellar gills upon each side of the body.

The *Lamellibranchiata* stand in somewhat the same relation to the *Odontophora* as the *Annelida* to the *Arthropoda*. The *Lamellibranchs* have the three fundamental pairs of ganglia of the *Odontophora*, but they possess no trace of the odontophore. Furthermore, they are all provided with bivalve external pallial shells, the valves being right and left in relation to the body. No shell of this kind is found in any of the *Odontophora*. Almost all Lamellibranchs, lastly, have a pair of lamellar gills on each side of the body, and all are provided with auriculate hearts. No doubt the *Odontophora* and the *Lamellibranchiata* properly form parts of one and the same sub-kingdom, Mollusca, and the three classes which follow, viz., the *Ascidioida*, *Brachiopoda*, and *Polyzoa*, are usually included in the same sub-kingdom.

But the difficulty of framing a definition which shall include the last-named classes with the *Lamellibranchiata* and *Odontophora* is almost as great as in the parallel case of the *Annuloida* and *Annulosa*, while, on the other hand, the Ascidians, Brachiopods, and *Polyzoa* exhibit many features in common. Thus the nervous system is greatly simplified in all three classes, consisting, in the *Ascidioida* and *Polyzoa*, of a single ganglion, sending perhaps a commissural cord round the gullet. In the *Brachiopoda* the chief ganglia, which appear to be the homologues of the pedal ganglia of the higher molluscs, and are connected by a circum-œsophageal cord, are combined with accessory ganglia, but these do not seem to be identifiable with the pedal or the parieto-splanchnic ganglia.

Again, the fact that the heart, when present, is of a simple tubular or saccular character, and is devoid of any separation into auricle and ventricle, constitutes a wide difference between these three classes and the higher Molluscs. On the other hand, these classes, which may be conveniently denominated Molluscoida, resemble one another in the fact that (so far as I am aware there is only one exception, *Appendicularia*) the mouth is provided with ciliated tentacula, disposed in a circle, or in a horse-shoe shape, or fringing long arms; that it leads into a large, and sometimes an exceedingly large, pharynx; and that in two of the three, at least, that system of cavities communicating with the exterior, which has been called the "atrial system," is greatly developed.

I cannot doubt, then, that the *Molluscoida* form a natural assemblage; but until the precise characters, if any exist, which unite them with the *Mollusca* proper can be clearly defined, I am inclined to think it might be better, as in the case of the *Annuloida*, to recognise them as a separate division of the Animal Kingdom.

The next two classes—the *Actinozoa* and the *Hydrozoa*—constitute one of the most natural divisions of the animal kingdom—the Cœlenterata. In all these animals the substance of the body is differentiated into those histological elements which have been termed cells, and the latter are primarily disposed in two layers, an external and an internal, constituting the "ectoderm" and "endoderm."

Among animals which possess this histological structure, the *Cœlenterata* stand alone in having an alimentary canal, which is open at its inner end, and communicates freely, by means of this aperture, with the general cavity of the body. In a large proportion of these animals the prehensile organs are hollow tentacles, disposed in a circle around the mouth, and all (unless the *Ctenophora* should prove to be a partial exception to the rule) are provided with very remarkable organs of offence and defence, termed "thread cells" or "nematocysts." These, when well exhibited, as, for example, by the common freshwater polype (*Hydra*), are oval, elastic sacs, containing a long coiled filament, barbed at its base, and serrated along the edges. When fully developed, the sacs are tensely filled with fluid, and the slightest touch is sufficient to cause the retroversion of the filament, which then projects beyond the sac for a distance, which is not uncommonly equal to many times the length of the latter. These fine filaments readily penetrate any delicate animal tissue with which they are brought into contact, and in the human skin cause great irritation. Nor can it be doubted that they exert a similarly noxious influence upon the aquatic animals which are seized by, and serve as prey to, the *Actinozoa* and *Hydrozoa*. Characteristic as these organs are of the Cœlenterates, however, it must not be imagined that they are absolutely peculiar to the sub-kingdom; some nudibranchiate *Mollusca*, such as *Eolis*, are armed with similar weapons, and the integument of certain *Turbellaria*, and even of some *Infusoria*, is provided with bodies which seem to be of a not altogether dissimilar character.

No Cœlenterate possesses any circulatory organs, unless the cilia which line the general cavity of the body can be regarded as such; and a nervous system has, at present, been clearly made out only in the *Ctenophora*. Here its central mass occupies a position which is very unlike that in which the principal masses of the central nervous system are found in other invertebrate animals, being situated upon that side of the body which is diametrically opposed to the mouth.

Whatever extension our knowledge of the nervous apparatus of the Cœlenterates may, and not improbably will, receive from future investigators the positive characters afforded by the histological features of their substance, and the free opening of their alimentary canal into the general cavity of the body, are such as to separate them, as a sub-kingdom, as sharply defined and devoid of transitional forms as that of the *Vertebrata*, from the rest of the Animal Kingdom.

Great difficulties stand in the way of any satisfactory grouping of the remaining classes, if we are determined to remain true to the principle that the definition of a group shall be true of all members of that group, and not true of any others,—a principle which lies at the foundation of all sound classification.

In possessing cilia as locomotive and ingestive organs; in being provided with a contractile water receptacle with vessels proceeding from it (in some cases at any rate) into the substance of the body; in their tendency to become encysted and assume a resting condition, the *Infusoria* undoubtedly exhibit analogies with the lower Annuloida, such as the *Turbellaria*, *Rotifera*, and *Trematoda*.

But the entire absence, so far as our present knowledge goes, of a nervous system, the abrupt termination of the gullet in a central semi-fluid sarcodic mass, and the very peculiar characters of the reproductive organs, of the *Infusoria*, separate them widely from the *Annuloida*, though it seems to me not improbable that the gap may hereafter be considerably diminished by observation of the lower forms of *Turbellaria*.

At present the *Infusoria* are usually regarded as forming part of the same sub-kingdom as the *Spongiada*, *Rhizopoda*, and *Gregarinida*, and as closely allied to them. But, so far as I am aware, no definition can be framed which will yield characters at once common to, and distinctive of, all these four groups; and recent discoveries tend to widen so greatly the hiatus between the *Infusoria* and the other three classes, that I greatly doubt if the sub-kingdom *Protozoa* can be retained in its old sense.

But if the *Infusoria* be excluded from it, the remaining groups, notwithstanding the imperfection of our knowledge regarding some of them, exhibit a considerable community of partly negative and partly positive characters.

The *Spongiada*, *Rhizopoda*, and *Gregarinida*, in fact, are all devoid of any definite oral aperture; a considerable extent, and sometimes the whole, of the outer surface of the body acting as an ingestive apparatus. Furthermore, the bodies of these animals, or the constituent particles of the compound aggregations, such as the Sponges, exhibit incessant changes of

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form—the body wall being pushed out at one point and drawn in at another—to such an extent, in some cases, as to give rise to long lobate, or filamentous, processes, which are termed "pseudopodia."

Finally, all these classes agree in the absence of any well-defined organs of reproduction, innervation, or blood circulation.

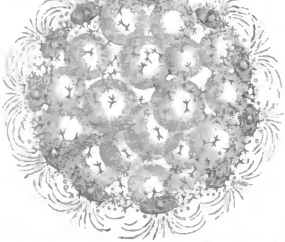
In my first lecture upon Classification, I passed very briefly over the class *Rhizopoda*, intending to return to the discussion of its limits, and of the value of its subdivisions, when discussing the subdivisions of classes generally. But as time will not permit me to enter at any length upon the greater part of this branch of my subject, I will content myself with briefly stating the conclusions at which I have arrived from a careful study of the extant literature of the subject, combined with some old investigations of my own.

It appears that three, or perhaps four, types of structure obtain among the *Rhizopoda*—

1st. That of the *Amœbæ*—Rhizopods with usually short pseudopodia, a nucleus, and a contractile vesicle.

2nd. That of the *Foraminifera*—Rhizopods devoid of nuclei and of contractile vesicles, and, for the most part, with long pseudopodia, which commonly run into one another and become reticulated.

3rd. That of the *Thalassicollæ*, provided with structureless cysts containing cellular elements and sarcode, and surrounded by a layer of sarcode, giving off pseudopodia, which commonly stand out like rays, but may and do run into one another, and so form networks.



Sphærozoum ovoideum (after Haeckel), one of the *Thalassicollæ*.

While a fourth type of structure is probably furnished by those anomalous creatures, the *Acineteæ*, the radiating processes of which serve as suctorial tubes down which the juices of their prey are conveyed.

That the *Rhizopoda* are divisible into at least three groups, corresponding to the three first-mentioned types of organisation, seems to me unquestionable; but it is another matter, and one on which I offer no opinion, what should be the exact limits of these groups, and what denominations we ought to employ for them. And it must be recollected that, so long as naturalists are unacquainted with the sexual method of reproduction of these animals, they are, to a certain extent, working in the dark.

In conclusion, I may sum up the results of this lecture by stating that, in the present state of our knowledge, the whole Animal Kingdom is divisible into eight categories or groups, no two of which are susceptible, in the present state of knowledge, of being defined by characters which shall be at once common and diagnostic.

These groups are the

Vertebrata.

Mollusca.	*Annulosa.*
Molluscoida.	*Annuloida.*
Cœlenterata.	*Infusoria.*

Protozoa.

I leave aside altogether the question of the equivalency of these groups; and, as I have already stated, I doubt the permanency of one—the *Infusoria*—as a distinct primary division. Nor, in view of the many analogies between the *Mollusca* and the *Molluscoida*, the *Annulosa* and the *Annuloida*, do I think it very improbable that hereafter some common and distinctive characters may possibly be discovered which shall unite these pairs respectively. But the discoveries which shall effect this simplification have not yet been made, and our classification should express not anticipations, but facts.

I have not thought it necessary or expedient, thus far, to enter into any criticism of the views of other naturalists, or to point out in what respect I have departed from my own earlier opinions. But Cuvier's system of classification has taken such deep root, and is so widely used, that I feel bound, in conclusion, to point out how far the present attempt to express in a condensed form the general results of comparative anatomy departs from that embodied in the opening pages of the "Règne Animal."

The departure is very nearly in the ratio of the progress of knowledge since Cuvier's time. The limits of the highest group, and of the more highly organised classes of the lower divisions, with which he was so well acquainted, remain as he left them; while the lower groups, of which he knew least, and which he threw into one great heterogeneous assemblage,—the *Radiata*—have been altogether remodelled and rearranged. Milne Edwards demonstrated the necessity of removing the *Polyzoa* from the radiate mob, and associating them with the lower Molluscks. Frey and Leuckart demonstrated the subregnal distinctness of the *Cœlenterata*. Von Siebold and his school separated the *Protozoa*, and others completed the work of disintegration by creeting the *Scolecida* into a primary division, of *Vermes*, and making the *Echinodermata* into another. Whatever form the classification of the Animal Kingdom may eventually take, the Cuvierian *Radiata* is, in my judgment, effectually abolished: but the term is still so frequently used, that I have marked out those classes of which it consisted in the diagram of the Animal Kingdom (p. 269), so that you may not be at a loss to understand its application.

ORIGINAL COMMUNICATIONS.

ON THE

EFFECTS OF THE SOLUTION OF THE CALABAR BEAN ON THE ACCOMMODATION OF THE EYE AND ON THE PUPIL.

By J. SOELBERG WELLS,

Ophthalmic Surgeon to, and Lecturer on Ophthalmic Surgery at, the Middlesex Hospital.

In a paper recently read before the Edinburgh Medico-Chirurgical Society (February 4, 1863), my friend Dr. Argyll Robertson called the attention of the Profession to the interesting fact that the Calabar bean possesses the peculiar property of stimulating the sphincter pupillæ and the ciliary muscle to contraction. He not only fully ascertained, in a series of ably-conducted experiments, its power of causing contraction of the pupil and of the ciliary muscle when a drop of its extract is applied to the conjunctiva, but also proved its efficacy in counteracting the paralysing effect of atropine upon the pupil and the accommodative power of the eye.

Professor Christison some years ago gave an interesting account of the properties of the Calabar bean(a), and of some experiments which he made with it upon himself. Having swallowed twelve grains of the bean, he was soon seized with giddiness and extreme weakness, together with other symptoms of severe poisoning, the heart and pulse becoming exceedingly feeble and tumultuously irregular. But it does not appear to have caused any impairment of vision.

Messrs. Bell and Co. having some weeks ago kindly procured for me some of the beans from Edinburgh, and prepared some solutions of various strength, I have been enabled to make repeated experiments with the extract, the results of which have fully borne out Dr. Robertson's experience. I gave a portion of the strongest solution (one minim of which corresponds to four grains of the bean) to Mr. Bowman, and at his request applied a little to his eye, and he has kindly

(a) "On the Properties of the Ordeal Bean of Old Calabar, West Africa," by Robert Christison, M.D., etc., etc., read before the Royal Society of Edinburgh, February 5, 1855.

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furnished me with the following valuable notes of his personal experience of its physiological effects:—

"We are much indebted to Dr. Robertson for calling attention to the influence of the Calabar bean on the ciliary muscle and on the iris. His paper is conclusive as to the reality of these effects, and my friend, Mr. Neill, of Liverpool, informs me that he has found the pupil to be contracted by it even in cases of dilatation of the pupil, the result of injury. This would seem to imply a direct specific action on the circular muscular fibres of the iris, and if so, in all probability also on the tissue of the ciliary muscle,—an action of stimulation producing a result the precise reverse of that of atropine.

"I gladly took advantage of the solution of the bean which you brought me, and of your offer to note its effects on my eye. The inside of the left lower lid was touched at 5.5 p.m., on April 30, with, I suppose, about a tenth part of a minim of the solution. Both my eyes are alike in optical power, and are in all respects normal. The pupils had a diameter of rather more than one line. The contact caused a slight smart for a minute.

"In five minutes (5.10) I experienced a decided tight feeling referrible pretty accurately to the ciliary region of that eye, as if something were creeping about in it.

"In ten minutes (5.15) this continued, together with occasional rather sharp pains in the ciliary region. An attempt to read with both eyes instantly increased this pain, and the type was confused, as if by a disturbance of the power of accommodation.

"In thirteen minutes (5.18) the near point of the left eye (Jaeger, No. 1) was at six and three-quarter inches, that of the right eye being fifteen inches, thus indicating a spasm of accommodation in the left, and a diminished power in the right eye. With this change, the effort to look at the type or optometer with either eye, or with both, much aggravated the sense of distress in the left eye. The type looked smaller with the right eye than with the left. The far point seemed the same as before in each eye.

"In twenty minutes (5.25) I could see Jaeger 17 at fifteen feet, but with the left eye with a remarkable oscillation in the distinctness, so that the type came and went, at one instant quite clear, then indistinct, which coincided with the sensations present in the ciliary region, as if the ciliary muscle was undergoing irregular contractions. The left pupil was now observed to have become rather suddenly contracted to the size of a large pin's head; and to avoid repetition, I may state that this contraction continued to the full amount for eighteen hours, then gradually relaxed during about three days, after which it was like its fellow. As it gradually dilated, it also resumed gradually its mobility under light, whether falling on its own or the opposite retina, or on both. With the sudden contraction of the pupil came also a sudden twilight gloom, as of an eclipse of the sun, much more marked when the left eye only was open. But this gloom soon lessened, owing, probably, to the retina, by continuance, becoming accustomed to the quantity of light admitted, and on the next day it was hardly noticeable.

"In twenty-five minutes (5.30) the pupil being extremely small, we noted the astigmatism. The vertical bars of a window were seen clear and sharp at from six to ten feet, the horizontal bars within the same range having thin edges, slightly hazy, but rendered clear by a concave cylindrical glass of fourteen inches focus suitably placed. Distant objects seen by the left eye through a concave spherical glass of fifty inches focus were very decidedly diminished in size.

"In thirty minutes (5.35) the near point by No. 1 of Jaeger was for the left eye at six and a-half inches, for the right eye only at ten and a-half inches, not nearer or further off, and even at this distance indistinct, whereas with the left eye the letters were crisp and clear. To this better sight of the left eye two causes contributed,—the larger size of the retinal image from greater nearness of the type to the eye, and the smallness of the pupillary aperture. With the left eye the near point for vertical lines was at eight and a-half inches, for horizontal lines at six and a-half inches. With the right eye the near point for vertical lines was at eleven and a-half inches, for horizontal lines at seven and a-half inches. The strained feeling of the left eye was less after half an hour, but did not quite cease till the next morning. The attempt to read continued somewhat painful all the evening, and even next day both eyes were somewhat uneasy in sustained vision of near objects, with both eyes or either of them.

"Eighteen hours afterwards (noon on May 1) both eyes were alike as to accommodation, and in both the near point for vertical and horizontal lines was one inch nearer the eye than natural, viz., for horizontal lines near point seven inches, vertical lines near point nine inches; and at twenty-four feet each eye could read No. 18 of Jaeger, only the letters were more sharply defined with the left, and looked rather smaller. The pupils were then,—

The eyes in shade, R O L O; in the light, R ◎ ◎ L.

"By way of comparison I accurately examined the accommodation for horizontal and vertical lines with each eye on May 9, and found both eyes alike; the near point for horizontal lines being nine inches, and for vertical lines ten inches for each,—one inch more remote from the eye than after eighteen hours from the instillation of the solution of the bean."

I will now pass on to the description of a case of paralysis of the circular fibres of the iris and of the ciliary muscle of the right eye (the left being perfectly normal) which presented itself most opportunely at the Middlesex Hospital on April 25, and afforded me an excellent opportunity, not only of fully testing the efficacy of the bean, but of making parallel and comparative experiments upon the two eyes, and watching, step by step, its effect upon the healthy and the paralysed structures.

Mrs. D., aged 26, was admitted an out-patient of the Middlesex Hospital April 23, 1863. She is suffering from paralysis of the constrictor pupillæ and of the ciliary muscle of the right eye. This affection appears to be of rheumatic origin, for about three months ago she was seized with a severe attack of rheumatism of the right side of the face. A day or two afterwards the sight of the right eye became affected, so that she could not see to read or to thread a needle when both eyes were open; she was also troubled with diplopia, to free herself from the annoyance of which she was obliged to close the right eye when sewing, etc. About the same time she also noticed a marked increase in the size of the pupil of the right eye. Her sight and health had previously been always good. There is nothing in her history or symptoms that would point to a specific or cerebral cause of the affection of the eye.

April 25.—The state of the two eyes was ascertained to be as follows:—

Right Eye.—The pupil is widely dilated (about four lines) and immovable. The sight is much affected, for she can only read no 16 of Jaeger, but not closer than eighteen inches from the eye. With a convex glass of six inches focus she can read the finest print (No. 1), the near point then lying at five and three-quarter inches, the far point at six an l a-half inches from the eye. This proves that there is still a minimum of accommodation, and that the eye is very slightly hypermetropic. The truth of the latter statement is proved by the fact that she can only read No. 19 at a distance of eighteen feet, but that with a convex glass of sixty inches focus she can read No. 18. A drop of a strong solution of atropine (gr. iv. to ℥j of water) was then applied to this eye, and four hours later the eye was again examined. The pupil was found to be slightly more dilated; the state of vision being the same as before, except that No. 1 could only be read with a convex glass of six inches focus at six and a-half inches, the last remnant of accommodative power had been temporarily destroyed.

The left eye was quite normal. Reads No. 1 at four inches, and, at a distance of eighteen feet, No. 16.

There was not the slightest impairment of the movements of the eye, and the refracting media and inner tunics were perfectly normal.

Within the next five days some solution of the Calabar bean was tried twice with marked effect, but as my time would not permit me to watch the course of the effect continuously during several hours after the application, I shall pass on at once to a detail of the last experiment (May 4), which I must be excused for giving somewhat at length, as it is interesting to watch step by step the peculiar action of the bean upon the pupils and accommodation of the two eyes.

May 4.—At 10.30 a.m. the condition of the two eyes was again tested.

Right Eye.—The pupil, stationary, measures three and a-half lines in diameter (the effect of the last experiment upon the pupil does not appear to have quite subsided, for previous to the last application of the bean, last Thursday, the pupil measured four lines). Can only read No. 16. In order to ascertain how much the dilatation of the pupil might influence

the state of vision, a diaphragm, having an opening one-third of a line in diameter, was placed before this eye, and it was found that this greatly improved the sight, for with it she could read words of small type (No. 4) from thirteen to sixteen inches, but not a word of No. 2. At a distance of eighteen feet can only read No. 19; with convex 80, No. 18; with diaphragm, No. 16; with diaphragm and convex 50, No. 16.

Left Eye.—Pupil, active, measures two lines in diameter. Can read No. 1 at four inches, No. 16 at 18 feet; with convex 80, only No. 19; with concave 50, only No. 20. At 11 a.m., a large drop of the strong solution of Calabar bean (one minim corresponding to four grains) was applied to the conjunctiva of each eye. It gave rise to a slight sensation of burning in the corners of the eye, and in about five minutes the lids felt heavy and leaden, as if they could hardly be lifted. At the same time, a peculiar sensation, as of something jumping and buzzing about the eye, was experienced, and a darting pain was felt in the ciliary region.

Fifteen minutes afterwards (11.15) objects about the room appear dark and misty. The smarting has ceased in both eyes, but the heavy, leaden feeling of the lids continues; the darting, jumping sensation in the ciliary region is less, and is intermittent, but is aggravated by an attempt to read. *Right Eye.*—The size of pupil is diminished to two and one-third of a line, perfectly stationary. She can now read the finest print (No. 1) from ten and a-half to fourteen inches. At a distance of eighteen feet cannot read No. 20. *Left Eye.*—Pupil measures one and one-third line, active, slightly oblong in transverse diameter; can read No. 1 only from three and a-half to five inches. At eighteen feet can only read No. 20; with concave 14, No. 16, but the letters appear very dark. In reading either near at hand or at a distance there is a constant oscillation in the sight of both eyes,—at one moment she can see distinctly, at the next the print becomes clouded and fades from her sight.

At 11.30. *Right Eye.*—Pupil measures two-thirds of a line, stationary. Can read No. 1 from eight to eleven inches. Cannot read No. 20 at eighteen feet. With concave 14, can read No. 18; cannot read No. 16 with any concave glass. *Left Eye.*—Pupil measures two-thirds of a line, active, heart-shaped, the base being upwards. Reads No. 1 from three and a-half to five and a-half inches; cannot read No. 20 at eighteen feet; with concave 6 can read No. 18 but indistinctly; with concave 7, No. 19; cannot see No. 16 with any concave glass. She complains of "blacks" floating about before her eyes. In testing her near and far point for No. 1, she is obliged to bring the print first to about her near point, and then gradually to move it further and further from the eye. She could not at once read it at the far point; this being particularly the case with the left eye. The type does not appear larger or nearer to her, only darker.

11.45.—The effect upon the accommodation is beginning slightly to wear off upon both eyes, but not upon the pupil.

Right Eye.—Pupil measures two-thirds of a line. Reads No 1. from ten to twelve inches. Can now decipher No. 20 at eighteen feet; with concave 24, No. 18; concave 14, only No. 20. *Left Eye.*—Pupil measures two-thirds of a line. Reads No. 1 from three to ten and a-half inches; can see No. 20 at eighteen feet; with concave 14, No. 18 plainly; concave 6, only No. 20, not No. 19.

12 The eyes do not smart now; objects in the room appear more light. *Right Eye.*—Pupil measures one line. Can read No. 18 at eighteen feet; with concave 36, No. 16. *Left Eye.*—Pupil measures one line. Reads No. 1 from four to fourteen inches; No 19 perfectly well at eighteen feet; with concave 20, No. 16.

At 12.7.—She could not read No. 1 with the right eye; only No. 2 from fifteen to nineteen and a-half inches.

12.15. *Right Eye.*—No alteration in the size of the pupil. Can now again see No. 1 from sixteen to eighteen inches, but only for a moment, the letters then become veiled, and disappear. On first looking she could see No. 16 quite plainly at eighteen feet, but in a moment or two the letters became clouded, so that she could only see No. 18. The myopia has almost disappeared on this eye, for with concave 50 she can only read No. 18, not No. 16. *Left Eye.*—Pupil the same. At a distance reads No. 19, not a word of No. 18. With concave 24, No. 16 very plainly.

1.20. *Right Eye.*—Pupil still measures one line. Cannot see smaller print than No. 17, this best at twenty-two inches from the eye. With a diaphragm can see No. 1 at about fourteen inches, but only very indistinctly. Can see No. 18 very plainly at eighteen feet, also with concave 50. *Left Eye.*—Pupil still measures one line. Reads No. 1 from four to seventeen inches; can see No. 18 very dimly; with concave 24, No. 18 distinctly. The reason of her being unable with either eye to see No. 16 at a distance may be due to the unfavourable light upon the test type.

2.15. *Right Eye.*—The pupil has increased to one and a-quarter line. Can see no print smaller than No. 12, this from twenty-three to fifty-one inches; with the diaphragm only No. 4 from sixteen to twenty-one and a-half inches. Can see No. 18 very plainly at eighteen feet. The eye has again become slightly hypermetropic; for she sees No. 18 worse with concave 50, better with convex 80. *Left Eye.*—Pupil still measures one line. No. 1 from four to seventeen inches. With concave 30, No. 16 indistinctly at eighteen feet distance.

3.30 *Right Eye.*—The pupil dilated to one and a-half lines. Can see No. 12 from thirty to fifty-one inches; with diaphragm No. 4 from seventeen to twenty-one inches. At eighteen feet No. 18 very plainly. Cannot now see No. 18 with concave 50, only No. 20; with convex 60, No. 18. *Left Eye.*—Pupil dilated to one and a-quarter line. Reads No. 1 from four to seventeen inches; at eighteen feet, No. 18 very dimly, but very fluently with concave 40.

5.35. *Right Eye.*—The pupil now measures two lines. Reads No. 12 from twenty-seven to forty-five inches; with diaphragm can read No. 4 from eighteen to twenty-two inches. A bright light being thrown on the test type, she can read No. 18 at a distance of eighteen feet; with diaphragm can read No. 16; still better with convex 80; with convex 60, only No. 18; with concave 50 No. 20 appears very dull. *Left Eye.*—The pupil has regained its normal size, viz., two lines; can read No. 1 from four to sixteen inches, and can now see it for the first time at once at the far point, being no longer obliged to move it gradually further off until this point is reached. At eighteen feet reads No. 18 fluently; with convex 80, only No. 20; with concave 30, No. 16 with difficulty; with concave 24, No. 18 distinctly. She is much fatigued by the examination, and complains of frontal headache.

Tuesday, May 5, 5 p.m.—*Right Eye.*—Pupil dilated to three lines; cannot read No. 12, only No. 16; at eighteen feet No. 18; also with convex 80, but not with convex 60; with concave 50 cannot read No. 20. *Left Eye.*—Pupil measures two lines. Reads No. 1 from four to thirteen and a-half inches; at eighteen feet, No 18; with concave 24 also No. 18; convex 80, No. 20. She complains of headache, and of considerable dimness in both eyes.

May 7, 10.30 a.m.—*Right Eye.*—Pupil measures three and a-half lines. Reads No. 16; with diaphragm, No. 4 from seventeen and a-half to twenty-one inches; at eighteen feet, No. 19, words of No. 18 but indistinctly; with convex 60, No. 18 easily; with diaphragm, No. 16; with concave 50, only No. 20. *Left Eye.*—Pupil measures two lines. Reads No. 1 from four to fourteen and a-half inches; at eighteen feet only No. 19 at first, then the letters of No. 18 break upon her; with convex 80, only No. 20; with concave 30, No. 16.

May 11, 10.30 a.m.—*Right Eye.*—Pupil is smaller than two days ago, measuring now only three lines; her sight is also better, for she can read No. 12 to-day from twenty-four to thirty inches, and with diaphragm No. 2, at eighteen feet can read No. 18, and words of 16 with convex 80; with concave 60 only No. 20 indistinctly. *Left Eye.*—Pupil measures two lines. Reads No. 1 from four to sixteen inches; at eighteen feet No. 18, and words of No. 16; with concave 36 No. 16 fluently, with convex 80, No. 20 indistinctly.

These experiments illustrate most fully the peculiar action of the Calabar bean upon the size of the pupil and the accommodation of the eye. Not only was the pupil of the healthy eye rapidly contracted, but even the paralysed pupil, which before the application measured three and a-half lines, was contracted to two-thirds of a line (the size of a pin's head) within half-an-hour after the instillation of the extract. The maximum of contraction of the pupil was the same in each eye, but the left regained its original size sooner, it also always remained active under the influence of light, whereas the right was quite immovable. The sight of the right eye also rapidly improved, for within a quarter of an hour of the application she could read with it the very finest print, and this whilst its pupil was two and one-third lines in diameter. The effect upon the ciliary muscle was more marked in the left than in the right eye, for in the former the near point was

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approximated to three inches, the far point to five and a-half inches; in the right eye the near point was never brought closer than eight inches, nor the far point nearer than eleven inches. Stronger concave glasses were consequently required for distant objects by the left than by the right eye. The effect upon the accommodation also ceased much sooner in the right than in the left eye, for in the former the myopia had disappeared five hours after the application, whereas six days afterwards the sight of the left eye for distant objects was still improved by a concave glass of thirty-six inches focus.

My next experiment will be to test the curative influence of the Calabar bean upon the paralysis of the pupil and accommodation, and to ascertain whether we cannot succeed by periodic applications of a very weak solution of the bean in exciting the sphincter pupillæ and the ciliary muscle to gentle contraction, without fatiguing and weakening them by over-stimulation.

16, Savile-row, W.

ON IRIDECTOMY IN DESTRUCTIVE ULCERATION OF THE CORNEA.

By ROBERT B. CARTER, M.R.C.S.E.,
Fellow of the Royal Medical and Chirurgical Society.

The value of iridectomy in destructive ulceration of the cornea, although long since established by Von Graefe, and fully recognised on the Continent, has not, I think, in this country, received the attention that is its due. The operation is certainly not performed often enough by surgeons in general practice, and, even in some ophthalmic hospitals, does not hold the position to which it is entitled. The following case affords an excellent illustration of its advantages:

G. R., a farm labourer, aged 53, applied to me on February 5, on account of an injury to his right eye. He is a feeble, decrepit-looking man, grey, and partially bald, who might pass for ten or fifteen years more than the age he acknowledges.

On January 28 (eight days previously) he received a blow on the eye from a twig. With the apathy characteristic of his class, he continued to work, in spite of loss of vision and increasing pain, until his employer sent him to seek assistance.

I found the conjunctiva of the right eye so much injected, that a pterygium of long standing, on the nasal side, could scarcely be distinguished from the surrounding vascularity. The cornea was nearly perforated by a grey, sloughing ulcer, about three lines in diameter, surrounded by a zone of dense opacity. The ulcer not being perfectly concentric with the cornea, but situated somewhat towards its outer and lower margin, the zone of opacity reached the margin in this direction; while, on the upper and inner side, above the pupil, it left a crescentic portion, which, although steamy and turbid, retained sufficient transparency to show the dark brown colour of the iris, but not to show its fibrous structure. There were no vessels proceeding to the ulcer, nor (except at the pterygium) encroaching upon any part of the corneal margin. Vision was limited to a dim quantitative perception of light, the patient perceiving the direction of the window, but not its outline, nor its sash-bars. There was severe pain, with nocturnal exacerbation, a feeble, quick pulse, and a worn, suffering aspect. The tension of the globe was not at all, or only very slightly, increased, and was certainly not greater than in the left eye, which, however, was already showing traces of sympathetic irritation. The injured organ had been covered by a folded handkerchief, but not treated in any way whatever.

Prior to experience of the good effects of iridectomy, it would have appeared to me certain, under the conditions I have described, that the impending perforation would be followed by iritis, probably passing on to complete disorganisation of the eye, and involving great likelihood of sympathetic destruction of its fellow.

I placed the patient upon a couch, and made an immediate iridectomy, removing the superior sixth of the iris. The pain of the operation was very acute; and, after applying Arlt's compress, I directed the patient to wait until the pain subsided. It was my intention to see him again, to prescribe an active tonic and sedative treatment, and to give him some general directions. As soon, however, as he became somewhat more easy, he left the house without my knowledge, and did not return until the following Sunday, the 8th of February. He then stated that all pain had ceased three hours after the operation, that he went back to work in the afternoon, and that he had deferred visiting me until Sunday, in order not to lose time. The compress had remained undisturbed, and, on removing it, I found the conjunctival injection much diminished, the section healed, the turbid crescentic portion of cornea cleared, the zone of opacity narrower and less dense, the ulcer receiving red vessels from below, and nearly filled up by plastic lymph. Perception of light had become qualitative, the patient being able to see a sheet of white paper.

As the case had done so well without medication, I re-applied the compress, and sent the man back to his work. On the 11th, the improvement being confirmed, and the patient able to count fingers, the compress was left off, and a band substituted for it. On the 22nd, there remained very little conjunctival injection, the vessels that repaired the ulcer had dwindled away; the place of actual excavation was marked by a well-defined dense cicatrix, its upper border just reaching to the centre of the natural pupil, and the rest of the cornea had regained perfect transparency. The patient could read No. 16 of Jäger's test-types without assistance, or No. 14 by the aid of a ten inch bi-convex lens, and I found that he could do very little more with the uninjured eye. Such a degree of amblyopia is not uncommon among elderly agricultural labourers, who, even when able to decipher simple words, never read, and who have never been accustomed to exercise their eyes about small objects of any kind. Their wives are preserved from a similar condition by using their eyes about needlework.

The patient was directed to discard all coverings from the eye, and to apply a mild astringent lotion (arg. nit., gr. ij., ad. ℥j.) for the removal of the remaining conjunctival vascularity.

The case above cited is only singular from the absence, at first accidental, of medical treatment; and, this feature excepted, my note-book would furnish several of similar import. In all of them, however, iridectomy was followed by the administration of quinine, or bark and ammonia, with or without opium, and by the local application of atropine and poultices, so that I was unable to determine the precise curative influence of the operation itself. Still, the operation has been the turning-point of every case, and the invariable precursor of rapid recovery. Before I practised it, I used to see occasional destruction of the cornea; but such a result has never followed its performance.

It must be confessed, I think, that we do not understand the *modus operandi* of iridectomy. In these corneal cases there is seldom increased tension, and there can hardly be (as suggested by Dr. Mooren in iritis) any retention of morbid matters behind the iris. A very complete division of the radiating fibres of the ciliary muscle is effected when the section for iridectomy is properly made, that is, when it is sufficiently far back, although the circular fibres are left intact. Is it possible that this division may produce a salutary change in the ocular circulation? The surgeons who practise division of the ciliary muscle by puncture seem to think that their procedure exerts some such influence. I tried it in a case of irido-choroiditis with marked, but very temporary benefit, and its repetition was not only useless, but a source of irritation. Shortly afterwards, I saw a patient in whom division of the ciliary muscle, by another surgeon, had been followed by extensive detachment of the retina—a result that the operation is obviously well calculated to produce. It is easy to conceive that the point or edge of the knife may itself detach and push inwards the retina in some cases, and that in others hæmorrhage or effusion under the choroid may produce the same effect. Since then I have entirely abandoned the operation, believing it to be, at the best, a very uncertain and imperfect substitute for iridectomy, and to be beset with many disadvantages and dangers from which iridectomy is wholly free.

The method of performing iridectomy is worthy of a passing notice. Mr. Bowman has sanctioned, by the great weight of his precept and example, such a rapid withdrawal of the knife as may produce a gush of aqueous humour, and a probable prolapse of the iris. Mr. Ernest Hart has recently advocated the same way of withdrawing the cutting-needle after the smaller incision required for artificial pupil. There is, however, among many operators of large experience a growing opinion that this gush of aqueous humour, and this prolapse of the iris, by the sudden shock to, and displacement of, the lens that they produce, are fertile sources of cataract after the operation, even where the anterior capsule has remained perfectly

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intact. Until this opinion be disproved, it will be safest to withdraw the knife with extreme caution, and to seize the iris by the introduction of proper forceps within the anterior chamber. This manœuvre is, to say the least, perfectly unobjectionable; it avoids a risk that may be actual, and that we cannot at present call chimerical, and it is perhaps more surgical than the more hurried and less careful method of procedure.

The precise steps of any operation must vary somewhat, however, in the hands of different surgeons; and the essential point is only to do the right thing at the right time. Scores or hundreds of elderly persons lose their eyesight every year by sloughing of the cornea, resulting from some trifling injury; and in all, or in nearly all of these cases, an iridectomy at any time prior to perforation would prevent the threatened mischief. The sufferers are mostly labourers, stone-breakers, hedge-trimmers, and so forth, who can seldom procure the services of an ophthalmic specialist; and it is in the hope of calling the attention of my brethren generally to a simple and effectual means of cure, that I have ventured to seek publicity for my fragment of experience in the matter.

Stroud, Gloucestershire.

ON ANEURISMAL TUMOURS INVOLVING THE NECK.

By JOHN COCKLE, M.D.
Physician to the Royal Free Hospital.

I HAVE ventured to make "Aneurismal Tumours of the Neck" the subject of a Medical communication, inasmuch as the region named may, with respect to such tumours, be regarded as neutral ground, to be explored alike by the Surgeon and Physician; for while, on the one hand, the Surgeon is rightly entitled to place some among such tumours in the category of Surgical Aneurism, the Physician, on the other hand, vindicates his right to share in the study by showing that others not unfrequently spring from the depths of the chest, and that the cervical tumour is but the extension of the primary disease. It were, indeed, to be desired that science could effect for us a more perfect allotment of these cases, each department taking its own. This, however, would imply a degree of perfection to which present science can scarcely ever even approach, much less attain. We must, then, either simply register our cases for the benefit of the future, or re-study them in connexion with the discovery of each new and important sign. We may thus hope to meet to some extent the difficulties of diagnosis.

In furtherance of this object, I have to detail the particulars of a very instructive case of aneurism of the neck which has recently fallen under my notice.

James R., aged 45, drover, a short, stoutly-built, muscular, and remarkably good-tempered Irishman, was admitted an in-patient under my care, at the Royal Free Hospital, May 22, 1862, for supposed subclavian aneurism.

Previous History.—He was in excellent health until six months ago, when, without any cause he could assign, he felt stiffness and pain about his collar-bone and shoulder, and soon after a swelling in this situation, which gradually got larger. He had drunk freely of spirits.

Inspection.—The countenance is healthy, natural, and free from anxiety; the lips of florid colour; the breathing is normal, both as regards the act and the number of inspirations. Cardiac impulse, normal in site, but very slight. A bipartite tumour extends from between the second and third right intercostal spaces to the angle of the jaw, the line of division being about two inches above the clavicle. The lower portion of the tumour, extending from the left end of the sternum to the outer third of the clavicle, is larger, though somewhat less prominent than the upper and smaller tumour, which is round and lobulated, and tends to press the jaw towards the left side. The right jugular vein is somewhat full, but patent, and courses round the external surface of the tumour. The sterno-cleido-mastoid muscle is displaced, and seems atrophied. The concussion impulse shakes the upper half of right chest and neck. The right external mammary artery visibly pulsates. No trace of œdema exists, or any other sign of venous congestion. The right pupil is contracted, being somewhat less than half the size of the left. There is, also, congestion of the right conjunctiva, more particularly at the inner angle of the eye. The tongue is always detruded to the left.

Measurement.—The upper tumour measures four inches in its transverse, and two and three-quarters in its vertical diameter. The lower sac five inches in its transverse, and two and a-half in its vertical diameter. The right upper arm measures nine inches at its middle portion, the left arm ten and a-half inches.

Palpation.—Cardiac impulse very weak, otherwise normal. Left radial pulse quickened, ranging at 90; normal in volume. Entire absence of pulsation in the right radial, ulnar, and brachial arteries. The carotid artery is, apparently, felt beating above the upper sac. The right temporal artery beats in unison with its fellow. The lower sac is so tense over the two inner thirds of the right clavicle, that here this bone cannot be felt; but at its outermost edge it ends abruptly, as if the sac had caused absorption of its remaining portion. The impulse over the sacs, especially the lower, is heaving, simply systolic, and unattended by thrill. The impulse is very liquid, especially along the inferior border of the lower sac. The beat is synchronous in both sacs, and with the left radial pulse. The temperature of the head is uniform; also that of both arms. The sensibility of the right arm is normal, but its motility decidedly lessened.

Percussion.—Dulness is bounded by the third right rib, that is, at a point a little below the visible site of tumour. Some amount of dulness exists towards the left of the sternum. Over the remaining portions of the chest the sound is perfectly normal.

Auscultation.—The heart's sounds are replaced by faint murmurs, variable in intensity and rhythm; some days the first murmur, at others the second, predominating. Faint double murmur is heard up the aorta to the bounding line of the tumour. Over both sacs, singularly pure and clear, double quasi-cardiac sounds are heard, without the faintest trace of murmur. The respiratory sound is audible over the entire extent of both lungs, and, as a rule, perfectly pure. Occasionally, the sound seems slightly bronchial at the upper part of the right lung.

General Symptoms.—Beyond the pain alluded to, occasional starting in sleep, and a certain amount of difficulty in intonation; in the earlier history of the case, there was not a symptom to note. This difficulty of intonation originated probably in a double cause—direct pressure of the upper sac upon the larynx, and, probably, pressure upon the recurrent nerve. Neither, during the subsequent progress of the case, with the exception of cough (and this not excessive), did one additional symptom occur. The patient was mostly cheerful, taking exercise in the ward, as he would not suffer the restraint of bed. But the symptoms existing became greatly intensified. The pain in the right side of the neck and shoulder recurred every day or two, mostly at night, in agonising paroxysms, often extending to the opposite side. So extreme, also, on several occasions was the sense of impending suffocation, that he was compelled to be instantly lifted out of bed, to prevent asphyxia. There was also observed slight paroxysmal dysphagia. The tumours gradually increased in size; and over one pouch in the upper sac the integument as gradually thinned and acquired a livid colour.

On August 7, the danger of rupture of the upper sac was most imminent; the integument deeply livid and thinned. Impulse was less marked, but still very liquid. I now determined, as a last resource, to try and coagulate the blood in the upper sac by passing through it, for five minutes, a strong electro-galvanic current. Here it was readily borne, but when the sponges were applied to the lower sac, the effect was insupportable, even for a moment. After the galvanism, the ice bag was applied, and rest enjoined.

By the following day the upper sac had become nearly solid, the impulse almost gone, and the sounds much less clear. The sac, however, gave way at the threatening point, and an oozing followed, which continued for four or five days, when the current was again applied. Early on the following morning the patient was unluckily allowed to leave his bed, and soon after the sac again gave way over a fresh spot. About seven ounces were lost almost at a gush. Unconsciousness immediately followed, the surface rapidly cooling, but the heart and lungs still acting, though laboriously. Soon after the last and fatal rupture, the right pupil regained its size, both being in a state of moderate dilatation. The first

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sound, hitherto heard over the sac, became of indeterminate character, but the clear second sound had entirely ceased. The cardiac and aortic sounds were now masked by the noisy respiration over the lungs. Dr. Sibson, who was present a few hours after the sac gave way, directed my attention to the marked elevation of temperature of the right side of the head. This, however, gradually subsided. The sac gave way at seven o'clock in the morning, and the patient died at seven o'clock in the evening. In addition to the use of the ice bag, iron and the iodide of potassium were fairly tried in the treatment of this case. The sacs were supported by straps of leather plaster—a method to which, in nearly every case of external aneurism, I attach very great importance. I may, perhaps, he excused mentioning that, after examination of this case, the opinion ventured on was, that it was one of aneurism of the aorta, involving the innominate, subclavian, and carotid arteries. But this was, probably, rather a lucky guess than a warrantable diagnosis.

Dr. Sibson was kind enough to make the post-mortem examination, and I am indebted to Mr. Gant for the following description of the aneurism and its relations:—"Commencing as an aneurism of the ascending and transverse aorta and innominate artery, the sac projects backwards immediately above the root of the right lung, which has undergone no pressure; then, inclining to the right of the trachea, the aneurism ascends to the hyoid bone in front of the common carotid. The right subclavian artery arises distinctly from the sac, but not involved in it. The canal of the artery is completely impervious. The right common carotid also distinctly arises from the sac, but is quite pervious. The right pneumogastric nerve may be seen passing down to the aneurism in this situation, but, as this nerve courses over the sac beneath the first rib, the two become inseparably united. The right recurrent nerve is distinctly seen winding round the subclavian just at the point where this artery springs from the aneurism. The right internal jugular vein is unobstructed, but the right innominate vein is flattened and evidently compressed, as it passes downwards more anteriorly than usual over the innominate portion of the aneurism. The superior cava is quite free and normal in its course. The left innominate vein is compressed, and the upper portion of the manubrium sterni partially absorbed. The bodies of the vertebræ corresponding to the posterior aspect of the sac are not eroded. The root of the right lung and the trachea over which the aneurism has passed towards have escaped pressure. The left carotid and subclavian arteries arise as usual from the aortic arch, and neither of them involved. To the extreme left the œsophagus is seen passing downwards without marked obstruction beneath the aortic arch, and reappearing in its normal situation. The root of the left lung is here also seen apparently unobstructed. Posteriorly to the sac are seen the right carotid artery, internal jugular vein, and right pneumogastric nerve over which the sac has passed. On the left of the sac is the hyoid bone above, and the trachea also in immediate relation to this aspect of the sac, but apparently not incommoded by it. Externally, the cords of the right brachial plexus emerge scarcely pressed upon, as the scalenus lies between. Anteriorly, the sac is overlaid by the right sterno-mastoid muscle, the deepest portion of which is inseparably connected with the sac in this situation, and which in its course divides the tumour into two unequal portions by its merely tendinous portion being left." I have merely to superadd that the heart is enlarged, and has undergone extensive degeneration; its various orifices are free and healthy. The dilatation of the aorta commences at the beginning of the ascending portion. Very extensive degeneration of the vessel exists. Large cretaceous plates and nodules extend from the very origin of the vessel to the termination of the thoracic aorta, where they abruptly ceased.

Pathology.—The general pathology of aneurism is so well known, that there are only two points in connection with it tempting me to dwell upon. But these are of a daily increasing interest. I allude to the occasional variation of size of the pupil, and the nature and origin of the sounds heard over the sac. The pupil varies in size in proportion to the amount of blood admitted to the brain. It is also directly controlled by the sympathetic nerve. Although it is matter of ordinary experience that the size of the pupils undergoes marked change in transient or permanent derangement of the cerebral circulation, I have not been successful in finding a sufficient number of recorded cases of such derangement, limiting change to a single pupil, to warrant any definite conclusion. We can, however, speak with greater confidence respecting the changes induced by disordered innervation. For direct experimental proof, we are in reality indebted to the original experiment of Pourfour du Petit, performed in the year 1727. He proved the sympathetic to be an ascending nerve, by showing that division of its cervical portion was followed by contraction of the pupil and congestion of the conjunctiva. About 130 years later, Budge and Waller confirmed this result by a most accurate series of experiments, and further showed that, in respect to its action on the pupil, the cervical filament of the sympathetic served simply as the conductor of an influence, the true source of which was centred in a portion of the medulla spinalis, corresponding to the last cervical and sixth dorsal vertebræ. This portion they designated the cilio-spinal tract. It was a natural inference from their experiments that, on division of this portion inclusive, the radiating fibres of the iris become paralysed, and the aperture of the pupil narrowed by the immediate contraction of the unopposed antagonists—the circular fibres—supplied through other channels. Mere physiological excitation of the cilio-spinal tract determines, according to them, dilatation of the pupil in amount corresponding to the degree of stimulus. The last well-known addition by Bernard to the catalogue of phenomena determined by division of this portion of the sympathetic, is the singular increase of temperature in both external and internal parts above the injury. These physiological facts have been recently systematically applied to Clinical Medicine by Dr. Ogle, to whose valuable essay I must refer you. It has been pointed out by an acute and competent observer that contraction of the pupil is significant of thoracic or cervical aneurism. And so, at times, it is, but not more significant of aneurism than of any other kind of thoracic or cervical tumour causing pressure, either on the cilio-spinal tract, or on the cervical ganglia of the sympathetic. Again, possibly not more significant of any of the above states than of disease of the meninges, or tissue proper of the tract, or even of the abdominal ganglia of the sympathetic. It is true that this condition of the pupil has, up to the present, been more frequently found in connexion with aneurism; but this arises partly from insufficient observation, and partly from the fact that aneurism is, relatively at least, much more frequent than any other form of intrathoracic tumour. Hence, on observing change of size of the pupil, we are only warranted in inferring irritative or paralysing pressure on the tract, the pathologic cause of which we are to seek through other means. I have notes of several cases of supposed non-aneurismal affections of the heart producing either dilatation or contraction of the pupil, but which would occupy too much time to enter into now. It would therefore be hazardous to generalise the sign at present, although of value in any doubtful case. It is difficult at times to differentiate pathological from what is called physiological difference of size of the pupil. A very slight variation might probably characterise some small, though most dangerous, aneurism—dangerous not from its size, but from its tendency to early rupture—or it might be significant of any other change involving these portions of the sympathetic system. There may be also question whether occasionally such contraction of pupil might not be more indicative of modification in the cerebral circulation than of nerve pressure. To the case I have brought before you I would apply this observation, directing your attention to the singular fact of the almost immediate restoration of the pupil to its normal size upon rupture of the sac. We can hardly suppose, had paralysing pressure during so many weeks been the cause of the contraction, that the function of the nerve would have been so speedily restored. There is also another singular occurrence deserving attention from the perversion of the ordinary physiological sequence. Only after rupture of the sac, and restoration of the pupil to its size, did marked elevation of temperature about the head ensue.

(To be continued.)

DEATH OF MR. ARMSTRONG, OF CARLISLE.—We regret to have this day to announce the death of Mr. E. Armstrong, Surgeon, at the age of 48 years. He was a shrewd and sound Practitioner, and a strictly honourable member of the Profession. Mr. Armstrong filled several public appointments, such as those under the Factory Commissioners and the Board of Guardians.—*Carlisle Journal*, April 21.

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REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

GUY'S HOSPITAL.

DOUBLE OVARIAN DROPSY—OVARIOTOMY—DEATH.

(Under the care of Dr. OLDHAM and Mr. THOMAS BRYANT.)

EMMA C., aged 32, was admitted into Guy's Hospital on April 10, 1863. She was a married woman, and had had one child two years previously. The abdominal tumour had been observed for two years, and was first noticed on the left side. Its growth had been gradual till November 23, 1862, when she was tapped, and 23 quarts of a dark-coloured fluid drawn off. She soon, however, rapidly refilled, and when admitted measured 48 inches in circumference. Her general health was tolerably good.

On April 15, ovariotomy was performed in a private room, and with only a few spectators present. On opening the peritoneum, an adherent cyst was at once opened, and it was then found that the whole of the tumour was firmly adherent to the peritoneum. With some difficulty this was separated, but the adhesions were so firm that Mr. Bryant at times believed that he must have been separating the peritoneum itself from its abdominal attachments. This, however, was not the case. The tumour was firmly connected to the peritoneum in every part, the stomach, liver, and omentum being involved. The cyst was at last separated, the omentum being divided and ligatured as the operation proceeded, and the pedicle in the left side fastened by three whip-cord ligatures. The right ovary was also found to be similarly affected, and the tumour was situated in the pelvis behind the uterus. This was also removed, the pedicle being fixed by two whip-cord ligatures. It must be added also that during the operation the bladder was found intimately connected with the cyst wall, and considerable care was required to prevent injuring it. The abdominal incision was at least eight inches long, having been increased to give more room. After the operation the edges of the wound were brought together with silver sutures.

After the operation, the patient went off to sleep for an hour and a-half, and was awakened by vomiting. Six hours afterwards her pulse was 90, and of good power. Tongue was moist. The sickness, however, continued. The abdomen soon began to swell and to become painful, and in twenty-two hours after the operation she died from peritonitis.

After death the evidences of general peritonitis were most marked. The viscera were otherwise healthy.

RECURRENT FIBROID TUMOUR OF THE LEG—REMOVAL — RECOVERY — RETURN OF THE DISEASE LOCALLY AND IN THE LUNGS — DEATH—AUTOPSY.

(Case under the care of Mr. COCK.)

This case, at the time of the first operation, was the subject of a clinical lecture by Mr. Cock, which is fully reported in this Journal, March 8, 1862. Although the tumour, Dr. Wilks said, contained no cancer cells, it was still "a growth of some activity." This turned out to be correct, as it soon returned locally, and at length in the chest. The return and destructive nature of this disease, Dr. Wilks remarks, shows its highly malignant nature, whilst, at the same time, it was probably one degree less malignant than true cancer.

A man, aged 23, was admitted for a tumour of the soft recurrent fibroid variety from the upper part of the right thigh, January, 1862. Mr. Cock removed the tumour. In September it returned, and grew rapidly. He was admitted into the Hospital in November. It was subsequently found that the right side of the chest was much larger, and there were other signs denoting that he had probably a growth in the thorax.

Autopsy, from Dr. Wilks' Records.—The body was spare. There was a large tumour, about the size of the head, at the upper part of the right thigh. Its surface was ulcerated and fungating. The leg was œdematous. The right side of the chest was much enlarged, and a soft tumour was seen coming through the sternum at its upper part. On removing the sternum, the chest was found to contain a large tumour. The right side was filled with it, and the lung compressed back. It also filled the anterior mediastinum, and covered the heart, reaching to the left side of the chest. In fact, it involved the sternum, so that this bone was broken in removing it, the growth having penetrated into its substance. It was difficult to say in what tissue the disease had commenced. The great bulk of the tumour was outside the lung, but both the lungs were filled with large, round, independent masses of the disease. The material was very soft, and at first appeared like medullary cancer, but, on closer examination, it was found not to be so vascular, and did not give out a milky juice on pressure. The microscope showed it composed of oval nuclei and delicate fibre. There was no deposit in any other organ.

THE LONDON HOSPITAL.

CLINICAL REMARKS ON A CASE OF ABSCESS IN THE BLADDER, IN WHICH THE BLADDER WAS INCISED AS IN THE LATERAL OPERATION FOR STONE.

(Under the care of Mr. H. J. ADAMS.)

APRIL, 1863.—A little boy, aged five years, was brought into the theatre, six or seven weeks ago, for vesical exploration. Mr. Adams made the following remarks to the class on the case:—

"The case which I am now about to present to you is that of a little boy who is labouring under severe irritation of the bladder, with the ordinary symptoms of stone. The child has a constant desire to make water, the effort being attended with, and followed by, great pain; the urine dribbles away at night, and he is constantly pulling his prepuce, which has become elongated and sore. He has lately become emaciated, and is altogether very ill. The history of the case is remarkable, for it appears that the child has laboured under symptoms of vesical irritation since he was a year and a-half old. About a year and a-half ago the symptoms had increased in intensity, and he was admitted into the Hospital under the care of Mr. Gowlland and myself, the impression being that he had stone in the bladder. He was repeatedly sounded, and something like stone was occasionally felt, but at other times nothing of the sort could be detected. The water was at this time of the usual character, and, in the absence of the decisive symptom of stone—as his symptoms were mitigated by the use of warm baths and tonics, combined with alkalies—he was attended as an out-patient, to be re-admitted as occasion demanded. The father tells me that he always observed a deposit in his water, the nature of which was not made out. As the symptoms have lately much increased in intensity, I have therefore determined to inject the bladder and explore it under chloroform, and to cut him at once if a stone is detected. All this, gentlemen, is plain sailing, but what am I to do if no stone can be detected? Shall I cut into the boy's bladder whether I can feel a stone or no? This is a question of the very greatest importance, and I wish to direct your attention to this point, for a stone may still exist, although it cannot be felt with the sound; it may be encysted, and nothing short of cutting can relieve the case. I must tell you that numerous cases have occurred in Hospitals and in private practice, where Surgeons have cut for stone, and where no stone could ever be found, as none existed. I witnessed this once myself, and the patient, as is usual, got quite well after the operation. The Surgeon was formerly advised to provide against this contingency by always carrying a stone in the waistcoat pocket, to be ready to show the patient or his friends after the operation of lithotomy. Now, what is the condition of the bladder in these cases of abortive lithotomy, where such mistakes (for they are mistakes) have arisen? I think that in most of these cases the false impression is conveyed by the end of the sound being brought into contact with the muscular columns of the detrusor urinæ in a state of hypertrophy; and I can illustrate my opinion by another case, which I shall bring before your notice presently, where the columns or rugæ of the bladder are easily recognised by the sound, and in which many of the symptoms of stone exist. There are also other conditions giving rise to such symptoms, as strumous prostate, cancer of the bladder, etc. I now inject the bladder with warm water, having first drawn off the urine, which is clear. I pass the sound, and explore the bladder, but I cannot satisfy myself of the presence of a stone. I therefore, in concurrence with the general opinion of my colleagues, shall send the child back to bed, so that we may examine further into the condition of the urine, in which it is thought that possibly albumen

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may be found, and I do this the more readily because the nurse says that the child has occasionally passed worms per anum. I shall watch the case carefully, and, if the symptoms are not ameliorated, I shall cut the child, stone or no stone, under the idea that a free exit to the urine may possibly relieve him."

The urine was tested, and no albumen was detected; and the use of carbonate of iron and the oil of the male fern, to be followed by castor oil, were separately used to get rid of the worms But no relief attended these means. The catheter was not again employed, and the urine flowed involuntarily, and became exceedingly ammoniacal and fœtid. Mr. Adams introduced the case again before the class, with the view to perform the lateral operation; but he guardedly stated to the class that it was from the urgency of the case alone, and not from any decided opinion of the existence of a stone, that he felt himself imperatively called upon to operate.

The child was placed under the influence of chloroform; the legs were held by assistants, and the neck of the bladder was incised by Blizard's beaked knife. A small quantity of sandy matter escaped with the first flow of the urine, and a large quantity of disgustingly stinking urine, loaded towards the last with fœtid pus, escaped; the bladder was carefully searched, but no stone was found.

The case was regarded as one of abscess of, or communicating with the bladder, which Mr. Adams supposed had probably originated in scrofulous deposit in the prostate gland or in the neighbourhood of the neck of the bladder.

Immediate relief followed the operation, and the child left the Hospital quite well.

TUMOUR OF THE PHARYNX REMOVED BY THE ECRASEUR.

(Case under the care of Mr. LITTLE.)

A. B., aged 73, was admitted into the London Hospital for a tumour of the throat. He stated that six months before, when shouting, he "felt something burst" in his throat, but that he spat up no blood or matter; ever since he had had a lump in his throat, which prevented his breathing with his mouth shut, or swallowing solids easily.

On admission, a tumour could be felt and partly seen. It grew from the posterior wall of the pharynx, and projected forwards against the soft palate, and blocked up the posterior nares. It extended downwards about an inch below the epiglottis, and upwards nearly to the skull. This projecting portion was slightly grooved at its base nearly in its entire circumference. The tumour was firm to the touch, had the characters of a fibrous growth, and was moveable on the vertebral column. There was no glandular enlargement. The patient had difficulty in swallowing solids, and his breathing and speech were considerably interfered with. The tumour was not increasing, and did not cause any pain.

On consultation, it was determined to remove as much as possible with the écraseur.

The écraseur was armed with a fine wire rope, inelastic, and very flexible. This wire was bent to the shape of the tumour, so that the écraseur would become applied to the tumour just below the soft palate. The lower loop of wire was passed downwards into the lower part of the pharynx, and held in its place with the finger, whilst the upper—the soft palate being drawn forwards—was pushed over the upper part of the tumour. The wire, being well passed towards the vertebræ, worked into the groove at the base of the tumour, and in two or three minutes the projecting portion was removed without any haemorrhage. It was necessary to remove the tumour quickly, although the risk was increased thereby, as respiration was much interfered with during the operation. The patient felt no pain, and was at once able to swallow better, and to sleep without stertor. The wound granulated healthily, and he was discharged well in a fortnight.

The removed portion, which was about two inches in length by one and a-quarter at its widest part, had the appearance of lymphatic gland tissue, with remains of extravasation of blood in various parts. It consisted of masses of corpuscles, like old pus globules or lymphatic gland corpuscles, infiltrated in the healthy tissues of the mucous membrane. The nature of the growth was doubtful. "Perhaps," Mr. Little said, "it was merely an enlargement of the tonsil-like glands in the neighbourhood of the orifices of the Eustachian tubes." Dr. A. Clark thought an abscess had commenced, and had become arrested in its development. The history seemed to favour this explanation.

THE ROYAL LONDON OPHTHALMIC HOSPITAL.

ENCEPHALOID DEPOSIT IN THE ANTERIOR PORTION OF THE EYEBALL.

(Under the care of Mr. DIXON.)

The following case is unusual, as presenting an encephaloid growth within the globe, wholly unconnected with the retina:

Thomas A., a seemingly healthy boy, 12 years old, the fourth child of labouring people in Lincolnshire, was brought to the Hospital about the middle of November. His parents are living, and he has five sisters and four brothers, all in good health. The right eye presented the following appearances:—There was a very slight vascular zone in the sclerotic, hardly any increased redness of the conjunctiva; the cornea was perfectly clear. Little, if any, pain had been felt. The greater part of the anterior chamber was filled with a nodular, yellowish mass, slightly reddened, with vessels resembling, in an exaggerated form, the fibrinous deposits seen in severe syphilitic iritis. About the upper sixth of the iris was left uncovered by the mass, and appeared unchanged in tissue, and of the same grey colour as that of the healthy eye. It was stated that the morbid appearances had first been noticed about three months before the boy came to London. The deposit slowly increased, until it nearly filled the anterior chamber. Then considerable redness of the globe suddenly set in, the cornea became slightly hazy, and the sclerotic adjoining the outer margin of the cornea began to bulge outwards, as if the growth were about to perforate. The adjacent portion of cornea also appeared infiltrated and softened.

Mr. Dixon removed the globe on the 18th of December. On making a section of it, the retina, throughout its whole extent, appeared healthy, the vitreous body was transparent, and no sign of disease could be detected posterior to the ora serrata. The lens was pushed outwards behind the ciliary processes, but had perfectly retained its transparency. The new growth was firm, smooth, and nodular, opaque, and of a yellowish-grey colour. It seemed to have originated from the outer ciliary processes, and, after perforating the adjacent portion of the iris, the outer half of which it had destroyed, had spread across the anterior chamber until it reached the inner edge of the cornea. It had also destroyed the sclerotic near the outer edge of the cornea, in which situation the tumour was covered only by conjunctiva. The pupillary margin of the iris was lost in the tumour, but the inner half of the iris and of the ciliary processes were perfect, although already adherent to the morbid growth. Examined microscopically, the whole mass presented fibres intermixed with compound cells in various stages of development.

FATTY CONCRETIONS IN THE CANALICULUS.

Ellen A., aged 37, applied at the Hospital on December 8, 1862, on account of a small lump near the inner corner of the right eye. It had existed about three years, and at first was taken for a stye. It occupied the situation of the lower canaliculus, and was about the size of a dried grey pea, and hard to the touch. Pressure upon it did not produce any oozing from the punctum. Mr. Dixon passed a fine probe into the sac, along the canal, and then laid open its upper wall. With a scoop five or six bodies of a brownish-grey colour were removed. They were closely packed together, resembling in size and shape the seeds of the dog-rose; instead of being hard and earthy, like ordinary dacryoliths, they readily yielded to pressure, having about the consistence of wax. They appeared to be wholly composed of fat, melting and burning away on the application of heat, without leaving any earthy residue.

ST. BARTHOLOMEW'S HOSPITAL.

ERYSIPELAS OF HEAD AND FACE, CONSEQUENT ON A NEGLECTED SCALP WOUND, IMPLICATING THE LARYNX — TRACHEOTOMY — DEATH ON THE FOURTH DAY AFTER THE OPERATION.

(Under the care of Mr. WORMALD.)

[For this and the following case we are indebted to Mr. Vernon, House-Surgeon.]

P. F., a gigantic Irishman, aged 31, applied at the Hospital on March 17, on account of erysipelas of the face and scalp,

resulting from a contused scalp wound of a week's date. He was admitted under Mr. Wormald's care. After his admission, the erysipelas involved the whole head and face, so as to render his features indistinguishable, and spread to some distance down the neck. Under the liberal use of stimuli and nourishment the swelling began to diminish, and he appeared progressing well.

Suddenly, on the evening of March 21, the mischief spread to his nostrils, and from thence to his fauces and larynx; he could not swallow, and when Mr. Vernon, the House-Surgeon, came to him, he found his dyspnœa so extreme, that he decided on at once opening the trachea. The trachea was situated at an unusual depth, and could only be reached through much infiltrated tissue; free bleeding occurred, so that, owing to this and to the extreme depth of the trachea, the knife was very sparingly used in the latter part of the dissection. When the trachea was reached and opened, a long bivalve tube was introduced; the relief to his distress was very manifest, and the bleeding was speedily controlled without the use of ligatures. Considerable emphysema occurred in the surrounding tissues, and it became evident that a longer tube would be required; the longest that could be procured was then inserted without much difficulty, but even now it became necessary to fit a second tube into the upper aperture of the inner tube, to increase its length, and to enable it to be secured in the wound. Wrapped in blankets, and breathing steam, he had a comfortable night, and in the morning he could swallow without much trouble beyond occasional cough.

His progress was from this time satisfactory, the erysipelas steadily subsiding; for the next forty-eight hours he was sensible, could take abundance of fluid nourishment, and slept fairly with the assistance of morphia injected beneath the skin.

On the morning of the 24th, a densely foggy one, he flagged, had much cough, with a considerable increase of thick mucus discharged through the tube. During a fit of coughing, some bleeding occurred from the wound; its source was not evident, and, as he was breathing to some extent through the larynx, the tubes were removed. For a time he rallied and improved, but again failed, and in spite of nourishment, which he took eagerly and without difficulty, he slowly sank, dying apparently from mere exhaustion just 100 hours after the operation.

Having lost his left arm five years since by a machinery accident, he invariably throughout his illness lay on his right side, but up to the last, as far as could be ascertained, his lungs remained sound.

Post-mortem Examination Twenty-six Hours after Death.—The wound looked sloughy and discoloured. The surrounding parts were infiltrated with a dirty puriform fluid, which had completely encircled the trachea, separating it from the œsophagus, and had then made its way down into the "posterior mediastinum," almost to the "roots" of the lungs. The upper lobe of the right lung was tightly bound down by old adhesions; the posterior portion of this lobe was congested, but, with this exception, the lungs were throughout sound. There was no distinct evidence of the recent congestion about the fauces or larynx. The knife had divided the fourth, fifth, and sixth tracheal cartilages. The edges of the aperture were irregular and ulcerated. The entire length of the trachea was of a vivid red colour, from intense inflammation. Immediately below the incision were some small patches of ulceration, clearly due to the pressure of the end of the tube.

SUICIDAL WOUND OF THROAT—DEATH FROM ACUTE PLEURISY—AUTOPSY.

(Under the care of Mr. PAGET.)

J. K., aged 50, admitted under the care of Mr. Paget, having gashed the front of his neck immediately below the hyoid bone. None of the important structures of the neck were severed, but, having been brought from a distance of some miles, he had lost a good deal of blood from some small vessels which required the ligature.

For some time he was in a state of extreme depression, and on the fourth day after his admission he was attacked with acute pleurisy on the left side; in spite of treatment, he rapidly sank, and died a week after his admission.

Post-mortem.—The wound looked discoloured. The other parts around appeared healthy. The muscles of the larynx were dissected out, and separated from each other by a layer of well formed pus, which had tracked its way down to the anterior mediastinum. Both pleuræ were covered throughout with soft, recently-formed lymph. The left pleural cavity was full of clear fluid, and the lung was much compressed. Lungs themselves healthy.

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Medical Times and Gazette.

SATURDAY, MAY 16.

HOSPITAL PHARMACY.

If slang is the language of a class, we must admit that, as a Profession, we are in this respect no way behind our neighbours. The slang pharmaceutical especially meets us everywhere. A private Practitioner who dispenses his own physic directs his assistant to prepare a bottle full of Mist. Mag. co., or Haust. rob., or blames him if he finds the drawer empty which should hold an abundant supply of Pil. Cathartic, or Pil. pro tussi. Nor do we blame him in this. He knows what the cabalistic labels signify, and so does his assistant. To him the rose smells quite as sweet although he may call it a chenopodium. It answers his purpose to have his favourite pills, mixtures, and draughts ready mixed for immediate use, and no one need trouble himself to interfere with any fancy designation he may choose to apply to them. But what we are now going to quarrel with is the slang pharmaceutical, variety nosocomial. We protest against the extension of this liberty to public establishments, to Hospitals for the supply of Medical aid to the poor, with the conjoined object of instructing the rising members of the Profession. We do not object to the practice of keeping ready prepared a limited number of such pills, mixtures, etc., as must be in daily use in any large Hospital. Where some hundreds of patients have to be prescribed for and supplied with medicines (which, whether they really require them or not, they will be dissatisfied at not being drenched with), the thing is almost a necessity. But this should be kept within reasonable bounds, and the special formulæ ought not to be so numerous as to be capable of being bound up into a volume constituting the Pharmacopœia of an individual Hospital. The flagrancy of this offence is indeed such as we ourselves had no conception of until we saw that the Pharmacopœias of only thirteen Hospitals, even when similar formulæ in use at more than one Hospital were only printed once, would form a closely-printed volume of 152 pages. This volume of receipes, compiled by Mr. Squire, is our authority for what we have said and for what we shall say upon the subject.

First, then, we say that it is unfair to the student of any Hospital, who has quite enough on his hands for meeting the requirements of examining boards, to lay upon him the necessity of studying any such special pharmacopœia, as he must do if he is to comprehend the operation of any kind of medicine prescribed by the Physician whose practice he is attending It is a task which we feel convinced that not one student in twenty will undertake, and the result is, that such as do not undertake it leave their Hospital not only with the

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most obscure notions of therapeutics in general, but with no practical knowledge whatever of the doses in which simple drugs ought to be prescribed under varying circumstances. When entering into practice for themselves, they are driven to the use of formulæ, the combinations of which they never appreciated, and find themselves for a long time hampered by a want of familiarity with the art of prescribing on their own account. They are taught a routine practice, not, as they should be, the habit of independent thought and a readiness in the extemporaneous combination of drugs.

Next, we say that the practice of prescribing by a Hospital Pharmacopœia casts a veil of mystery over the treatment of patients, which we are certain the accomplished members of the staff would be the first to repudiate. But such is the case. What would a stranger in a Surgical ward of Guy's Hospital, for example, understand by a direction to use the Unguentum Metallorum, or in St. Thomas's by the prescription of Mistura Dyspepticæ or Mistura Emolliens? The London Hospital Pharmacopœia contains a formula for Mistura Glacial, and even when the prescription of a Physician refers to a pill or mixture, some terms of which convey a definite idea to a visitor, he must not consequently infer that he at all comprehends the character of the medicine prescribed. Thus, the Pulv. Rhei. c. soda of University College Hospital contains a preparation which its name would not imply that it contained, namely, grey powder; and the Mistura Mucilaginis of the Westminster Hospital contains both tincture of opium and dilute sulphuric acid. The difficulty and the evil are the same when in the published reports of cases the medicines administered are mentioned by the names under which they stand in the Hospital Pharmacopœia.

These objections to the use of Hospital Pharmacopœias might indeed be overcome by confining the latter to the region of the Apothecary's dispensary, while the Physicians and Surgeons in prescribing for any patient did so in the usual way, without reference to the special name under which his combinations might be known below stairs. But still, as matters stand now, both students and strangers would be liable to be deceived, inasmuch as the very preparations which find place in the London Pharmacopœia are travestied in that of the Hospital. To some extent a fair reason may be assigned for departures from the authorised formulæ, namely, that the omissions and substitutions tend to cheapen the medicines dispensed without damaging their efficacy or materially altering their action upon the system. Thus the confections of the London Pharmacopœia are mostly prepared with treacle in place of the sugar or honey directed to be used by the College. The compound decoction of aloes, in six out of the thirteen Hospitals mentioned by Mr. Squire, is made without saffron or tincture of cardamoms, and in two of the six the quantity of liquorice used to render the dose less nauseous is most unkindly reduced also. Four of the Hospitals, according to the same authority, make some changes in the preparation of the Mistura Ferri composita, all, however, retaining the quantity of sulphate of iron directed by the College. Thus, Guy's omits the sugar, and substitutes decoction of liquorice for the rose-water. The Westminster and London Hospitals prepare it with water, replace the spirit of nutmeg by some cloves or cassia, and omit any sweetening ingredient; while the London Ophthalmic prepares it merely with sulphate of iron, carbonate of potash, myrrh, and water. We should not be disposed to criticise these changes very closely if the tampering with the College formulæ went no further than this. But we shall have no difficulty in showing that some of the Pharmacopœia preparations are more or less seriously modified by the substitutions, omissions, or additions they undergo; that, in fact, prescribed in the same doses as those of the London College, their action will be more powerful, less powerful, or altogether of a different character. We ask, if this be true, how it is to be expected that a student will be able to obtain by observation in his Hospital that knowledge of the doses and operation of the Pharmacopœia preparations which he should possess before entering into actual practice? Take the following instances:—The Confectio Sennæ of St. George's, St. Mary's, and the Middlesex Hospitals contains jalap in the proportions of 15, 40, and 20 grains to the ounce, and that of Middlesex bitartrate of potash also. The decoction of Pariera Brava of University College Hospital is made with ʒiv., and of St. George's with ʒv. of pareira instead of ʒx. to the pint, and a compensation for the deficiency attempted by using a larger quantity of water, and so prolonging the ebullition. At University College Hospital the Infusum Sennæ Compositum contains half the quantity of senna directed to be used by the College, and a little more ginger, the deficiency in purgative power being made up with sulphate of magnesia; in fact, it is a salts and senna mixture. At the same Hospital the Linimentum Opii consists of powdered opium and olive oil, and the preparation which corresponds to the Linimentum Opii of the College is called Linimentum Saponis c. Opio, containing, however, as does also that of the Consumption Hospital, a deficiency of tincture of opium. Lastly, for we need not multiply these examples, the Unguentum Creasoti of the Skin Hospital is prepared with ♏vi. in place of ʒss. of creasote to the ounce of lard, and contains also gr. x. of red precipitate and ʒss. of mercurial ointment. In what is called, at this Hospital, Unguentum Creasoti co., gr. xx. of carbonate of lead and ʒss. of palm oil are used in place of the mercurial ointment in the above preparation. Surely all this is calculated to mislead.

Besides all this, it will already have become apparent to our readers that the same name does not in different Hospitals at all imply the same thing, while similar things pass under different names. A few more illustrations of this may not be amiss. The Collyrium Belladonnæ of St. George's is made with two grains, and at Guy's with twenty grains of extract to the ounce of water. The nitro-muriatic acid bath at Guy's is made with ʒix. of nitric acid and ʒxvi. of hydrochloric acid, at St. George's with ʒxxiv. of nitric and ʒxxxvi. of hydrochloric acid, and at London Hospital with ʒxv. of nitric and ʒxxx. of hydrochloric acid to 30 gals. of water. The Confectio Ferri of London, St. Mary's, St. Bartholomew's, and Westminster Hospitals is made with ʒij. of sesquioxide of iron to ʒvi. of treacle, while at University, Consumption, and Middlesex it is prepared with equal weights of these two ingredients. In preparing Infusum Chirettæ, twice as much chiretta is used at the Westminster as at the Consumption Hospital. Lotio arnicæ mont. is made at St. Mary's with ʒij. of the tincture to ℥j. of water, while at Middlesex the tincture in the same quantity of water is in the homœopathic proportion of *seven minims*. Lotio Hydrarg. Bichlor. varies in strength from gr. ½ to gr. i. of corrosive sublimate to the ounce of water, and Black Wash from ℥ss gr. to 15 gr. of calomel to ℥j. of limewater. This last preparation passes under the several names of Lotio Hydr. Chlor., Lotio Hydr. Cinerea, Lotio Hydr. Nigra, Lotio Nigra, and Lotio Hydr. Oxyd. Lotio Rubra at St. George's is prepared with sulphate of copper, at King's with sulphate of zinc, and at the Skin Hospital with corrosive sublimate. But perhaps one of the most dangerous of all the instances of this sort of confusion is to be found in the Pulvis Bismuth. co., which at the Consumption Hospital and Guy's signifies a powder for internal administration, and at the Skin Hospital one containing chromate of lead and vermilion, evidently for external use. We might occupy page after page by quotations of this sort from Mr. Squire's book. We pass on, however, to draw attention to some of its curiosities.

It is remarkable, though perhaps not "passing strange," that the most striking of these are to be found in the Pharmacopœia of a special Hospital. It is possible that there may be some hidden value, some specific virtue in combining a variety of medicines, and especially in very minute doses; and certainly the claims of experience, if put forward, must be allowed. But

for all this, some of the following are, as we say, *curious* examples of what ingenuity can do in this way. The following is the formula for the Pil. Aloes c. Ferro. at the Skin Hospital:—Aloes, 2½ gr., oxysulphuret of antimony, $\frac{1}{10}$ gr., sulphate of iron, $\frac{1}{10}$ gr., capsicum, $\frac{1}{10}$ gr., extract of gentian, $\frac{1}{10}$ gr., glycerine, q. s. At the same Hospital an Unguentum Hydrarg. c. Plumbo (c. zinco should have been added) contains certainly so many shots, that one of them must hit the desired mark, and thus save an infinity of troublesome thought. It is thus composed:—Acetate of lead, 10 gr., oxide of zinc, 20 gr., calomel 10 gr., palm oil, ½ oz., citrine ointment, 20 gr., lard to 1 oz. This Hospital, as might be anticipated, is strong in baths. Two of them contain sulphur, viz., the balneum boraci co. and the balneum sulphuris co., and both are directed to be prepared with perhaps the most grossly adulterated article in the London Pharmacopœia, namely, precipitated sulphur. The Skin Hospital perhaps is specially favoured by the druggists, but we fear if any one were to attempt imitation of these baths with the article so called, as generally supplied, nothing but disappointment would result. Two ounces of borax and two ounces of precipitated sulphur in thirty gallons of water form a bath which does seem to us to savour of —— well, never mind what. A similar remark applies to the balneum conii co., where two ounces of extract of conium and a pound of starch are used to the thirty gallons. The starch may be of service; but have the Medical authorities of the Hospital ever satisfied themselves that the extract of conium contains any of the volatile active principle of the hemlock, on which, if on anything, the operation of the preparation must rest? Let us suggest an improvement,—try the succus conii. But there are other curiosities in this book. Here is the very chemical Haustus Coleh. comp. of St. Bartholomew's —Vinegar of colchicum, 20 min., carb. of magnesia, 10 gr., mint-water to ℥iss. This has certainly the authority of Scudamore. At the same Hospital, Linimentum Saponis comp., containing soft soap, solution of ammonia, spirits of wine, oil of origanum, and oil of turpentine, and is directed to be prepared with *boiling* water. Perhaps the Apothecary uses his own discretion in not following this formula to the letter.

We have now said enough to stimulate our readers to study this extraordinary volume of Mr. Squire's. It is as entertaining as a novel—a capital book for the half-hour following dinner. We do not know whether the Latinity is always that of the Hospitals, or whether such names as cataplasma carbonas, cataplasma fermenti, frigida, and solutio ruber are to be regarded as mere oversights of the editor. But for all this, much instruction may be derived from it, to say nothing of its perusal being sure to originate some serious thoughts respecting the provision made for the poor by the Medical charities in London.

THE WEEK.

ROYAL VISIT TO NETLEY HOSPITAL.

The first public act of the Queen has been to visit the Royal Victoria Hospital, which was opened about two months since. This Hospital is intended for the reception of invalid soldiers from foreign stations, and just now contains about 600 fine old soldiers, chiefly from India. The Queen intimated her intention on the morning of May 8 to visit the Hospital on the afternoon of the same day, and Colonel Wilbraham, the Commandant, received instructions at the same time to make arrangements for ensuring privacy. The Queen landed about half-past three, attended by the Prince and Princess Louis of Hesse, Prince Alfred, Sir Charles Phipps, Lord Charles Fitzroy, Sir James Clark, and others. She spent nearly two hours in the Hospital, and visited almost every part. Colonel Wilbraham, C.B., Inspector-General Dr. Anderson, Major Ravenhill, R.E., Deputy-Inspectors Longmore and Maclean, Professors Aitken and Parkes, Staff-Surgeons Pierce, Nicholson, McLeod, and, in fact, all the Hospital staff, followed her. She sent several times for Mr. Longmore and Dr. Maclean to inform her of the state of men whom she saw very ill in bed, and she went up to the bedside of a great number of men and asked them questions about themselves. Altogether she must have spoken, in a most kind and touching way, to thirty or forty sick men, and she made Colonel Wilbraham and Dr. Anderson explain to her all the arrangements for their comfort. She then looked at the rooms of the Army Medical School, and visited the quarters of the married soldiers. In fact, she most thoroughly inspected the whole place, and went into many more wards than had been intended by the officials, who were afraid she would be fatigued. She did not appear to be so, although she must have walked some miles. The Hospital looked in beautiful order, and she is understood to have been pleased with everything except the accommodation for the married women. She looked well in health, but had, when not speaking, a sad and careworn expression; she was very gracious, and her voice was beautifully clear and sweet, though she spoke in rather a low tone. When she smiled her face wonderfully brightened up. She was evidently greatly interested in her visit, and yet it was as clearly a trial to her. The old soldiers were delighted to see her, and one man, who lay almost dying in bed, told her he thanked God he had been permitted to see her before he died. Prince Alfred, who was with her, looked quite strong and robust. The Princess Alice spoke to several of the soldiers' wives, and seemed as much interested in the place as her mother. Prince Louis also seemed both interested and pleased. Luckily, the day was extremely fine, and the Hospital and grounds were looking their best.

PARLIAMENTARY.

The debates in Parliament during the past week have not been prolific in matters of interest to the Profession. On Thursday, the 7th inst., Sir Robert Peel, in answer to a question by Mr. Longfield, stated that he did not intend to defer the Bill for Vaccination in Ireland until the Government should have determined upon the course they would pursue with regard to the Vaccination Acts in England. As the measure in question referred only to Ireland, he did not see the necessity of postponing it. Friday was signalized by the announcement from the Chancellor of the Exchequer that he intended to extract the last irritating element from the Budget, by abandoning the club licenses, and by the rejection by the Select Committee of the proposed Amalgamation of the Metropolitan and City Police. The Prison Minister's Bill, the City Traffic Regulation Bill, and Mr. H. Seymour's motion on the Occupation of Waste Lands in India, bearing as it did on the cultivation of cotton in that country, have been the chief matters of social importance discussed. On Wednesday the second reading of the Railway Accidents Compensation Bill was moved by Sir J. Fergusson. Mr. Longfield moved, as an amendment, that the bill be read a second time that day six months. This was seconded by Mr. Bentinck, and, after a short debate, the bill was thrown out by a majority of 20. It may be admitted that the existing law does at times press hardly upon companies, and that fraudulent claims are occasionally made, and impose both on Medical Practitioners and on juries. But the principle on which the bill was founded was neither in accordance with law nor justice. Mr. Longfield, we think, rightly characterised the bill as "monstrous" and "indecent." He said:—

"The first section of the bill provided that no person should be entitled to compensation in consequence of an accident from the railway company unless his life were insured, thus limiting arbitrarily and indecently the amount at which human life was valued. But what was the rate at which railway directors seemed to appreciate human life? The bill on their behalf divided railway passengers into three classes, which were appraised by the hon. baronet at the rate of £400 in the case of a first class, £300 in the case of a second, and £200 in the case of a third class passenger, that being the estimate which

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the directors had the modesty to put upon human life as represented in those three different classes. (Hear, hear.) Now, in the days of Athelstan, there was a tariff of human life, in accordance with which a man was fined £13 for killing a peasant, the tariff increasing in amount up to £1500 in case of a monarch. (A laugh.) He could not say what was charged in the case of baronets, for they came later. (A laugh.) There was also under the Irish law what was called an *eriach*, or stipulated rate of payment in the case of persons who happened to be killed by accident or negligence; and, if the present bill passed, the various companies would have to keep, not only railway offices, but also insurance offices, of which the tariff was to be regulated by the Board of Trade, the directors, in addition to their other powers, being now anxious to have the privilege of killing the public at the rate of so much per head. (Hear, hear, and laughter.) If such legislation were sanctioned, it would, he supposed, shortly come to pass that a regular fixed scale would be established by which the life of a sheep would be appraised at 40s., a cow at £15, a horse at £50; the loss of an eye at so much, general mutilation at so much more, until the *maximum* of £400 was reached in the case of the life of a first-class passenger. (A laugh.) Such was the nature of the legislation which the hon. baronet proposed, legislation called for by the existence of no grievance which he had proved, by nothing stronger than the assertions of railway companies themselves. (Hear, hear.) He should remind the hon. baronet that committees had sat to inquire into the subject of railway accidents, and that reports in reference to it had been made from time to time, not by pettifogging lawyers, but by most competent and disinterested persons connected with the Board of Trade. Mr. Lowe, in giving his evidence before one of those committees, that of 1858, stated that he regarded Lord Campbell's Act as the only security which the public had against railway accidents. He might add that one of the reports which had been made to the Board of Trade in relation to these accidents showed that 38 persons had been killed, and 498 injured, as the result of two collisions, while in the case of one of them the accident was proved to have been attributable to neglect on the part of the signalman, a youth of 19, who was paid only 14s. or 15s. a week. (Hear, hear.) In 28 instances the negligence of the inferior servants of railway companies had been the cause of accidents, and it was monstrous, he contended, that the House should be asked to throw its protection over those companies to the extent which the hon. baronet proposed. He for one objected to human beings being placed in the same category as cattle, and to having human life sacrificed to the greed and cupidity of railway directors."

The legal objections to the bill were enforced by the Solicitor-General and Mr. Bovill. As was to be expected, the supporter of the bill indulged in various sarcasms on "compassionate Doctors." Our Profession can well afford to disregard Sir J. Fergusson's imputation, as false as libellous, that partnerships exist between pettifogging lawyers and Doctors in railway accident cases, and that there is a class of Doctors and solicitors who make it a practice to get them up.

IDENTIFICATION OF PERSONS FOUND DROWNED.

On Saturday last, Dr. Richardson conducted an inquiry which may ultimately be often resorted to in those Medico-legal investigations in which the question of identity is involved. On the preceding Wednesday an inquest was held by Mr. Humphreys, the coroner for East Middlesex, on the body of a man who had been found drowned in the Thames, and who was assumed to have been the murderer of the unfortunate girl Emma Jackson, who was found some weeks since with her throat cut in a brothel in St. Giles. The witnesses who knew the supposed murderer were taken to view the body of the deceased man on Wednesday, but the body was so decomposed, the face so black, and the tissues so swollen, that they were utterly unable to offer any opinion. To prevent the case from falling through, Dr. Richardson suggested, first to Dr. Lankester, and afterwards to Mr. Humphreys, that probably the features of the dead man might be greatly restored. Mr. Humphreys thereupon requested Dr. Richardson to make the attempt, and deputed Dr. Edmunds to take part in carrying out the operation. The process adopted by Dr. Richardson consisted in immersing the body in a salt water bath for two hours; then the face was raised from the water and exposed to chlorine; and finally the arteries leading to the face were injected with chlorine water containing chloride of zinc and a little sesquichloride of iron. The decomposition of the tissues was so great that the operations were attended with much difficulty, but the results judicially were all that could be desired. The face was brought from dark black to a pale ash colour, the tumefaction was reduced, and all the witnesses on viewing the body after the process were enabled to depose without hesitation that the body was not that of any man whom they had ever seen; while one witness (Stoke) swore positively that it was not the person who attended Emma Jackson when he saw her last. Dr. Richardson and Dr. Edmunds were also enabled to determine that the dead man was a young man of 21 or 22, whose beard had not been shaven, and whose whiskers were imperfectly developed. While we may look upon this inquiry as fruitful in its results practically, we may add the fact that Dr. Richardson believes that in future much more perfect results may be secured, and we may hope that by improvements in the different steps of the proceedings, any dead body, the tissues of which are not actually destroyed, may be so far restored as to be identified. This is a new feature in Forensic Medicine, and one which may render service to the public, and reflect credit on modern Medical science.

TOXICOLOGICAL NOTES:—UPAS TIEUTÉ; SULPHATE OF IRON; THE TOOT-POISON.

It is well known to toxicologists that there are two Javanese poisons which bear the name of Upas—the Upas Tieuté and the Upas antiar. Confounded as the two are by popular writers, they are perfectly distinct in their properties. The Upas Tieuté owes its activity to the presence of strychnia, which was found in it by Pelletier and Caventou. The activity of the Upas antiar, on the other hand, depends on a neutral principle—Antiarin. Upas antiar, in small doses, acts as an irritant; in larger, it paralyses the heart, or causes death by convulsions and coma. A case of poisoning by Upas has lately appeared in the *Times*, transferred from *Galignani's Messenger*. If the case be authentic, it was clearly one of poisoning by the Upas Tieuté; the symptoms were as nearly as possible identical with those produced by a small poisonous dose of strychnia. The patient is said to have recovered. An instance of the poisoning of a number of sheep by sulphate of iron has recently been reported to the Central Society of Agriculture in Paris. Sulphate of iron belongs to the class of uncertain irritants. Like trisnitrate of bismuth, nitrate of potash, and several other salts, it is quite capable of producing violent effects and death when given in large quantities; and yet persons have swallowed a considerable amount of green vitriol with comparative impunity. Its effects on some of the lower animals would seem to be as uncertain as on man. Two drachms have made a dog a martyr to science in twenty-four hours, whilst the same quantity has scarcely affected another. A rabbit has taken forty grains without apparent injury. It would seem, from the recent occurrence in France, that the salt, although poisonous to the Ovine Ruminants, is harmless to the closely-allied *Bovidæ*. In France, sulphuric acid is commonly used in the maceration of the pulp of beet-root for cattle food. A farmer, who fed his sheep on the pulp so prepared, added by way of experiment 1800 grammes of sulphate of iron to every 1000 kilogrammes of beet-root. The sheep fed on the pulp thus medicated soon fell sick, and many of them died. The alimentary canal was found inflamed, and yielded, on analysis, sulphate of iron. The cows, however, which had been fed on the same pulp, were unaffected. That it was the

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iron salt which poisoned the sheep was proved by the fact that sheep fed on the same beet-root minus the iron continued perfectly healthy. The whole subject of the comparative effects of poisons on different species and genera of animals would well repay investigation. Sulphur, for instance, which to man is only a mild laxative even when given in considerable quantities, is said to be, in proportionately large doses, a fatal poison to the horse. The effects of opium on man and animals are not identical,—in the former sopor, in the latter convulsions, are the leading phenomena. Toxicological facts seem hopelessly ultimate. Of the cause of such differences we are as ignorant as we are of the reason why ordinary phosphorus should be a fatal poison and amorphous phosphorus an inert powder. Dr. Lauder Lindsay's paper on the Toot-poison of New Zealand, read before the British Association at Cambridge, describes an agent which, although little known in this country, is producing disastrous effects amongst the flocks and herds of the New Zealand settlers. The amount of property lost by graziers through its instrumentality has been in some instances as much as 75 per cent. The Toot, or Tutu plant, is the *Coriaria ruscifolia*, and belongs therefore to a genus, many of whose species have been proved to be poisonous. The Toot-poison is narcotico-irritant. In man it produces coma, delirium, and convulsions, and, during convalescence, loss of memory and vertigo. In cattle and sheep the symptoms are vertigo, stupor, delirium, and convulsions; curious staggerings and gyrations; frantic kicking and racing or coursing, and tremors. The seeds, contained in beautiful dark purple luscious berries, resembling the blackberry, and equally tempting to children, and the young shoots, like asparagus in taste and appearance, are the poisonous portions of the plant. The former cause the greater number of accidents to man, the latter to cattle. In both it seems that a certain predisposition is necessary for the poison to take effect. Depressing influences render both more liable to suffer from it, whilst it is quite possible for animals to become completely habituated to its use. The discrepancies between the accounts given by different writers of the poisonous properties of various Coriarias may perhaps be explained by the facts observed by Dr. Lindsay in the case of the Toot-poison. An underfed or starved animal just landed from a sea voyage is sure to be poisoned if it be allowed to luxuriate on the pleasant-looking succulent Tutu shoots, whilst for one that has been habituated to its influence, the same plant is believed by the colonists to be as nourishing and as safe as clover.

THE CASE OF TURK *v.* BARKER.

ANOTHER action for wrongfully confining an alleged lunatic was tried at Westminster before Mr. Justice Byles on May 11. Proceedings, however, in this instance were taken against the relieving officer of the Parish of Lambeth for having placed the plaintiff in the Workhouse Lunatic Asylum, and not against the Medical man who signed the certificate on which the officer acted. The verdict of the jury was a natural consequence of the highly-seasoned articles on the liberty of the subject, and the cruel injustice of confounding violence with insanity, which were so plentiful in the public journals a few months ago.

"The plaintiff, it appeared, was a commission agent, and a member of the Commercial Sale Rooms, and had carried on business for thirty years. He was a married man, having several children, some of whom were grown up, and some lived at home; one of those living at his house was a young woman of sixteen or seventeen years of age, and another was a little boy of nine or ten. On the 24th of May last year the defendant went to the plaintiff's house, having a cab outside with two men in it, and telling the plaintiff that he had heard he was conducting himself in an outrageous and violent manner, had him placed in the cab and driven to the workhouse, where he was placed in the lunatic ward and visited by the Surgeon, who for two or three days could not pronounce any positive opinion as to his sanity, as he was vehemently excited at his position; but after that time he came to the conclusion that he was of sound mind, though very excitable from the effects of drinking. This was the plaintiff's case.

"For the defendant, the cross-examination of the plaintiff and his witnesses, and the witnesses called for the defendant, disclosed that the plaintiff's children had gone to the defendant to complain of their father's outrageous conduct to them, and of his violence, and he had told them to go to a magistrate, but the magistrate declined to interfere. The defendant, as relieving officer, thereupon thought it his duty to do so. He had frequently threatened to murder his children and himself afterwards. The neighbours had heard his violent threats, and one of them had protected his daughter, whom he had slapped and shaken, and threatened to turn out of doors. He called his boy 'the devil's darling,' and often threatened to thrash him, but he kept out of his way. He breakfasted usually in bed, but got up in time for business. He got intoxicated at times, but denied that he could recollect having caressed and kissed the back of an arm-chair on one occasion, unless a lady were in it. His subscription to the Commercial Sale Rooms had been declined to be received because of complaints of his violent conduct, and Dr. Cronin had given a certificate, dated May 24, 1862, certifying that the plaintiff 'was of unsound mind, aggravated by drink, and wholly unfit to be at large; that his conduct both at home as well as abroad was outrageous, and that he was continually threatening his own life and that of his children.' Acting on this certificate, and believing it to be his duty, the defendant, as relieving officer, had had the plaintiff removed to the lunatic asylum of the workhouse.

"His lordship, in summing up, said that the defendant was legally wrong, and a verdict must go against him; but on the question of damages his lordship left it to the jury to say what damage the plaintiff had received. What had happened to him had probably been most beneficial to him, and there was no pretence for imputing any malicious motive to the defendant, who, mistakenly no doubt, had simply acted as he believed it to be his duty to do; urged on by the complaints of the plaintiff's children and what he heard from the plaintiff's neighbours, and believing the responsibility of acting in the matter to be cast on him.

"The jury, after a short consultation, to the surprise of every one in court, found a verdict for the plaintiff—Damages £20.

"His lordship immediately gave leave to stay execution."

LOCAL REPORTS ON SMALL-POX.

(Continued from page 487.)

III. *A Short Report of Small-pox in Belgravia, showing the Origin, Gradual Progress, and Spread of the Disease.* By C. J. B. ALDIS, M.D. Cantab., Medical Officer of Health for St. George's, Hanover-square.

THE disease first occurred at St. George's Hospital in a schoolboy, aged 7, who resided in Lloyd's-place, Brompton, and was admitted into the Hospital on October 24, 1862, for fever; but the "fever" turned out to be small-pox; whereupon the patient was placed in a private room, instead of being sent to the Small-pox Hospital. The new remedy, *Sarracenia Purpurea* was tried, and he was discharged cured on November 14. Four other patients, aged between 11 and 20, became infected with the complaint, besides a student of the Hospital, residing in Shaftesbury-crescent. As far as I could ascertain, all these patients had been vaccinated. A man, aged 30, unvaccinated, died on November 22, at No. 2, Robert-street, Pimlico. He had refused to be taken to the Hospital. The disease also attacked five women, whose ages varied between 20 and 50, during the same months. They were vaccinated, and resided in Hugh-street West. I then summoned a special meeting of the Nuisances Removal Committee, on November 27 last, to consider the appearance of small-pox, and to adopt such means as might be deemed expedient. It may be incidentally stated, that although measles had been epidemic during the month of November, yet it did not prove fatal in a single instance until December 4. Several cases also of secondary measles and of anomalous eruption occurred in the district. (a) But to return to our subject. It appears,

(a) It may be interesting to mention that an infant, while under my care during the present epidemic, at the Surrey Dispensary for syphilis covering the whole body, became affected with distinct small-pox, which disappeared, and with it vanished the syphilitic eruption. I have seen lepra disappear during the convalescence from measles.

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then, that the disease was imported into St. George's Hospital at the north corner of the district, from Brompton, in October; that it was conveyed by one of the pupils to Shaftesbury-crescent at the eastern extremity. I then traced it to Hugh-street West, and other streets situate in the central portion; subsequently to the end of Pulford-street, in a south-easterly direction near the Thames; then to the south-western boundary. On former occasions, many of the earlier cases of small-pox have happened in houses near the river. The eruption in some cases has been of so mild a form as not, at first, to be deemed that of small-pox; but during its progress, the specific character of the pustules proved it to be variolous. Very young children have mostly escaped the influence of the epidemic, owing, no doubt, to their being protected by previous vaccination.

The following is a table of the number of cases of small-pox which I have registered in the Complaints of Nuisances book from—

November	18 to 26 inclusive	. . . .	8
January	2 „ 28	„	6
February	4 „ 28	„	6
March	3 „ 26	„	46
April	1 „ 23	„	41
			107

But it must be remembered that only one case of sickness from small-pox was generally registered at the time of making each complaint, and that several of the family of the person whose disease was entered often became infected. The total, therefore, which is exclusive of the five patients in St. George's Hospital, may fairly be increased. Moreover, it may be assumed that cases of small-pox have happened in private practice which have not come to my knowledge; and although the complaint has almost been confined to the dwellings of the labouring classes, still it has spread to some few persons in better circumstances. The total number of cases reported to the Committee amounted to 141, of which 39 were sent to Mount-street.

Out of the preceding cases of sickness, the following deaths occurred:—

Date.		Sex.	Age.	Vaccinated.
Nov.	22	Male	30	No.
March	9	Female	20	Yes.
„	—	„	1 month	No.
„	11	„	22	No.
„	—	„	6 months	No.
„	12	Male	6	No.
„	13	Female	24	No.
„	15	Male	18	Yes.
„	17	„	36	Yes.
„	28	„	10 weeks	No.
April	7	Female	39	Yes.
„	8	„	3 weeks	Yes.
„	9	Male	1	No.
„	10	„	6 weeks	No.
„	13	„	5 months	Yes.
„	14	Female	38	No.
„	16	„	40	Yes.
„	20	Male	40	Doubtful.
„	—	„	22	No.
„	24	„	6	Yes, when the small-pox appeared.

I may produce, as an example of the localising of zymotic disease from insanitary conditions, a family consisting of the father and mother with six children, who resided at No. 2, St. George's-place. One of these suffered from measles in January last. Three had been attacked with scarlet fever, followed by renal disease in one instance, when I visited the house, and tried to induce the mother to allow them to be taken to the Infirmary in Mount-street, but she refused. Two of the children having afterwards been attacked with typheid fever, I went again with the Rev. Mr. Gedge, to urge her to permit the children to be taken away, when she declined a second time. One of the latter patients died, and small-pox subsequently appeared in one of the other children, which also died. At length two others, upon being seized with small-pox, were sent, by the mother's wish, to Mount-street from this perfect pest-hole. Three children, however died, one from typhoid fever and two from small-pox The house was in so bad a state that I reported it to be unfit for human habitation, which the Committee have approved. It is important to recollect that the population of the Belgrave sub-district has gained 15,000 within ten years, and that a great number of the houses occupied by the labouring classes contain a family in each room. The frequent custom among the Irish of holding "wakes," to which neighbours crowd, and the dead body lies festering with small-pox, or some other zymetic disease, greatly adds to the danger of infection.

IV. *On Small-Pox in the City of London.* From Notes supplied by H. Letheby, M.D., etc., etc.

In the City the force of the epidemic has not been severely manifested. Here and there in the western district, and in the worst parts of the eastern, it has shown itself, but the total number of cases of sickness from it among the poor since April 1 has been but 34; and the total number of deaths among *all classes* in the City since that time has been only 10. The truth is, the City had its visitation of the disease in the spring of 1860, and then vaccination was pretty extensively practised, so that the population is at present tolerably well protected. Not, indeed, so completely as it should be, for scarcely anything is so slovenly done as vaccination. During the epidemic of 1860, I collected the records of 223 cases of small-pox, all of which occurred within the City, and of which 62 were fatal. 122, or rather more than half of the whole number, were reported to have been successfully vaccinated, and 24 as not having been vaccinated at all; the others had either been vaccinated without success, or had furnished uncertain returns. The general results of my inquiries were, that of the fatal cases, 52 per cent. had not been vaccinated, 18 per cent. had, but without success, and 30 per cent. are said to have been vaccinated successfully. Of the cases which recovered, 72 per cent. had been vaccinated successfully, 6 per cent. not successfully, and 22 per cent. had not been vaccinated at all. So that of the fatal cases as many as 70 per cent. had not been protected by vaccination, and of the recoveries 72 per cent. had.

V. *Newington.* By Wm. T. Lipp, Jun., M.D.

Newington, with an area of 624 statute acres, and a population of 84,000 at least, has not been exempt from the present epidemic of small-pox. The total mortality therefore in the eighteen weeks ending May 2, was 19, of which 1 occurred in St. Mary's district, 12 in St. Peter's, and 6 in Trinity. As to their ages, three died under 1, seven between 1 and 5, four between 5 and 10, three between 10 and 20, and two between 20 and 30. One aged 14 was registered as vaccinated, and six aged 6 months (?); 1, 5, 7, and 11 as unvaccinated. In two weeks only, viz., those ending January 3 and February 7, were there 3 deaths registered. In the same period of eighteen weeks there were issued 1536 sickness orders for the out-door poor, and these included 67 for small-pox—viz., 13 in St. Mary's, 27 in St. Peter's, No. I. and II., and 27 in Trinity. Of these latter, 19 have occurred in the last three weeks in nearly equal proportions. Ten cases in addition have been received into the workhouse; the first two originated therein, and were mild; of the others, all but one have been admitted from without. They are placed in a ward at the top of the Infirmary, and there is little doubt but that the Board of Guardians will, if necessary, erect a temporary Hospital on a piece of ground three acres in extent, not far from the Workhouse. The number of vaccinations and re-vaccinations is very large, and bills are regularly posted every week, drawing attention to the prevalence of small-pox, and urging vaccination. A complaint was brought under my notice of a boy, eight years of age, being unvaccinated; and on carefully perusing the several Vaccination Acts in case it should be deemed right to summon, it appeared that unless I could produce proof of the original vaccination notice having been served on the mother, *i.e.*, eight years ago, no proceedings could be taken for a penalty, and that no fresh notice on my part, nor on the Registrar's, would be sufficient to comply with the words of the Act. The issue was never tried, for I found the mother and child were both going into the country the next day; and, I believe, had they remained, that consent could have been obtained without recourse to arbitrary proceedings. The great variety in the appearance of the pock-marks on the arms of children deserves special notice, and it will be worthy of careful investigation as to their relative value, *quoad* exemption from small-pox.

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VI. *Absence of Small-pox at Eltham.*

Dr. David King, Medical Officer to the Eltham sub-district, writes:—"I have great thankfulness in stating that in the Eltham District, Plumstead Board of Works, there have been no cases of small-pox for some years."

VII. *Clapham.* From Dr. J. MacDonogh, Medical Officer of Health for Clapham District.

I have been located in Clapham about thirty years. We had a few cases of small-pox occasionally as in other districts, but nothing like an epidemic until 1859. In that year there were 77 cases among the Union poor, and 5 deaths. In 1860, there were 72 cases and 5 deaths. In 1861, there were 55 cases and 1 death; and in 1862, there were 11 cases and no death (among the parish poor). During the above periods there were amongst all classes—in 1859, 9 deaths; in 1860, 6 deaths; in 1861, 6 deaths; and in 1862, 1 death. In the present year, 1863, there were 27 cases and no death amongst the Union poor up to May 9. The present epidemic began in the beginning of April last, and is now amongst all classes. My oldest patient is 57 years; she was in childhood duly vaccinated; a lady in affluent circumstances. My patients are of all ages and circumstances up to the above age. A woman over 40 years, who nursed her husband, a man about the same age, assured me she had the small-pox when a girl, and a girl about 14 years, whose mother declares that this girl had the small-pox when a child, and who showed me pits left by it, both are now ill of small-pox. Vaccination and re-vaccination are going on briskly, scarcely anything else moving. The Guardians of this Union have provided a small-pox infirmary, and a carriage at the call of any who may apply for it.

VIII. *Small-pox and Vaccination in Paddington.* By Dr. J. B. Sanderson, Medical Officer of Health.

The diffusion of small-pox in the Parish of Paddington has, up to the present time, been very limited. Since the beginning of the year only 7 deaths have been recorded in a population of 83,000. About 25 cases have come under my notice, most of which have been treated by private Practitioners; 9 of these cases have occurred very recently, and within a few yards of each other, in the immediate neighbourhood of the dust-yards on the north bank of the Paddington Basin. The houses invaded are for the most part inhabited by persons occupied in dust-sifting, who, from their mode of life, and their reckless disregard of all precautions, are particularly liable to contagion. The sanitary condition of these houses is unsatisfactory. The usual appliances (apparatus for the supply of water to the closets, proper dust-bins, etc.,) have been provided in compliance with sanitary orders, but have been as speedily destroyed by the occupants, so that for the present I am compelled to content myself with rude and ineffectual substitutes. Among such a population it is difficult, even with the utmost vigilance, to secure general vaccination.

The measures which have been taken to check the further progress of small-pox are the following:—

1. *Domiciliary visitation of infected neighbourhoods for the purpose of seeing that the people avail themselves of the existing facilities for Vaccination.*—This measure I regard as paramount in importance. The duty has been performed partly by myself, principally by my inspector. I now know that almost all the children in the streets adjoining the locality principally infected have been vaccinated, and I confidently anticipate that, in that direction, the disease will spread no further. The inspector is now visiting others to which it has not yet extended, and there it may be hoped that its invasion may be anticipated. This measure is incomparably more effectual for the promotion of vaccination than any other. It could be carried out everywhere in the metropolis without difficulty, were it not that in many districts the number of inspectors is insufficient, or that these officers are occupied in matters not belonging to their sanitary duties.

2. *Service of special notices requiring compliance with the Vaccination Act.*—Wherever, in his visitations, the Inspector finds vaccination neglected, he requires, by written notice, the parent or the individual, as the case may be, to apply for vaccination to some Medical Practitioner within a stated period, at the expiration of which he repeats his visit. If he finds that the notice has been neglected, he reports the case to the Board of Guardians, who thereupon promptly take proceedings under the Act.

3. *Circulation of handbills.*—These are worded in homely language, and are circulated only in streets and places inhabited by the poor, for it is by no means desirable to increase the already unreasonable alarm which prevails among the up per and middle classes.

4. *Provision for the reception and treatment of small-pox cases.*—In this matter the Guardians and Sanitary Committee have taken active steps. A report has been prepared by the latter on the cost and most suitable situation for the erection of a temporary building, and there is no doubt that in the event of its becoming necessary, the Guardians will be prepared to meet the emergency with the same promptitude with which they have hitherto acted.

IX. *Westminster.*

In the parishes of St. Margaret and St. John, Westminster, 20 deaths were recorded during the month of April as being attributable to small-pox, and 18 had not been vaccinated. Every effort is being made to arrest this outbreak by having the houses thoroughly cleansed and limewhitened, and inducing the poor to send their children for re-vaccination. Bills have been issued for this purpose, and during the month of April 1300 children and other persons have been vaccinated. As yet no place has been provided where cases of small-pox can be sent to, but the Medical Officer of Health suggests that if not the whole, yet a portion of one of the Workhouses should be cleared for the admission of small-pox cases, and that all the Practitioners in the neighbourhood should have the privilege of sending cases into the Workhouse whether they arise in the persons of paupers or otherwise. He has also recommended to the parochial authorities that the fee received by the Registrar of Births and Deaths for entering cases of vaccination should be likewise paid to the vaccinator who forwards the duplicate certificate, and thus give him a direct interest in forwarding to the Registrar of Births and Deaths that evidence of vaccination by which alone a just estimate can be arrived at of cases which remain unvaccinated after the prescribed period of three months. If this were done, it would be impossible for any large number of children to remain unvaccinated. Already in the present month there are seven deaths from small-pox, and at present the disease is but little decreased.

REVIEWS.

Clinical Memoirs on the Diseases of Women. By Alfred H. M'Clintock, M.D., F.R.C.S., late Master of the Dublin Lying-in Hospital, etc. 8vo. Fannin and Co.

This work comprises sixteen distinct Memoirs, illustrated by thirty-five well-executed wood engravings, distributed throughout the text. Eleven of these Memoirs treat of as many particular diseases of the sexual organs: one is devoted to "Stone in the Bladder;" one to "Hæmorrhage after Parturition;" another to the "Semeiological Value of the Pulse in Childbed;" and the remaining two to "Dropsy, and Cystic Disease of the Ovum." The contents are set forth in twenty-two pages of index, from which the extent of information given and the variety of details discussed may be inferred.

The author's style is simple, clear, and fluent, and he brings the labours and theories of other writers, foreign as well as British, to bear in a most happy way upon his own observations; and thus, while the reader is made acquainted with the literature of the subject, he sees the various opinions and practice of its contributors brought to the test of more extended clinical observation and practice.

Each Memoir is an exhaustive treatise on the disease of which it treats. Very numerous illustrative cases are recited, not in obscure and wearisome detail, but in a few well-digested lines, which at once portray all the important features of the case. Speaking of an attributed cause of prolapsus uteri, he remarks:—

"I feel satisfied that the frequency of cervical hypertrophy and elongation of the os and cervix uteri, and its influence on the production of prolapsus, has been greatly over-estimated by M. Huguier and some others, and therefore the practice they recommend—viz., excision of the cervix uteri—if justifiable at all, should only be resorted to in a few exceptional cases."

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The author's experience of pessaries leads him to speak in the following terms of their use:—

"A very large majority of (my) patients derived from their use the greatest relief and comfort, the uterus being kept in its proper place, and the instrument occasioning comparatively no annoyance. By judicious use of the pessary—the size of the instrument being from time to time reduced, till its diameter about equals the normal diameter of the vagina, and it can at length be safely dispensed with—cases may be cured."

Some interesting cases of excision of inverted uteri are recorded. The écraseur was used in three cases, and in each with perfect safety. The relative value of the several modes of removal of uterine tumours is fully discussed in the Memoir on Polypus of the Uterus. When the pedicle of the tumour is small, not thicker, for example, than the little finger, Dr. M'Clintock prefers torsion; and when the pedicle exceeds this size he prefers the écraseur to the knife or scissors, "on account of the security which this mode of operating gives against hæmorrhage." Fatal hæmorrhage has followed excision by the scissors. On six occasions the écraseur was used "with the most satisfactory results." "In using the instrument," he says, "I have generally found it necessary to bring the bulk of the tumour beyond the external genital orifice; and this necessity it is that limits its range of applicability. The use of the ligature (he says) alone as a means of extirpating uterine polypi is destined ere long to become nearly obsolete. As an auxiliary or supplemental means, in conjunction with excision, the ligature will continue to hold an important place. In ten instances I removed uterine polypi by means of the ligature alone, and three of these women died some days subsequently to the operation. I will not say in consequence of it; the reader shall have an opportunity of determining that point for himself. . . ." He shows that out of 69 cases of deligation occurring in Dr. R. Lee's and in his own practice, 12 patients, or 1 in 5, died; while there was no death in 59 cases in which the removal was effected by other means. He further shows that peritonitis, phlebitis of the uterus, pelvic abscess, phlegmasia dolens, and low fever are the chief consequence of ligature of uterine tumours, produced apparently by their decomposition within the body. Fearing similar consequences, Dr. M'Clintock objects to the removal of fibroid tumours by gouging, as advocated and practised by Mr. Baker Brown.

We are glad to find our author adopting a more precise definition and an intelligible nomenclature for extravasations of blood in the neighbourhood of the uterus. Under the head "Pelvic Hæmatocele" he includes cases of extravasation on either side of the pelvic peritoneum, the term "Uterine Hæmatocele" being restricted to extravasation of blood into the substance of the uterus.

The extreme interest and importance of pelvic hæmatocele is fully illustrated in the memoir devoted to this lesion, of which Dr. M'Clintock is inclined to assign a very common cause. "So great," he says, "is the proportion of instances where difficulty of menstruation has preceded the hæmatocele, that we regard dysmenorrhœa as one of the predisposing causes of the complaint."

With regard to the causes of mammary inflammation and abscess, the author repudiates the opinion that lacteal distension even predispose to them. He assigns another cause. "A very large proportion of cases of mammary abscess had some form of sore nipple previously. On a few occasions I have had an opportunity of observing the inflammation of the breast to supervene immediately and directly upon the ulceration or fissure of the nipple, as though it were an extension from it; whilst in other cases the gland became affected secondarily, in the same way as do inguinal glands from irritation of the vulva or of the urethra."

From some incidental remarks on ulceration of the womb, it appears that, if he does not think that this condition exists less frequently than has been represented, he is at least of opinion that it does not usually produce the severe symptoms which have been attributed to it. "Dr. James Henry Bennett," he says, "himself tells us that inflammatory ulceration of the cervix uteri during pregnancy is of frequent occurrence, and the most prominent of all the symptoms occasioned by its presence during the puerperal state and after abortion is hæmorrhage."

"I cannot offer (Dr. M'Clintock goes on to observe) any decisive opinion derived from my own experience in this matter. This much I can say, that many patients affected with chronic inflammation and ulceration of the os uteri have been delivered under my care, who, nevertheless, had no subsequent attack of hæmorrhage or extraordinary amount of lochial discharge; and that in none of the cases of secondary hæmorrhage (after parturition) which were submitted to ocular examination, was there any ulceration present."

Such extracts as the foregoing will hardly do our author justice; those who want to be better informed on the subjects of which the book treats, must read it themselves. They will find it pervaded by a kindly tone and a full appreciation of the labours of others; and its dictates are ever directed by the large experience, sound practical knowledge, and excellent judgment of the author, whose book is at the same time an acquisition to Medical literature and to the established renown of the Dublin school.

Reports in Operative Surgery. Series the Eighth. By Dr. Butcher, Surgeon to Mercer's Hospital.

We have had occasion before to notice the several series of admirable Surgical reports which have emanated from the pen of Dr. Butcher, and which have materially assisted in placing him in the high position he now holds amongst the Dublin Surgeons—a race of men to whom Surgery has been vastly indebted, and who are looked up to with respect and veneration wherever our art is practised.

This new and eighth report consists of details of five cases of deformity and disease in which the author has put in force with great success the most bold and scientific treatment. The first is an instance of elephantiasis of the lower extremity which was, if not cured, at least materially remedied by ligation of the femoral artery. This case in particular is one of great interest, and does Dr. Butcher much credit.

The second case is an instance of excision of the knee-joint for incurable disease, constituting the fourth where the author has operated with success. The details of this operation and treatment are told with the utmost care and minuteness. The warm criticism on the conduct of those Surgeons who have not taken sufficient care to select their cases, and thus have seriously damaged this excellent operation, is certainly well deserved.

The fourth and fifth cases are instances of large tumours of the upper jaw which were removed with success, and the fifth case detailed is a remarkable instance of hare-lip which Dr. Butcher succeeded in entirely remedying by a well-planned and well-executed operation.

We can award the author the same amount of praise which we bestowed upon him when we noticed his last series. The cases are admirably reported, and the illustrations are striking, and we should think faithful. We would recommend the careful study of the present series to every operating Surgeon.

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Selections from Foreign Journals.

ON AN EPIDEMIC OF CHOREA.

By M. F. BRICHETEAU.

This small epidemic occurred in one of M. Monneret's wards at the Necker Hospital, where M. Bricheteau was at the time an *interne*. On October 26, it contained 28 patients, 6 suffering from phthisis, 5 from hysteria, 3 from uterine affections, 3 from heart disease, 3 from brain affections, 2 from typhoid fever, 2 from rheumatism, 1 from gastric fever, and 2 from chlorosis. In the afternoon a young girl was brought in, suffering from the most intense chorea, which had come on the evening before after some dispute. In the course of the evening, one of the hysterical patients, who had formerly had chorea, began, after a hysterical paroxysm, to exhibit some movements, which at the end of twelve hours became so violent that she was obliged to be tied down. She lay at the opposite end of the ward to the chorea patient. On the 27th, two other hysterical patients, who had been in the Hospital for two months or more, were seized much about the same time with chorea—one after a hysterical paroxysm, the other spontaneously. On the 28th, two new cases occurred; on the 29th there was no new case; but on the 30th there were two additional cases, and on the 31st there was another: so that between the 26th and 31st of October eight patients

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contracted chorea in this ward; and in all probability the epidemic would have become propagated to the neighbouring ward, had not measures for arresting it been taken—these consisting in the isolation of the patients. Of the nine patients, the four last attacked, as their chorea was only of a medium intensity, and they were able to walk, were at once discharged. The five others, whose violent movements compelled them to be kept in bed, were placed in a separate pavilion, the other patients being prevented access to them. After this no case occurred.—*Gazette des Hôpitaux*, No. 46.

EXCERPTA MINORA.

Influence of the Relative Ages of the Parents upon the Sex of their Offspring.—M. Boudin, in a communication addressed to the Académie des Sciences, comes to the following conclusions:—1. The masculine sex predominates when the father is the oldest, and the feminine when this is the case with the mother. 2. There is a tendency to equilibrium in the sexes, but still with a slight predominance of the female, when the father and mother are of like ages.—*Gaz. des Hop.*, No. 25.

Operations for Stone in Russia.—Dr. Ebermann stated to the St. Petersburg Medical Society that according to the reports of the Russian Civil Hospitals for 1856-59, there had been 231 cases of lithotomy, of which 194 terminated in recovery, and 37 in death. Within the same period lithotrity had been executed only 5 times, all the patients recovering. During the years 1857-59 there had been 6 lithotomy operations performed at the Obuchoff Hospital, St. Petersburg, 3 of the patients recovering, and 3 dying. In the various provincial Hospitals, since 1856, there have been 54 lithotomy operations, 41 having proved successful, and 13 fatal.—*Petersburg Zeitschrift*, No. 1, 1863.

Discharge of a Portion of the Pancreas by Stool.—The *Wien. Allgem. Med. Zeitung* (1863 No. i.) refers to the favourable issue of a case some six months since reported in its columns, in which a portion of the pancreas was discharged by stool, and found amidst the fæces. The patient is now perfectly well, and has departed on a long journey.

GENERAL CORRESPONDENCE.

ON THE MEANS OF CONTROLLING HÆMORRHAGE IN THE REMOVAL OF SCROTAL TUMOURS.

LETTER FROM J. FAYRER, M.D.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the *Medical Times and Gazette* of February 7, 1863, Dr. Quinlan, of Dublin, alluding to the removal of scrotal tumours, remarks, that recent operators have not acknowledged Dr. O'Ferrall's method of controlling hæmorrhage, though they have had recourse to it in these operations. He also remarks, "that since the publication of Dr. O'Ferrall's plan of elevating the scrotum to drain it of blood, a complete change has occurred in these operations."

Dr. Quinlan is, perhaps, not aware that they are of almost weekly occurrence in Calcutta, that the tumour is invariably elevated to drain it of part of its blood before it is removed, and that such has been the case for many years—long before 1844 or 1845, when Dr. O'Ferrall's plan was made known.

The late Mr. Brett, of the Hon. E.I. Co.'s Service, in his work on "Surgery in India," printed in Calcutta in 1840, mentions elevation of the tumour to drain it as one of the preliminary steps of the operation. *Vide* page 94:—"The tumour should be turned over on the abdomen to allow of the veins being somewhat emptied of their contents."

We now use a clamp, of which I enclose a sketch of my own design, or a running cord with a brass ring, a suggestion for which we are indebted to Dr. Mactier, B.M.S., and we have comparatively little dread of hæmorrhage, which, I must add, in my experience of these operations, is more formidable in its arterial than venous form.

I have no desire to detract from the originality of Dr. O'Ferrall's invention, but I and my colleague, Mr. Partridge, have frequently had recourse to this proceeding, unaware that it was claimed as an original invention, or was anything beyond what the circumstances of these cases naturally suggested.

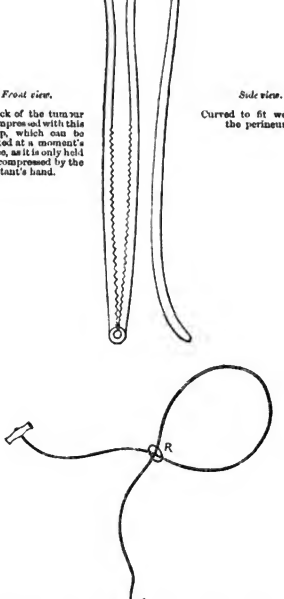
If Dr. Quinlan will refer to the *Medical Times and Gazette* of September 13, 1862, he will see that the most modern mode of performing this formidable operation is considerably modified since Dr. O'Ferrall's plan was published, and since Hoo-Soo, sank after being on the table upwards of an hour and a-half.

I am, &c.

J. FAYRER, M.D.,
1st Surgeon Medical College Hospital, Calcutta.

Calcutta, April 3.

STEEL CLAMP.



A cord, strong and twisted, like those of window sashes in England, running through a brass ring (R), and enclosing the neck of the tumour. It is fitted with a handle at each end, like that of a cork-screw, to pull tightly on. This is a most efficacious tourniquet.

THE LEVÉE.—Amongst the gentlemen attending the levée held by H.R.H. the Prince of Wales on behalf of Her Majesty, on Wednesday, were Sir C. Locock, Mr. Coulson, High Sheriff of Cornwall; Doctors—Breslin, E. Phillips, F. G. Read, Dickson, Lyon Pfayfair, C.B., F. Bird, Hinxman, Ramsbotham, T. K. Chambers, C. Rutherford, Scott Alison.

DR. B. W. RICHARDSON.—The Philosophical Society of America, held at Philadelphia, have elected Dr. Richardson, the author of the essay on the "Cause of the Coagulation of the Blood," a member of their body. This is the fourth foreign society which has conferred the like honour on themselves and on the distinguished English physiologist.

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REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 28, 1863.

Mr. PARTRIDGE, President, in the Chair.

DR. A. T. H. WATERS read a paper on

A REMARKABLE CASE OF INJURY OF THE HEAD, IN WHICH THE RIGHT RESTIFORM BODY AND THE RIGHT POSTERIOR COLUMN OF THE SPINAL CORD WERE DIVIDED TRANSVERSELY, WITH REMARKS.

The following is a brief abstract of the case:—John M'Bride, a sailor, aged 23, was admitted into the Liverpool Northern Hospital about noon on February 19, 1863. He had received a blow on the side of the face on the previous day from a capstan bar, which stunned him for a short time. On presenting himself at the Hospital he was able to walk with assistance. When seen by the author he was in bed. He was quite conscious, understood everything, and spoke rationally and distinctly, although articulation was not quite perfect. He complained of slight dizziness of the head, and slight numbness of the right side of the face and of the right arm and leg. He was unable to swallow, and had constant hiccough. The face was dusky, the breathing quiet, the pulse 100 and regular, the tongue was protruded in a straight line, the uvula was drawn to the right side. There was partial loss of power over the right side of the face, and right arm and leg; both these limbs could, however, be readily raised. He could open and shut both eyes. The pupils were rather dilated, the eyeballs constantly rolling about. No affection of vision or of hearing was complained of. The right side of the face and the right arm and leg were of higher temperature than the corresponding parts of the opposite side. The patient said he could distinctly feel when touched on either side of the face, on either foot, leg, or arm. Sensation appeared slightly less perfect on the right side than on the left, but on both sides it was good. The patient died somewhat suddenly at five p.m. on the day of admission, after an ineffectual attempt to swallow. He had survived the accident about twenty-four hours. After death the cranial bones and the vertebræ were found unfractured. The cerebrum was healthy. There was a considerable quantity of slightly coloured fluid at the base of the skull and in the spinal canal; the venous sinuses were very full of blood; the right hemisphere of the cerebellum was slightly and very superficially lacerated on its under surface, close by the side of the right restiform body. The medulla oblongata at its posterior aspect and right side was the seat of an extravasation of blood lying beneath the pia mater. This extravasation was into the nervous substance, and was connected with lacerations of that structure. The parts having been hardened in spirit, two transverse lacerations were found connected by a vertical one. The first or superior laceration involved the right restiform body about its middle; the laceration extended to within a very short distance of the median furrow of the fourth ventricle behind; to the outer side and in front the laceration extended as far as the line of origin of the eighth pair of nerves. Blood was effused between the lacerated parts, and separated them from each other. The nervous substance in the adjacent parts was also infiltrated with blood. The median furrow of the fourth ventricle was pushed a little towards the left side. As far as it was possible to judge, this laceration involved the whole, or very nearly the whole, of the fibres of the right restiform body, and a portion of the grey matter spread out on the floor of the fourth ventricle. None of the roots of the eighth pair of nerves were torn, but the laceration extended close to the superficial origin of the glosso-pharyngeal and par vagum, and no doubt involved their deep fibres. The second or lower laceration was situated just below and to the right of the nib of the calamus scriptorius. It had divided that part which is known as the posterior pyramid and the tract outside of it, which is the continuation of the posterior column of the spinal cord. The laceration extended about two lines into the nervous substance; it stopped behind at the median fissure, and externally it did not extend beyond the line of attachment of the posterior roots of the spinal nerves. Blood was effused as at the upper laceration. These two lacerations were connected by a vertical one, which ran down along the inner side of the restiform body, and terminated below by joining the inner part of the lower laceration. The lungs were loaded with black blood. The heart was healthy. The author remarked that the importance of the case was in the fact that the parts which were formerly supposed by most physiologists, and still are by some, to be the sensitive tracts, were divided on one side without loss of sensation ensuing. The case was remarkable as presenting us with a repetition in a healthy man of those experiments so often performed on the lower animals by the physiologist—namely, division of certain portions of the cord or medulla. The result of the case tended to confirm the views recently advanced by some physiologists, that the posterior columns of the cord and the restiform bodies are not the channels by which the posterior roots of the spinal nerves communicate with the sensorium, and to refute the opinion that those structures are concerned in that function. With regard to the minor symptoms, they for the most part agreed in a remarkable manner with the lesion which was found. So severe a laceration of the restiform body could scarcely happen without involving the deep origin of the facial, the glosso-pharyngeal, and the pneumogastric nerves. Hence the symptoms of paralysis about the face, etc., which had been referred to. The immediate cause of death appeared to have been a sudden arrest of the function of breathing.

DR. HERMANN WEBER made a contribution to the pathology of the

CRURA CEREBRI.

After some preliminary remarks on the rare occurrence of diseases of the crura cerebri uncomplicated with other affections of the brain, Dr. H. Weber related the following case:—A man, aged 52, affected with disease of the aortic valves, hypertrophy of the left ventricle, and rigidity of the larger arteries, had during the last years of life frequent tinnitus aurium, a dull but moderate headache, disturbed sleep, and anxious dreams. Two months before death, there occurred sudden paralysis of the right side of the body (limbs, trunk, and face) as to motion and sensation, and of the muscles of the left eye, supplied by the third nerve, with dilatation of the left pupil; disturbance of vision only slight—viz., imperfect double vision when using both eyes combined, and impaired accommodation when using the left eye alone; the other special senses and the intellectual faculties unaffected; slow and irregular pulse; obstinate constipation; increased temperature in the paralysed limbs. The paralysis of the right side of the face, the soft palate, the tongue, and the trunk had been from the beginning less complete, and became gradually much diminished, as well with regard to motion as to sensation; that of the limbs, on the contrary, remained almost complete with respect to motion, while the sensation gradually improved. The paralysed muscles of the left eye regained their function only very imperfectly; and the left pupil, too, remained much dilated. The obstinate constipation continued. About eight days before death, symptoms of broncho-pneumonia and pleuritis, especially of the right side, came on. Death took place two months after the seizure. *Post-mortem Examination.*—Phenomena of recent broncho-pneumonia and pleuritis occupying the greater portion of the right lung, and existing only in a very limited manner in the lower lobe of the left lung. Hypertrophy of the left ventricle of the heart, with disease of the aortic valves (rigidity through atheromatous deposit, stenosis of the orifice, and insufficient closure). Extensive atheromatous affection of the arterial system, and especially of the cerebral arteries. Hæmorrhage into the inferior and internal portion of the left crus cerebri, the cavity being about six-tenths of an inch long, and five-twentieths of an inch broad, and as deep; it was situated close to the surface, and in immediate contact with the third nerve, the nerve-fibres of which were degenerated. The tissue of the crus round the cavity was hardened in the thickness of about one-fifteenth of an inch. The remainder of the left crus and the other portions of the brain were normal. Dr. Weber remarked that the diagnosis in this case had been comparatively easy. The sudden paralysis of the right side of the body, with paralysis of the third nerve of the left side, and with immunity of the mental faculties and special senses, pointed unmistakeably to an affection near the base of the left hemisphere, and in immediate connexion with the third nerve, therefore also the crus cerebri. The fact that none of the other cranial nerves were affected indicated that the morbid condition was confined to a small spot, and the existence of the disease of the arterial system recognised during life rendered hæmorrhage more

probable than any other alteration. Dr. Weber thought under similar circumstances an almost accurate diagnosis might be always ventured. The author then gave an account of the two only cases of an analogous nature which he had met with in Medical literature; the one related by Andral ("Clinique Médicale," tome v., p. 339, 1834), the other by P. H. Green (*Medico-Chirurgical Transactions*, vol. xxv., p. 195), the main symptoms of both cases being in accordance with those observed by himself. He then touched upon the symptoms produced by section of the crura cerebri in animals, especially the circus movements described by Magendie, Lafargue, Longet, Schiff, and other physiologists, the absence of hemiplegia, and the occurrence of hyperæsthesia on the side of the lesion noted by Schiff. Dr. Weber did not endeavour to explain the discrepancy between the results of vivisections and the symptoms of disease in man. He alluded, however, to the differences in the pathological and experimental lesions themselves, and also in the connexion of the different portions of the brain between themselves in man and animals. He wished by no means to disregard the results of the physiological experiment; but, on the contrary, thought that, whenever any discrepancy existed, we ought to be very cautious in drawing inferences from pathological observations. He therefore did not consider as certain, but only as probable results of lesions of the centre, the internal and lower portions of the crura cerebri in man (the only parts which were diseased in the three cases related):—1. Almost perfect paralysis of the limbs of the opposite side as to motion, and great impairment as to sensation. 2. Less complete and more transitory paralysis of the opposite side of the trunk, of the face, soft palate, and tongue, as to motion and sensation (leaving the muscles of the eye intact). 3. A similar, but perhaps more permanent, impairment of the pneumogastric and sympathetic nerves of the opposite side. 4. A great retardation in the functions of the intestinal canal. 5. Immunity of the intellectual faculties and special senses. 6. Paralysis of the third nerve on the side of the lesion, if the latter affects the nerve substance adjacent to the point of issue of that nerve.

Dr. Meryon, after alluding to the service rendered by Dr. H. Weber, in his paper on the Crura Cerebri, and in his former contribution to the pathology of the Pons Varolii, expressed his opinion that, if every case of cerebral disease were as carefully examined as this had been, the numerous instances of discrepancy which we hear of between the anatomical disposition of the nerve fibres in the encephalon, and the symptoms which present themselves in structural lesions of the brain, would soon become the rare exceptions. He illustrated his proposition by adducing—1. The case described by Dr. Weber, in which a correct diagnosis had been formed as to the seat of the disease in consequence of the third cerebral nerve being implicated in the hemiplegia; and, 2. The case reported by Dr. Waters, the symptoms in which clearly pointed to the medulla oblongata, and to that portion of it in the immediate neighbourhood of the nucleus of the facial nerve, as the locality of the lesion; and referred to the observation of Dr. Cazalis, of the Salpêtrière, who has described the imperfectly palsied eyelid as a diagnostic sign of facial paralysis dependent on intra-cranial disease, and the perfectly fixed lid in affections of the facial nerve only. Dr. Meryon vindicated the theory of the posterior columns of the spinal cord and the corpora restiformia being tracts of sensitive impressions to the sensorium, notwithstanding the solution of continuity of the nerve fibres of the restiform body in Dr. Waters' case, and showed how such impressions may be conveyed to the brain by the intimate connexion of a portion of each posterior root of the spinal nerves with the posterior vesicular columns, and substantia gelatinosa in the grey matter, and partly by those bundles of nerve fibres which pass out again from the grey substance into the lateral white columns.

Dr. Waters said the case he had brought under the notice of the Society was remarkable from the peculiar nature of the lesion that was sustained. With perhaps one or two exceptions, he was not aware that any case of a parallel character had ever been placed on record. The results of the case, as regarded the symptoms, did not in the slightest degree invalidate the views of Sir Charles Bell as to the function of the posterior roots of the spinal nerves, but they were quite in opposition to the theory that the posterior columns of the spinal cord and the restiform bodies were the tracts along which sensitive impressions were conveyed to the sensorium. The partial division of the grey matter on the floor of the fourth ventricle—generally believed to be the continuation of the central grey matter of the cord—without any loss of sensation following on the side opposite to the lesion, seemed rather opposed to the view that decussation of the conductors of sensitive impressions takes place all along the spinal cord; for, although only a portion of the grey matter was divided on the right side, yet if the sensitive fibres decussate before reaching the medulla oblongata, the left side of the body ought to have had a diminished sensibility, whereas the opposite was the fact—sensibility was diminished on the right side. The existence of increased temperature on the side of the lesion was also an interesting phenomenon; this and the somewhat flushed condition of the face were symptoms somewhat similar to those which follow an injury to the sympathetic. The author alluded to a case reported by M. Begin, in Longet's "Anatomie et Physiologie du Système Nerveux," where one antero-lateral column of the cord was divided by a sharp instrument, the posterior columns and the central grey matter being uninjured. In that case there was loss of power of the affected side, but no loss of sensation. The case he had reported, coupled with that of M. Begin, and taken with the experimental and pathological cases which have been already brought forward, seemed to prove beyond doubt that neither the posterior columns of the cord nor the restiform bodies were concerned in transmitting sensitive impressions. In conclusion, the author dwelt on the importance of a careful observation of such rare cases as the one he had related, which constituted, in fact, a repetition in man of the experimental inquiries so often made by physiologists. Such cases, when correctly observed, might serve to establish important physiological doctrines, as not being open to the objections which might be advanced against the results of vivisections in the lower animals, or the facts observed in disease in man.

Dr. Weber said that the Author's case was like his, in that there was increase of temperature on the side of the body opposite the lesion. In his (Dr. Weber's) case this increase only lasted seven or eight days, which was about the time the temperature was increased after section of the sympathetic.

Dr. Thos. K. Chambers gave a contribution to the therapeutics of

CONTINUED FEVER.

Analysis of 214 Cases of Continued Fever:—108 treated on "general principles;" 106 treated on a uniform plan of continuous nutriment and hydrochloric acid. The first series occurred during the six years ending September, 1857; the second series during the five and a half years ending March 31, 1863. *Reasons for the Cases being Fairly Comparable.*—1. They are each a consecutive series. 2. They are spread over a considerable period of years. 3. All treated by the same Physician, and under similar circumstances. 4. Diagnosed and recorded by independent registrars. 5. The equality of the cases is shown by the equality of the mean duration of their convalescence. Of the first series—of 13 entered as typhus, 3 died; of 39 entered as typhoid, 16 died; of 56 of doubtful type, 3 died; of 108, total of continued fever, 22 died. Of the second series—of 19 entered as typhus, none died; of 48 entered as typhoid, 2 died; of 39 of doubtful type, 2 died; of 106, total of continued fever, 4 died. Excluding from the first series 2, and from the second 1, who died within two days of admission, and gave therefore little scope for judging of the effects of treatment, there remains somewhat less than 1 in 5 as the death-rate under the first treatment, and less than 1 in 35 as the death-rate under the second treatment. Therefore the second method of treatment is a powerful means of preserving life. Details of treatment were given, and some remarks made on the action of emetics.

Dr. Weber said that, fifteen years ago, when he was a student at Bonn, the usual treatment of fever was by hydrochloric acid alone, without food. Fifteen drops of the diluted acid were given four, five, or six times a-day. The mortality was about sixteen or twenty per cent., the cases being typhoid. The fever was, on the whole, more violent than here. Dr. Weber thought it would have been better to have made a comparison between the treatment by hydrochloric acid and no treatment.

Dr. Murchison had listened with much interest to Dr. Chambers' communication, inasmuch as the treatment recommended closely resembled what he had followed at the Fever Hospital during the last eighteen months. The treatment of typhus and allied fevers by the mineral acids was a very old

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one; it had long been the favourite treatment in many parts of Europe, particularly in Germany and Sweden. At the same time, he had not that implicit faith in it which Dr. Chambers appeared to have, and he must protest against Dr. Chambers' inference, that his treatment was calculated to prevent fifteen out of every eighteen deaths from fever. Dr. Murchison had employed the mineral acids, in conjunction with abundance of fluid nutriment, and wine when indicated, in upwards of 1500 cases; and although he had often seen the most marked improvement (cleaning of the tongue, etc.) follow the use of the acids, his statistical results had been much less favourable than those now communicated to the Society. He was convinced that, with more extended experience, Dr. Chambers would be compelled to modify his opinion. Dr. Chambers' statistics were open to several fallacies. 1. The cases selected for comparing the results of different plans of treatment had occurred at different periods, instead of at the same time. 2. In both series the form of fever had not been determined in a large proportion of the cases, and no details had been given to enable any one to judge of their severity. Many of the cases "of doubtful type" had probably been examples of simple fever, which was rarely fatal under any method of treatment. The results would be materially affected by the proportion of cases of simple fever or febricula in either series. 3. The rate of mortality in the first series, treated "on general principles," was far above the average mortality from fever in general Hospitals, and hence it was not a fair standard of comparison. The total mortality in this series (including febricula) had been 20 per cent., for typhus alone, 23 per cent., and for enteric fever now less than 41 per cent. 4. The ages of the patients suffering from the different forms of fever had not been given. Age exercised little or no influence over the rate of mortality of enteric fever; but in the case of typhus, the results of different methods of treatment could never be satisfactorily compared without taking the ages of the patients into consideration. Under 20 years of age, typhus was rarely fatal; about 50, the mortality was nearly 60 per cent. 5. The number of cases was too small to warrant any decided opinion as to the advantages of the treatment recommended. The second series included only 19 cases of typhus, and 48 of enteric fever, diagnosed as such. A Practitioner, with extensive experience in fever, might often have under his care 20 cases of typhus in succession, without losing a single case, but then if he lost 5 cases, the mortality would be 20 per cent. During last autumn, of 41 successive cases of enteric fever under Dr. Murchison's care, only 2 died, 1 from perforation of the bowel, and the other from acute tuberculosis—lesions not likely to have been cured by any treatment—yet the rate of mortality for the entire year had been considerably greater. Most of the 43 cases had been severe, but in none had a drop of hydrochloric acid been administered. Dr. Murchison doubted if the hydrochloric acid possessed advantages over the other mineral acids. Although he believed that the treatment of continued fevers by the mineral acids, together with a uniform system of nourishment, was justified by our knowledge of the pathology of fever as well as by experience, he was confident that Dr. Chambers' statements were calculated to make those who heard them too sanguine as to the results to be obtained from it.

The Author, in reply, said that all statistics were open to the objection raised by Dr. Murchison, that they were not long enough. His statistics were not brought forward as conclusive, but as a help to further inquiry, and he would grant that it might be found that the mortality was slightly different if further series of cases were compared, but not so as to affect the practical conclusion. His reason for bringing forward the two series of cases, the subjects of the paper, was that, being equal in number, and being pretty much under the same circumstances, they were fairly comparable. The difference in the mortality might be due, it was said, simply to a general difference in the mortality of the fever at the two quinquennial periods; but he had found that the mortality from fever in the two periods was as nearly as possible equal, taking Dr. Murchison's statistics as his authority. He did not bring forward the cases to exemplify the acid treatment, but rather as evidence of the value of continuous nutriment. In fact, he believed that the acid was beneficial principally in a subsidiary manner in preparing the digestive mucous surface for the nutriment. That it did thus produce a beneficial change was evident from the cleaning of the tongue. In reply to Dr. Waters, the author said that wine was given in both classes, but in both, on account of the expense, it was only given in cases in which it was strongly required. The treatment by acids in Germany was not successful, from being relied on solely, and not supplemented by nutriment.

THE PATHOLOGICAL SOCIETY.

TUESDAY, APRIL 14 AND 21.

Mr. PRESCOTT HEWETT, President, in the Chair.

Dr. WILKS read a report on Dr. Dickinson's case of

APOPLEXY OF THE SUPRA-RENAL CAPSULE.

I have examined the supra-renal capsule which was submitted to me, and find it, as Dr. Dickinson states, in an apoplectic condition, using the term apoplexy, according to an absurd custom, as synonymous with effusion of blood. It appears as if some large vessel had ruptured in the interior of the organ, and then the blood had infiltrated through the tissue. On placing sections in water, the whole of the blood could be washed out, leaving the organ in a healthy state. I have on several occasions met with this condition, and have passed it by as of little moment, and should have done so on the present occasion had I not lately received a pamphlet from Professor Mattei, of the University of Siena, in which this subject of effusion of blood in the organ, or apoplexy as he also styles it, is considered. He quotes the case of a man, sixty years of age, who died with severe abdominal pains, and in whom such apoplexy was found, all other organs being healthy, and he considered that death was due to this. He also mentions the case of a fœtus, which died at birth from pressure on the cord, and here no organ was found in an abnormal state, except the capsules, which were affected with apoplexy by infiltration. He thinks therefore that death may be due to apoplexy of the supra-renal capsules, and that this is brought about through the agency of the sympathetic. Although, as before said, I have met with this condition, but have hitherto attached no importance to it, yet the statement which I have quoted from one who has evidently paid some attention to the changes in the supra-renal organs must not be passed over, and therefore will necessitate some further observations of pathologists.

Dr. HENRY DICK presented two

YOUNG ITALIAN GREYHOUNDS SUFFERING FROM RICKETS,

and of which he gave the following history:—The mother is eight years old, and the father two years old. There were eight pups in the litter, four of which remained with the mother and were perfectly healthy, and four were removed after the lapse of twenty-five days; two of them were sickly, but got well by being fed on boiled meat and bread and milk. Those two which were presented to the Society were fed upon meat, bread, and broth, but the animal food formed the largest proportion. After being thus fed for three weeks, they began to exhibit a difficulty in walking, particularly on their hind legs. A little afterwards the articulations became swollen, and the fore-legs began to bend. Their eyes were running, but their appetite remained good. At one time their whole body was so painful that they could not bear to be touched. They now present those symptoms of rickets which are observed in the human subject. They are bow-legged, have swollen articulations, and large stomachs. Dr. Dick considers those specimens conclusively demonstrative that rickets is not identical with scrofula, and does not owe its origin to hereditary syphilis, as it is sometimes believed, but thinks that it is induced by improper or insufficient food. Too much animal food or bad milk in early life will, he believes, induce rickets, and for that reason rickets is found not only in the poorer, but also in the better classes.

Dr. DICK also presented a microscopic specimen of part of a

POLYPUS REMOVED FROM THE ANTERIOR PORTION OF THE URETHRA.

This piece, examined under the microscope by Mr. William Adams and himself, exhibited epithelial cells and delicate fibrous tissue. Dr. Dick believes that polypus in the anterior part of the urethra is rare, but occurs more frequently in the prostatic portion. M. Velpeau presented to the Académie de Médecine of Paris, last year, a paper on the rarity of such excrescences in the anterior portion of the urethra.

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On a question by Dr. Gibb on the means used in making the diagnosis,

Dr. Dick replied it was done by the assistance of the urethroscope. He believes that those excrescences are similar to those in the trachea described by Dr. Gibb. In operating, they bleed on the slightest touch, but are easily detached with the instrument.

Dr. Brinton reported on the specimen of disease of the liver exhibited by Mr. Holthouse for Dr. Basham. It was, as had been supposed at the last meeting, malignant.

Mr. Gay brought before the Society a child, two years' old, who had a peculiar form of

MALFORMATION OF THE GENITALS.

There was epispadias, and the penis was so rudimentary that it seemed to form but a valve to what looked like a fissure in the lower wall of the abdomen. The scrotum and testes were normal.

Mr. Holmes asked if the symphysis pubis was deficient, if the bladder was normal, and if any attempt at cure by operation was contemplated.

Mr. Gay had passed a sound into the bladder, but had not discovered anything abnormal. He did not know how it could be remedied by operation.

Dr. Brinton said that in one case of large epispadias his colleague, Mr. Simon, had operated. There were pressing reasons for the operation. The operation was to divert the stream of urine into the rectum. It was successful for a time, but the patient died of one of the unfortunate Hospital diseases which so often attack patients after operation. In a case of epispadial deformity in a female, an operation for the relief of the deformity was contemplated, but attempts produced such excessive prolapsus that it was abandoned.

Next were brought forward patients on whom had been performed excision of the ankle—Syme and Pirogoff's amputation—as previously announced.

Mr. Canton brought before the Society a case in which excision of the ankle-joint had been performed by Mr. Hancock in the Charing-cross Hospital, in 1857, for strumous disease of the bones. The patient did well after the operation; he was in bed five months, and in twelve months was able to walk with a stick. He was still well, and had an extremely useful limb. Mr. Canton then gave the particulars of another similar case, but the patient, a boy two years of age, had not attended, as he had promised.

Mr. Bryant then showed a case in which he had performed Pirogoff's operation in September, 1860. [This case is recorded in this Journal March 9, 1861.] The patient, who had been in bed ten weeks, walked in three months. He had gradually gone on well, was at work, and the limb was a very good one.

Mr. Little then showed a patient on whom Mr. Maunder had performed Pirogoff's operation for injury to the foot from a railway accident. After the operation there was some inflammation of the leg, but the patient ultimately did well, and walked in six months.

In reply to Mr. Canton, Mr. Bryant stated that the tendo-Achillis was divided in his case.

Mr. Holmes then brought forward a patient, on whom he had performed Syme's operation in April, 1862, for strumous disease of the tarsal bones. The stump healed quickly, and the patient could bear on it in five weeks, and now walks quite well.

Mr. Henry Thompson then brought forward

THREE CASES OF SYME'S OPERATION.

He had performed the operation six times, but was only able to show three of the patients. One was a woman about 35 years of age, on whom he had operated four or five years ago. There was no sloughing of the flaps, but the healing was slow. She, however, recovered with a good stump, and walked in four months, and still walked quite well. The next was a boy 10 years of age, on whom he had operated a year and a-half ago. He walked well, with a simple boot without a spring. In the third case the operation had been also very successful. The patient, a woman, had been operated on seven years ago, and now walked several miles a-day in her occupation.

Mr. Gay then exhibited

TUMOURS REMOVED FROM A CHILD WHO HAD CONGENITAL MALFORMATION OF THE GENITAL ORGANS.

See the report of this case in this Journal, April 4, 1863.

Dr. Montgomery was requested to examine and report on the specimen.

Dr. Gibb brought forward the following

ILLUSTRATIONS OF LARYNGEAL OBSTRUCTION.

1. *Disease of Turbinated Bones and Floor of Nostril, with Exudation of Fibrin.*—Patient, a lady of 35, with disease of the throat for twelve years, and discharge from back of the fauces of lumps of fibrin. The epiglottis was pendant, almost flat on the glottis, and serrated. Inflammation, ulceration, and partial destruction of turbinated bones of right nostril, extending to its floor and the velum palati. The nostril was divided into two cavities. This was seen by rhinoscopy. Had been a great sufferer for years. Local and constitutional treatment was curative.

2. *Organic Aphonia from Foliated Growths on the True and False Vocal Cords.*—Young man of 24, with a syphilitic history. Aphonia and dysphonia for twenty-two months, depending upon several foliated growths on the true and false vocal cords of both sides. At times he was quite dumb. Under treatment the voice returned in five months, and he spoke well in two months after.

3. *Organic Aphonia for Five Years from a Tumour on the Right Vocal Cord.*—Young lady of 29, with hoarseness at first of twelve months, followed by aphonia for five years, supposed to be hysterical. This depended on an oblong growth, involving the surface of the right vocal cord nearly its whole length. Persevering local treatment gradually discussed the growth, and speech was recovered in six months.

4. *Organic Aphonia for Three Years from Tumours on Both Vocal Cords.*—Young woman from Essex, aged 22, aphonic for three years. She had been treated for consumption at one of the Hospitals, but the lungs were sound. Small growths were present on both vocal cords, one close to the left arytenoid cartilage. The voice did not return until the end of nine months.

5. *Varying Aphonia, from Two Small Growths on one of the Cords.*—This was in a young lady of 20, supposed to be phthisical. Voice weak, and at times a whisper, for eighteen months. Two dark crimson growths were present on the surface of the left vocal cord, which, although they did not interfere with its action, nevertheless impaired phonation. In three months local and general treatment brought about a cure.

6. *Impaction of a Piece of Walnut-shell below the Glottis.*—Young gentleman of 13, who had had a piece of walnut-shell impacted in the larynx below the cords, namely, in the subglottic space. Tracheotomy had been performed, but as the spasms continued, a laryngoscopic examination was made, and showed a piece of shell laying cross-wise, from left to right, below the cords. This was subsequently expelled spontaneously.

Mr. Pollock then showed a specimen of

RUPTURE OF THE INTERNAL CAROTID WITHIN THE SKULL FROM VIOLENCE.

The patient was brought to the Hospital after an injury. His leg was bent, the contents of one orbit were lying on the cheek, and the upper wall of the orbit was completely smashed. There was no history as to how the accident had occurred. There was a great deal of arterial hæmorrhage, and this was arrested by pressure on the carotid in the neck. The patient died in three hours. At the post-mortem examination, the base of the brain was found to be very extensively injured, and the internal carotid artery was found to be wounded. This was probably from some spicula of bone, as its osseous canal was quite uninjured.

Mr. Prescott Hewett said there was recorded but one case, and that a doubtful one, of rupture of the internal carotid by injury to the carotid canal. In the case related by Mr. Pollock, no doubt the wound of the artery was from some spicula of bone which had been forced into the artery. It was very like one recorded by Nélaton. A Medical student in a quarrel received a thrust from an umbrella, just under the left upper eyelid. No immediate symptoms followed, and nothing much was thought of it; but soon afterwards the right eye began to protrude; hæmorrhage took place from the right nostril. Soon after this M. Nélaton saw him, then there was extensive pulsation behind the eye. An aneurism formed by injury of the carotid and cavernous sinus was diagnosed. In order to prove this an experimental injury was made on the dead subject; the point of an umbrella being thrust into the orbit in the same direction, just such an injury as had been conjectured to exist in the patient was produced. The student died of extensive hæmorrhage, and at the autopsy there were found an injury of the carotid artery and cavernous sinus.

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HARVEIAN SOCIETY OF LONDON.

March 19, 1863.

Mr. W. Sedowick, Vice-President, in the Chair.

Dr. J. Burdon Sanderson read a paper on

ASTHMA.

After stating that the definition of asthma as a species of disease must be founded exclusively on the study of its development during life, with but little assistance from morbid anatomy, the author proceeded to describe the phenomena of an attack, dwelling particularly on the nocturnal onset of the affection, and the complete remission of all the symptoms during the intervals. The characteristic elements of asthmatic dyspnœa were stated to be, (1) excessive expansion of the chest; (2) resisted but forcible efforts to expire; (3) diminution of the exchange of air in the chest, and consequent venous condition of the blood. In the asthmatic state the chest is arched forwards in extreme inspiration, the diaphragm sinks below its normal level, so that its power is lost, while the almost fruitless efforts to renew the air in the chest are accomplished by elevation of the upper ribs. The expiratory muscles of the abdominal wall are in excessive action, but, in spite of their efforts, air is expelled from the chest with extreme difficulty and in small quantity. The condition of the blood which is thus produced gives rise to the sensation of want of breath, and impels the patient to make conscious and voluntary efforts to get rid of the used air, which is as it were locked up in his chest, so as to enable himself to obtain a fresh supply. In order to arrive at an explanation of this remarkable state, so different from every other form of dyspnœa, the circumstances must be considered under which it is developed. Asthma comes on during those hours of the night in which sleep is ordinarily most profound. At night the respiratory function is modified; the quantity of air exchanged is diminished. This diminution is partly, though not entirely, dependent on a change in the respiratory function of the vocal cords, which in nocturnal breathing approach each other more closely than in the waking state, that muscular action by which they are kept apart is relaxed. The more profound the slumber the greater the relaxation, and the narrower the chink of the glottis (*e.g.*, in snoring expiration). Assume for a moment that this natural relaxation becomes excessive. As the laryngeal resistance is normally greater to the egress than to the ingress of air, the chest falls more and more with each respiration, the inspiratory power of the diaphragm lessens, the exchange of air is diminished, the blood becomes less arterial, and thus, without any agency beyond the intensification of that condition of respiration which exists in natural sleep, all the elements of asthma are developed. In short, it is possible to account for asthma as a result of disorder in the respiratory function of the glottis. But if it be remembered that the muscular fibres on which this function depends are governed by the same nerve as the contractile fibres of the lung tissue (as is shown by the experiments of Donders and others), it will be readily admitted that if in asthma the respiratory fibres of the glottis are relaxed, those of the lung are in a similar state of relaxation, which would afford an additional explanation of the remarkable dilatation of the chest. This view accords perfectly with what is known as to the intimate relation of asthma and emphysema. Emphysema cannot be regarded as the cause of asthma; it would even be more correct to speak of it as its consequence. Emphysema results from resisted but powerful efforts on the part of the expiratory muscles to expel air from an expanded lung. This is precisely the state of things in asthma. But the relation between the disease and the lesion is rather that of community of cause than of consequence. Temporary over-expansion of the lung is a constituent of asthma; permanent expansion cannot exist without emphysema. Under the head of "Diagnosis," the author distinguished between asthma and spasmodic dyspnœa, in all forms of which the relation between the inspiratory and expiratory act is the reverse of that which holds in asthma, *e.g.*, in the spasmodic dyspnœa of phthisis, acute bronchitis, and dwelt on the importance of determining the relative duration of the inspiratory and expiratory act, which may be best effected not by listening to the chest, or observing its movements, but by the auscultation of the larynx. As regards treatment, the author had found that no remedies were useful during the attack of asthma excepting stimulants, of which ipecacuanha in large doses, alcohol, and coffee were instanced as most important.

The President, at the close of the discussion, announced that the next meeting would take place on April 2, when Dr. Pollock would read a paper "On Pneumothorax."

OBITUARY.

THE LATE JOHN CHALLICE, M.D., F.R.C.P. EDIN.

We are sorry to record the decease of John Challice, M.D., F.R.C.P. Edin., the active and popular Medical Officer of Health for Bermondsey. Dr. Challice, after an education by no means adequate to his very great abilities, was initiated into the Medical Profession at a very early age by the method then customary, of a five years' apprenticeship, partly passed with a Surgeon Apothecary in Bloomsbury, and partly with Mr. Coleby, who carried on an enormous practice amongst the working men in Bermondsey. It was during his residence in Bermondsey that the first outbreak of cholera occurred, in 1832, and Mr. Coleby had a great reputation for his successful treatment both of that terrible pestilence and of the epidemic diarrhœa which accompanied it. His chief remedy was the dilute nitric acid in large doses; and there is little doubt that although it occasionally failed, as every other remedy does in the stage of prostration, yet that it was so markedly successful in very many cases that the Bermondsey people looked upon Mr. Coleby's treatment almost as specific. Young Challice then went through the Medical curriculum at King's College, where his good nature, and frank, manly bearing and shrewd common sense made him a favourite with his fellow-pupils, as well as with his Professors. After passing through the prescribed courses of lectures, and devoting a short space to study in Paris, Challice established himself as a General Practitioner in the neighbourhood of Hanover-square;—a step which he took partly because he believed that he should get into practice rapidly through his connexions, and partly because of his attachment to one of his preceptors, the late Herbert Mayo, F.R.S., with whom he was on terms of the closest intimacy, and who had the highest opinion of Challice's sagacity and discernment.

In due course of time he married, and removed to a large house in Southwick-crescent; but finding that his practice did not increase fast enough to satisfy his active and somewhat restless temperament, he embraced an offer made him by Mr. Coleby, who retired with a large fortune, which he had accumulated by thrift and ceaseless industry out of the petty gains derived from attending the honest artisans of Bermondsey, and who introduced Challice as his successor.

Here he was hard at work for years; at first devoting himself to the poorer classes, who formed the *clientelle* of his predecessor, and then gradually acquiring a large practice amongst the wealthy manufacturers and tradespeople. His unremitting labour during the cholera epidemics of 1849 and 1854, when, sending his wife and family away to a place of safety, he remained, sometimes without taking his clothes off for three or four days and nights, attending to all comers; his assiduous promotion of all sanitary improvements, his sagacity and clear-headedness, soon procured him the general confidence of the Southwark community. They made him Chairman of the Board of Guardians, and looked upon him by general consent as the public "guide, philosopher, and friend." From the parochial, his influence soon made itself felt in the political world, and there is no doubt but that whatever candidate received the support of Dr. Challice, was the most likely man to be at the head of the poll in the Southwark elections. He had always retained a knot of influential friends and patients at the West-end, and the circle of such friends was immensely increased in proportion as he was felt to be the depository of no small amount of political influence. He soon became at home with the leading members of the Liberal party, amongst whom the late Sir William Molesworth had the greatest possible affection for him, and frequently sought his society. After Sir William Molesworth's return, he publicly thanked him as the author of his successful election, and up to the time of his death showed him the strongest marks of gratitude, and constantly took his advice. He was also intimate with the late Thomas Wakley, Esq., M.P., between whom and Challice there was a remarkable similarity in person and mental endowments. Both preeminently English in stature, feature, and complexion, with a

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gift of winning, easy, flowing speech, immense appetite for the excitement and turmoil of political work, and that indescribable stamp of common sense and self-confidence which insures the confidence of others. Thus flattered and courted by eminent politicians, and feeling himself endowed with singular capacity for political life, it cannot be wondered that his thoughts soared above general practice in Bermondsey, and that from being an *habitué* of the lobby, he should desire to enter the portals of the House of Commons along with many whom he felt to be less qualified for public business than himself. Propositions were made to him that he should stand for Southwark and that his expenses should be borne by his constituents, and there is no doubt that he looked forward to it eagerly. Meanwhile, he was constantly before that part of the political public which is formed of great town constituencies, and attended sedulously to their interests. His labours against cholera, his personal and unrequited devotion to the poor in their calamity, and his efforts to raise the condition of the working classes, were followed by his constant presence at deputations, committees of the House of Commons, etc., on all great social questions. We believe that he did great good by his exertions to procure a purer water supply for London, and that whatever good there was in the Gas Acts was due to him. He established the baths and wash-houses in Bermondsey, and caused such immense sanitary improvements to be made that, as his friends often said, *if he had been a Frenchman* he would have had the thanks of the Government and the ribbon of the Legion of Honour. His great objects of ambition were to be M.P. for Southwark and coroner for Middlesex, whenever that office should become vacant by the death or resignation of Mr. Wakley. In this latter idea he was greatly encouraged by Mr. Wakley himself, who pronounced him the fittest person to be his successor;—this we say of course without prejudice to the present able and accomplished coroner, who was not then generally known as a likely candidate. As a stepping-stone, he accepted the deputy-coronership for East Middlesex, under Mr. Humphreys. At last the time seemed to have come. The death of Sir Charles Napier was announced, and then or never was the time for Challice to stand for Southwark. But the crisis was too much for him. Whilst dining with a political friend that day, and talking over his prospects, he felt his right arm drop as he was carving a chicken, and knowing that he had been smitten with paralysis, and muttering something about not feeling well, he left the table, and went home. That was the death-blow to his hopes. He recovered his health completely to all appearance, but was obliged to give up all hopes of Parliament, resigned the deputy-coronership, and, when Mr. Wakley died, he wisely, after a short hesitation, left the field open to Dr. Lankester. He yearned, too, for his old position at the West-end, and having already taken a respectable Scotch degree of M.D., and having found it impossible to attend to the drudgery of general practice, he removed to Great Cumberland-street. He had a singularly clear mathematical head, was one of the best whist players in London, and remarkably bold and inventive as a speculator. It may be well believed therefore that he had before now endeavoured to realise the means of attaining the objects of his ambition by various speculations; these were not uniformly successful, but in the last year or two his fund of suggestion and combination was much in request, and his administrative abilities caused him to be much sought out by the promoters of public companies. As a politician, he was liberal, but conservative in tone, and with nothing of the low, venomous stamp. He despised mob government. His knowledge of modern history, and of all the details of the military and political events from the French Revolution to the present time was most full and accurate, and although it is generally understood that the historical works which have appeared with his name were written by his wife, yet he only wanted the time, and not the knowledge, to shine as a political writer himself. At last, however, in the midst of apparently recovered health, in full prosperity and happiness, he was again stricken with apoplexy, and died on the 11th inst. after two hours' illness.

Dr. Challice's career suggests one or two useful morals. How infinitely more useful his great capacities and talents would have been had they received the pruning and training of a Cambridge education! How much to be regretted that his introduction to the Profession should have been amongst a class who set the example of attaining the quickest possible result by the least scientific means! If, by the mere force of sagacity, and his own large experience, he were, as we believe he was, a thoroughly clear-sighted and successful Practitioner, how much his powers of usefulness have been enhanced had the modern refinements of scientific Medicine received the attention that was squandered on the sterile soil of politics? How it may be wished that his enormous power and buoyant energy, that seemed to exult in overcoming difficulties, had been given unreservedly to Medicine, and that he had moved amongst politicians as a great Physician instead of being distinguished amongst Physicians as a great politician! And a great Physician he would have been had he been content to follow Medicine, and not have tried other seemingly shorter paths to wealth and fame. But these are mistakes which may be easily condoned. Men get into grooves, and are helpless. There never walked a more honest, affectionate, generous, self-denying, true-hearted man, and his shrewd good sense and generosity will never be forgotten by the large circle of friends who now lament his decease.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary Examinations for the Diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 7th inst., viz.:—

Vivian Wearne, Helstone, Cornwall, Septimus Terry, Northampton, Horace Cooper, Caversham, and John Warrington Haward, Leicester-square, students of St. George's Hospital; John Stevenson Harvey, Boulogne-sur-Mer, George Frederick Walford Mendows, Otley, Ipswich, and William Milward, Seabrook, Brighton, of Guy's Hospital; Edmund Pope, L.S.A., Puddleton, Dorsetshire, and Richard Theodore Grubb, Cahir, Ireland, of the London Hospital; Joseph Peeke Richards, Oxford-terrace, Islington, and Cornelius Benjamin Fox, Truro, Cornwall, of King's College; Frederick Henry Alderson, Ipswich, and William John Way, Plymouth, of the Middlesex Hospital; Thomas Stowell, Brighton, and Hutton Joseph Webber, Tunbridge Wells, of St. Bartholomew's Hospital; James Mortimer Fuller, St. John's-wood, of University College; Robert William Tibbits, Ashton, Bristol; Richard Hison Daly Johnson, Liverpool; George Branston Valentine Nash, L.S.A., Liverpool; William Clarke, L.F.P. and S. Glasg., Langsight, near Manchester; John Burlett Wilby, Leicester; Edward Gibbs, Birmingham; and Ebenezer William Eaton, L.F.P. and S. Glasg., Manchester.

Admitted on the 9th inst.:—

Charles John Pyle, Amesbury, George Edward Pyle, Amesbury, William Edward Soffe, L.F.P. and S. Glasg., Bungay, Suffolk, James Smith Turner, Margaret-street, Cavendish-square, Charles Hinds, Barbadoes, and Martin de Gatway Hurlstone, Chester-street, Hyde-park-corner, students of the Middlesex Hospital; Francis Henry Wood, New Romney, Thomas Hedgeake, Kinver, Staffordshire, John Brockwell, Cleator, Cumberland, and Thomas Milne, Totnes, Devon, of Guy's Hospital; William Jones, Llangorse, Brecon; Thomas John Pearfield, Edwinstowe, Notts, and Edmund Vallance, Brighton, of St. Bartholomew's Hospital; William Adolphus Frederick Bateman, L.S.A., Richmond, Surrey, and Henry John Hunt, Melksham, Wilts, of King's College; Richard Prior Wintle, Earl's-court-terrace, Kensington, and John Henry Counell Whipple, M.D. St. Andrew's, Plymouth, Devon; Henry Summerhayes, Crewkerne, Somerset, of St. Thomas's Hospital; James McBride, Rathfriand, Co. Down, Ireland; Joseph Septimus Steward, L.R.C.P. Lond., Ulverston, Cumberland; John Charles Compson, Stourbridge, Worcester; Alfred Oliviant Francis, Derby; Samuel Swabey, Prince Edward Island.

The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 12th inst., and when eligible will be admitted to the Pass Examination:—

George Eastes, H. C. Hilliard, W. T. H. Wood, and J. W. Barrett, students of Guy's Hospital; H. J. Branson, Charles Heaven, and A. J. Mowbray, of St. George's Hospital; J. C. Wilkins and J. N. Watson, of the University College; Edward Brewster, of the Charing-cross Hospital; J. A. Grindrod, J. A. Eatock, Thomas Sutton, and W. H. Sutcliffe, of Manchester; W. H. Lightbody, C. J. Bennett, and David Wright, of Edinburgh; J. L. Morris and John Williams, of Glasgow; C. H. Battersley and H. W. Battersley, of Dublin; A. O. Haslewood, of Newcastle; A. P. Evans, of Birmingham.

Passed on the 13th inst.:—

David Jones, Thomas Richard Phillips, William Lewis Hughes, Isaac de Sanche, and Charles Peyton Moreton, students of Dublin; Henry Parry Chandler and Henry John Byder Bush, of the Middlesex Hospital; Thomas Gray Pratt and Charles Frederick Oxley, of Edinburgh; Ebenezer Diver, of University College; Robert Wood, of the London Hospital.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, May 7, 1863:—

Samuel Woodman, Finchley-road, St. John's-wood; Caleb Gargery, Birmingham; George Wyatt Sharp, Great Cumberland-street; William Allin Thompson, Oxford; Thomas Pilkington, Enfield, Accrington, Lancashire; John Spencer Ferris, Bradford on-Avon, Wilts; Thomas Brewer, Halifax.

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APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BAKER, JOHN WRIGHT, M.R.C.S. Eng., has been elected Surgeon to the Derbyshire General Infirmary.

BASTIAN, H. CHARLTON, M.A. Lond., M.R.C.S., has been elected a Fellow of the Linnæan Society.

BRANDE, Dr. W. T., has been re-elected Hon. Professor of Chemistry at the Royal Institution of Great Britain.

COMBE, Dr. MATTHEW, M.D. St. And., has been elected Surgeon to the Tower Hamlets Dispensary.

FRANKLAND, E., has been re-elected Professor of Chemistry at the Royal Institution of Great Britain.

GASCOYEN, GEORGE GREEN, F.R.C.S. Eng., has been appointed Assistant-Surgeon to St. Mary's Hospital.

GILMORE, SAMUEL, L.R.C.P. Edin., has been elected Medical Officer for the Workhouse Infirmary and Fever Hospital of the Castlebalyney Union.

GRIFFITHS, GOODRIDGE, M.R.C.S.E., L.M. Dub., has been appointed House-Surgeon to the London Surgical Home.

HOLLAND, Sir HENRY, M.D., has been nominated Vice-President of the Royal Institution of Great Britain.

JOHNSON, JOHN WHITAKER, F.R.C.S. Eng., has been elected Honorary Consulting Surgeon to the Derbyshire General Infirmary.

WATSON, Dr. PATRICK HERON, F.R.C.S. Edin., has been appointed Surgeon to the Royal Infirmary of Edinburgh.

DEATHS.

ARMSTRONG, ELLERAY, M.R.C.S. Eng., at Carlisle, on April 18, aged 48.

BRAME, SAMUEL SHARMAN, M.R.C.S. Eng., at Lowestoft, Suffolk, on April 17, aged 49.

CHALLICE, JOHN, M.D. Aberd., etc., at 13, Great Cumberland-street, Hyde-park, on May 11, suddenly, to the inexpressible grief of his widow and children, aged 49.

COUCH, RICHARD QUILLER, M.R.C.S. Eng., at Penzance, Cornwall, on May 8.

ELLIOTT, Dr. JOHN, of Dublin on board the *Golden Fleece, en route* to Madras, on April 27, aged 25.

EVANS, GUSTAVUS, M.D. Glasg., at Dalston, Cumberland, on May 9.

HODSON, THOMAS L., M.R.C.S. Eng., at Liverpool, on May 5, aged 46.

REID, Dr. DAVID BOSWELL, at Washington, United States, on April 5, late of Edinburgh.

ROWE, WILLIAM HENRY, M.R.C.S. Eng., at 12, Grafton-street, Brighton, on May 9.

SMART, THOMAS BARKER, M.D. Aberd., at Scarborough, late of Hulton Bushel, on April 25, aged 45.

THOMSON, JOHN DUNTOOK, M.D., St. And., Surgeon R.N., at Sydney, New South Wales, on January 30, aged 43.

WHEELER, WALTER D., M.R.C.S. Eng., at New York, late of Clifton, on April 6, aged 62.

WHITFORD, ANTONY, M.B. Lond., of Shepherd's House, Cranbrook, Kent, at St. Columb, on May 8, aged 29.

THE statements which appeared in the *Times* and other daily papers, to the effect that Dr. Jenner is to attend the Queen to Balmoral this spring, is incorrect.

THE COLLEGE LECTURES.—Professor Gulliver, F.R.S., will resume his lectures on the 2nd proximo, when he will deliver six lectures on the Blood, Chyle, and Lymph, in continuation of his former course on these subjects, and will be succeeded by Professor Solly, F.R.S., who will deliver six lectures on the Brain, and some of its Diseases, commencing Tuesday, June 16.

F.R.S.—From among forty-five candidates, the Council of the Royal Society have recommended for election the following, one in three:—Colonel F. M. Eardley Wilmott, R.A.; Revs. Dr. A. P. Stanley, Dr. G. Salmon, and R. Harley; Dr. F. W. Pavy, Professor D. Oliver, Messrs. E. W. Cooke, W. Crookes, J. Ferguson, F. Field, J. R. Hind, C. W. Merrifield, W. Pingelly, H. E. Roscoe, and S. J. A. Salter.

DEATH OF DR. REID.—Many Edinburgh citizens will learn with regret the death of Dr. David Boswell Reid, well known by his labours in regard to ventilation. Dr. Reid, who has been for some years in America, died at Washington on April 5. The death was sudden, and caused by congestion of the lungs. Dr. Reid had been appointed by the Government Medical Inspector to the Sanitary Commission, and he was about to leave Washington, to be employed in ventilating the new military hospitals which have been erected in different parts of the country. Dr. Reid was a native of Edinburgh, grandson of the celebrated Hugo Arnot, the historian of Edinburgh, and was himself at one time an extensively-employed and successful teacher of chemistry here. His connexion with the ventilation of the Houses of Parliament is but too well known. He ventilated St. George's Hall, Liverpool—the only building in the world, he said, in which his principles of ventilation have been completely carried out. The ventilation of this building is considered very successful. Dr. Reid began his public career in Edinburgh as assistant to the late Dr. Hope, Professor of Chemistry in the University. He was also a candidate for the Chair when Dr. Hope resigned.—*Scotsman.*

ANTHROPOLOGICAL SOCIETY OF LONDON.—At the fortnightly meeting of this Society, on Tuesday last, Dr. Hunt, President, in the chair, a paper was read by Professor John Marshall, F.R.S., on the "Microcephalic Brain of an Idiotic Boy, aged 12." The brain in question weighed eight and a-half ounces, being about one ounce and a-half smaller than "Gore's case" of an idiotic female, aged 42. The particulars of the paper will appear at length in the *Transactions* of the Society. A paper was also read by W. Bollaert, Esq., F.R.G.S., on the "Past and Present Populations of the New World," in which the author gave many interesting examples of the moral depravity and physical deterioration of the free blacks and mixed breeds of South America. A discussion supervened, which was joined in by Messrs. Hunt, Bouverie, Pusey, Seemann, Blake, Bendyshe, and others.

ST. BARTHOLOMEW'S HOSPITAL.—COLLEGE EXAMINATIONS.—*Winter Session*, 1862-63.—Senior Scholarship in Medicine, Surgery, and Materia Medica: 1. "Not awarded;" 2. S. Hall and H. Mackintosh. Senior Scholarship in Anatomy, Physiology, and Chemistry: 1. F. W. Richards; 2. L. Powell. Hichens Prize: H. Mackintosh. Practical Anatomy, Senior (Foster Prize): 1. J. T. Eccles; 2. G. Coates; 3. A. H. Brewer; 4. C. D. Pearless; 5. J. W. Snook; 6. A. S. May; G. Bennett and F. G. Cropp; 9. J. Raven. Practical Anatomy, Junior (Treasurer's Prize): 1. T. Cuddeford; 2. T. Cole; F. Bateman and A. C. Farringdon; 5. G. F. Webb; 6. W. Iliffe; 7. R. Broughton.

THE BONE OF CONTENTION.—The French palæontologists continue to assert their conviction of the authenticity of the jaw-bone found at Moulin-Quignon. *Galignani's Messenger* states that meetings have taken place at the Garden of Plants between four distinguished Fellows of the Royal Society, representatives of English geological and palæontological knowledge—MM. Prestwich, Falconer, Burk, and Carpenter, and MM. Quatrefages, Desnoyers, Gaudry, Lartet, and other well-known men of science, under the presidency of Dr. Milne Edwards, of the Institute, to discuss, and, if possible, to decide on the authenticity and antiquity of the flint hatchets and human jaw in question. Sir John Bowring, being in Paris, was invited to the conference. The results of the examination, though by no means of a positive character, have, on the whole, served to confirm the doubts expressed by the British geologists as to the trustworthiness of these particular specimens of ancient civilisation. That large quantities have been fabricated and sold by French workmen admits of no question; but the genuineness of many of those found at St. Acheul was established by the unanimous opinion of the conference, as was the fraudulent character of the greater number of those found at Moulin-Quignon.

DEATH OF DR. GUSTAVUS EVANS.—An inquest was held at the village of Dalston, Cumberland, on Monday, before Mr. W. Carrick, Surgeon, and a respectable jury, upon the body of Mr. Gustavus Evans, M.D., who died suddenly on Saturday last. It appeared from the evidence of Barbara Nixon, the woman with whom the deceased lodged, that he had been subject to acute pain in the head and neck for some time past. On Friday night, on his return from visiting a patient at Barnard Castle, he complained that the pain was very severe. Next morning after breakfast he took his usual walk in the garden, and smoked his pipe there for half an hour, after which he went up into the drawing room. On his landlady going into his room shortly afterwards she found him lying on the floor, as if he had rolled off the couch. He said to her, "Let me rest;" but in about twenty minutes he became insensible, his last words being, "Oh, Mrs. Nixon, can you spare ——." He never completed the sentence. His partner, Dr. Cornelius Hall, of Carlisle, was sent for during the day, and also Mr. Brown, Surgeon, Carlisle, but their efforts to relieve the patient were unavailing, and he died about nine o'clock in the evening. It appeared that the deceased had been in the habit of using chloroform and chloric ether to relieve the

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pain with which he was afflicted; and it was stated in evidence that bottles containing chloroform had been found in his conveyance since his death. One of these contained water, and as much chloroform as would be taken for a dose. Dr. Hall stated that he had no reason to suppose that the deceased was suicidal; on the contrary, his circumstances were comfortable, his mind was tranquil, and on the day before his death he had expressed his intention of taking a rest from his Professional duties and trying a change of air. A post-mortem examination of the body had been made by Mr. Brown, Mr. Hall, and Mr. Page, and they arrived at the conclusion that death had been caused by an overdose of chloroform. The coroner having summed up the evidence, the jury returned a verdict of accidental death, in accordance with the Medical testimony. The deceased was highly respected in the neighbourhood of Dalston, and also in Carlisle, where he practised for many years. Among the poorer classes he was especially esteemed, for he seemed ever to have their welfare at heart. The Dean of Carlisle alluded to the melancholy event in his sermon at the cathedral on Sunday afternoon.—*Times.*

UNIVERSITY COLLEGE, LONDON.—The distribution of prizes to the Students of the Faculty of Medicine in University College, London, took place on the 11th inst., Dr. Parkes, F.R.S., Fellow of the College, former Professor of Clinical Medicine, in the chair. The Atkinson Morley Surgical Scholarship, £45 per annum, for three years from June, 1862, was awarded to William John Smith, of Leamington; the Longridge prize of £40, for general proficiency in Medicine and Surgery, to William Henry Griffin, of Banbury; and the Filliter Exhibition, in Pathological Anatomy, £30, to Thomas Griffiths, of Carmarthenshire. Gold medals were awarded for acquirements in Clinical Medicine (Dr. Fellowes, winter term, 1861-62), to J. Talfourd Jones, of Brecon, South Wales, and Frederick Thomas Roberts, of Carmarthen; in Anatomy and Physiology (Professor Sharpey, M.D., F.R.S., Dean), to Bryan H. Allen, of London; in Anatomy (Professor Ellis), Senior Class, to Charles Bradley, of Nottingham; in Chemistry (Professor Williamson, F.R.S.), to J. Tyrrwhitt Hughes, Llandovery; in Comparative Anatomy (Professor Grant, M.D., F.R.S.), to John Comyns Leach, of Crediton, Devon; in Medicine (Professor Jenner, M.D.), to Palemon Best, of St. Ive's, Cornwall; in Surgery (Professor Erichsen), to Herbert Everitt, of Norwich. The remarks made by Professor Parkes on this occasion are so well worthy the careful attention of every student of Medicine, that we purpose placing them before our readers in our next Number.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.—DISTRIBUTION OF PRIZES.—On Monday, the 4th inst., the distribution of prizes to the students of the Westminster Hospital took place in the board-room of that institution, the Dean of Westminster being in the chair, supported by the Hon. P. Heydell Bouverie, M.P., Treasurer, Mr. Grainger, F.R.S., etc., and the Medical Officers and Lecturers. The Very Rev. Chairman opened the proceedings with a few observations appropriate to the occasion, and expressing the pleasure he felt in presiding at such an interesting ceremony, and then delivered the several prizes, consisting of handsomely-bound books and Surgical instruments, to the various successful candidates. The following is a list of the prize men.—*First Winter Session.*—Anatomy and Chemistry: Mr. Charles St. Aubyn Hawken and Mr. George E. L. Pearse, Medal, Certificate, and Chadwick Prize, £6. *First Summer Session.*—Botany, Materia Medica, and Practical Chemistry: Mr. George E. L. Pearse, Medal, Certificate, and Chadwick Prize, £4; Mr. William Yates, Certificate. *Second Winter Session.*—Anatomy, Physiology, Medicine, and Surgery: Mr. William Gandy, Medal, Certificate, and Chadwick Prize, £6; Mr. Albert L. Peacock, Medal and Certificate. *Second Summer Session.*—Forensic Medicine and Midwifery: Mr. William Gandy, Medal, Certificate, and Chadwick Prize, £4. *Third Winter Session.*—Clinical Medicine and Surgery: Mr. George Mowat and Mr. William H. Kempster, Medal, Certificate, and Chadwick Prize, £5. Dental Surgery: Mr. A. L. Peacock, Prize; Mr. J. B. Oliver, Certificate. Midwifery: Mr. J. B. Oliver, Prize. Chadwick Prize: Mr. Frederick P. Edis, Prize; Mr. William Gandy, Second Prize. Anatomy: Mr. Ralph Burnham, Prize; Mr. William N. Symonds, Certificate. Physiology: Mr. George E. L. Pearse, Prize; Mr. George P. Bate, Certificate. Surgery: Mr. William Gandy, Prize; Mr. Algernon N. Watts, Certificate. Chemistry: Mr. Bate, Prize; Mr. Richard Bugden, Certificate. Clinical Medicine: Mr. F. P. Edis, Prize. Clinical Surgery: Mr. F. P. Edis, Prize. Dental Surgery: Mr. Charles St. Aubyn Hawken, Prize. Prosector's Prize: Mr. Brownlow North Hyatt, Mr. C. St. Aubyn Hawken, Mr. G. E. L. Pearse, and Mr. Albert L. Peacock. A vote of thanks to the chairman having been proposed by Mr. Holt and acknowledged by the Dean, the proceedings terminated.

THE DUBLIN HOSPITALS.—The Dublin correspondent of the *Times* extracts the following particulars from the Sixth Report of the Board of Superintendence of Dublin Hospitals which has just appeared. "The Report contains the results of their inspection of each of the Hospitals, nine in number, which receive grants from Parliament, to ascertain if the comforts of the patients were duly provided for, the buildings kept in sufficient repair, and the general management satisfactory. The Westmoreland Lock Hospital, for the reception of women of an unfortunate class, is described as much improved. The average daily number of beds occupied throughout the year was 86¾, and the patients remained in Hospital an average of thirty-four days. During the last year, 104 of the patients on being discharged are said to have returned to their friends, and 71 have gone into some of the Dublin Penitentiaries. The House of Industry Hospitals are the Hardwicke, the Whitworth, and the Richmond, which accommodate respectively the following average number of patients throughout the year, 55½, 64, and 96½. In Stevens's Hospital the average number was 184, and 2414 cases were treated to a termination during the year. The average number of beds daily occupied in the Meath Hospital was 65 in the infirmary, and 15 in the fever wards. The Cork-street Fever Hospital provided for 99 daily. The management of the Rotunda Lying-in Hospital is favourably mentioned; 978 labour cases, and 178 chronic patients were received during the year; the average daily number of beds occupied by the former was 26; the number of lying-in cases was less last year than any year since 1778, which is ascribed to the prevalence of fever in the Hospital. In the Coombe Lying-in Hospital, 389 labour cases, and 8 chronic cases were admitted during the year; and in a populous and very poor district of the metropolis 1199 cases have been attended to during the year. St. Mark's Ophthalmic Hospital received 223 patients during the year. The Governors observe in their last report that this Hospital is at present one of the most perfect sanitary institutions of its kind, and the Board states that the admirable arrangements made for internal and external patients fully warrant this testimony. The last is the Hospital of Incurables, into which 24 were admitted during the year, and which is said to be conducted with much efficiency and economy, while the comfort of the patients is most carefully attended to. Some of the others are said to be defective in the matter of economy; but in other respects the reports are all more or less favourable. The rate of mortality in the several Hospitals is as follows:—Lock Hospital, 0·86 per cent.; Hardwicke, 8·5; Whitworth, 6·14; Richmond, 3·52; Stevens, 2·81; Meath, infirmary, 3·74—fever, 7 66; Cork-street, 5·70; Rotunda Lying-in Hospital, 8·13—unusually great, in consequence of fever; Coombe Lying-in Hospital, 2·7."

UNIVERSITY OF LONDON.—Yesterday, a meeting of the members of the University of London and their friends was held in the Convocation-room of the University, Burlington-house, Piccadilly, for the admission of candidates for degrees. Earl Granville, K.G., the Chancellor of the University, presided. The following Medical degrees were conferred:—M.D.—Charles Hilton Fagge, Guy's Hospital; John Henry Galton, Guy's Hospital; Morell Mackenzie, London Hospital; Walter Basnett Ramsbotham, University College; Joseph Rutter, University College; Robert Bowie Walcott, St. Thomas's Hospital. M.B.—Richard Dawson and Edward Thomas Tibbits, University College; Frederic Marsden, King's College; Henry Colley March, St. Thomas's Hospital; Horace Jeaffreson, St. Bartholomew's Hospital; John Bayldon, Surgeons'-hall, Edinburgh; William Dale, Leeds School of Medicine and Middlesex Hospital; Frederick Stockwell, St. George's and Bath United Hospitals. In the course of his address, the Chancellor thus referred to the proposal of granting degrees to women:—There was one question to which he would for a moment refer that was not of inferior importance to any that had engaged the attention of the senate,—he alluded to the question whether women as well as men should be admitted to the degrees of that University

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In any remarks he might make, he felt perfectly convinced that his friend on his right (Mr. Grote) would readily protect the ladies, and affirm that they were equally competent to obtain honours in any pursuit they might feel disposed to attempt. The argument which was chiefly enforced by those who wished for the admission of women to degrees was based on the liberal character of the University. It was also stated that the great object of such an University was to promote knowledge, and that persons estimated knowledge very much in proportion to the value they found attached to it. It was then argued that that value would be greatly appreciated by a certificate emanating from a body like that of the London University, which would be recognised by the world at large. Eminent examples of gifted women were quoted in support of the argument, and among those whose names were mentioned was the name of that modest, unassuming, and deeply scientific woman, Mrs. Somerville. And it was said that a certificate of that kind, bearing testimony to the acquirements of women, would greatly assist them in obtaining employment by persons who would not readily take their own word. On both sides it was admitted that there was no question as to conducting the education of men and women together; but that the only question was whether women should be examined or not. Now, it was held by those who did not agree to this proposition that there were great and serious objections to the system proposed. It was felt that men and women were different in quality of talent and in intellect, and that to teach them and educate them exactly in the same manner would do injury to each and to both in combinatian. It was also felt that the field of exertion for the talents of men and of women lay in different directions, and that what might even be a merit in the one sex, might be a fault in the other. Besides this, it was doubted whether it was desirable to expose women—members of the gentler sex—to that spirit of competition, and—which the very character of the thing itself implied—to that struggling and striving, as it were, for domination and power to which their admission to academical degrees would lead. These were some of the reasons which influenced their Chanceller (a laugh) to commit what he certainly felt to be a most ungallant act—that of giving his casting vote against the proposition. From conversation with men and with women on the subject, he believed there was not one woman in a hundred who was not for the exclusion of women from University examinations.

BOOKS RECEIVED.

The Shilling Guide to the London Charities for 1863; showing in Alphabetical Order the Name, Date of Foundation, Address, Objects, and Annual Incomes, Number of People Benefited by, Mode of Application to, and Chief Officers of, every Charity in London. By Herbert Fry. London: Robert Hardwicke. 1863.

*** Curious as well as useful information is to be obtained from many a book of the directory class, and we have seen few directories from which more of both kinds may be extracted than from Mr. Fry's "Guide to the London Charities." Under the term "Charities," the author appears to include institutions having endowments either for the benefit of body or mind. Hence, many neither usually associated with the idea nor with the term "Charity" find a place in his list, such, for instance, as the University of London, Westminster School Merchant Taylors' School, etc. We do not wonder at the Chancellor of the Exchequer casting a wistful eye at the enormous sums of money which are yearly expended—well or ill—in charitable institutions. Here are the incomes of some of the metropolitan Hospitals, obtained, we presume, from authentic returns:—St. George's, £10,000; King's College, £6,000; London Hospital, £17,500; St. Mary's, £4,000; St. Thomas's, £30,000; St. Bartholomew's, £29,000; (this is surely a misprint, the income of St. Bartholomew's we believe to be nearly double the sum stated): Westminster, £7,800; Victoria-park Hospital for Consumption, £6,162; the Brompton Hospital for Consumption, £8,628; the German Hospital, £3,600; the Fever Hospital, £1,878; the Royal Free Hospital, £6,000; the Metropolitan Free Hospital, £2,091; the Great Northern Hospital, £916; the Hospital for Sick Children, £3,500. So much for legitimate medicine, but illegitimate is equally liberally supported. The income of the Mesmeric Infirmary is stated at £7,918, and that of the London Homœopathic Hospital is returned at £1,735.

A Manual of Chemical Analysis. Part I. Qualitative. By Henry M. Noad, Ph.D., F.R.S. London: Lovell Reeve and Co. 1863.

Who to Consult; or, a Book of Reference for Invalids. London: Aylott and Son. 1863.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

G. K. P.—Apply to Dr. F. Hawkins, Registrar. The fee is £5 5s.

G.—A legal British Medical and Surgical diploma.

Dr. Moor's paper on Placenta Prævia is in the printer's hands.

C. P.—Our usually acute and well-informed contemporary, the *Lancet*, has been the victim of a hoax. It gravely announced last week, as a fact, that Mr. Propert had contributed *ten guineas* (!) to the Adams defence fund. Such a donation would be ridiculous for Mr. Propert to offer. There is a story that he asked five friends how much he ought to give, and that they advised him to limit his donation to ten guineas; but we understand that the friends were tailors, and that therefore the donation they recommended is but a fraction of what may be expected from Mr. Propert.

We copy the following letters from the *Manchester Examiner and Times*:—

["ADVERTISEMENT.]

"*To the Editor of the Examiner and Times.*

"SIR,—In reference to the report of the 'Alleged Libel upon a Manchester Physician,' in yours of to-day, I beg to observe that the action was not, as there stated, against the *Lancet*, but against Dr. Roberts, of this city. It is not easy, from your report, for the public to understand the case, which is simply this:—Dr. Roberts, in a series of letters, some anonymous, published in the *Lancet*, charged me with meeting Homœopaths in consultation, and stated that such conduct was considered by the Medical Profession as improper and disgraceful, and he offered to find three cases in proof.

"Subsequently, however, Dr. Roberts withdrew the cases, not being able to substantiate them, and in one of his pleas he alleged 'that it was not disgraceful or improper to meet a Homœopath in consultation,' being directly contrary to the position first taken by him, and a contradiction which has yet to be reconciled. The court held, on the argument, that even if such had been admitted to be true, *it was not improper or disgraceful to meet Homœopaths*, and that *so far* the plea demurred to was good. But as to the letters in question, it was stated that if the object of the defendant was maliciously to place me in an invidious position, and to injure me in my Profession, the publication of them might be actionable, *which is substantially the question yet to be tried.*

"Yours respectfully,

"101, Piccadilly, May 8, 1863. "CHAS. CLAY, M.D."

["ADVERTISEMENT.]

"ALLEGED LIBEL UPON A MANCHESTER PHYSICIAN.

"*To the Editor of the Examiner and Times.*

"SIR,—It is with much regret that I feel compelled to trouble you in consequence of a letter of Dr. Clay inserted in your issue of Saturday last.

"It is *not* the fact that I stated in my letters to the *Lancet* that Dr. Clay's meeting Homœopaths was 'improper and disgraceful,' or that I 'withdrew the cases' mentioned by me, 'not being able to substantiate them.'

"It was *Dr. Clay*, in his declaration, that used the words that it was 'improper and *disgraceful*' for him and other Medical Practitioners to meet Homœopaths; and in my second plea I alleged that his statement was not correct. My instructions to my counsel were that, although contrary to the usual etiquette, it was not 'disgraceful' to do so; as a minority of the Profession disagree to this rule, and no Physician or Surgeon would refuse to meet them if such refusal proved detrimental to a patient in danger.

"To this plea Dr. Clay demurred, on the ground that I could not deny (what in fact I had *not* stated) that it was 'disgraceful' to meet homœopaths, and it was on this demurrer that the judgement of the Court of Exchequer was given in my favour.

"Mr. Baron Bramwell stated, in the course of the argument, that the declaration of the plaintiff *was* libellous on the Profession, but *not my letters*: and the whole court gave judgment that my plea was GOOD and his *declaration bad*, thus deciding that my letters were not libellous, and, consequently, that no action was sustainable upon them.

"Dr. Clay, from his letter, evidently leads you to believe that there is a question yet to be tried in the action. Now he well knows, or ought to know, that the decision of the court *goes to the whole cause of action*, and that if he should, from any motive whatever, go to trial, he will have to pay for his experiment, as the court, after its decision, *must* set aside any verdict which might by possibility be given in his favour.

"The cases mentioned by me, in which Dr. Clay had met Homœopaths, so far from being *withdrawn*, were, under a judge's order, obtained by *him*, actually *supported* by me; and the particulars of the cases were given by me to the court under my plea of justification.

"In conclusion, I have to state that I was at first advised by my solicitors that my letters were *not* libellous, and that, consequently, I had a good defence to any action which the plaintiff might bring; and upon that advice I acted, and the result has proved its soundness.

"If I had done anything wrong in the course I pursued, I should have been ready to make an ample and suitable apology; but I have only been discharging the duty which I owe to myself and to the other members of my Profession by the line of conduct I have pursued.—I am, sir, your obedient servant, "WM. ROBERTS, M.D.

"10, Chatham-street, May 11, 1863."

THE MEDICAL OFFICERS OF H.M.S. "ORPHEUS."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Seeing in the *Medical Times and Gazette* of Saturday last that Dr. J. M. Tronson, Surgeon, and M. Coates, Assistant-Surgeon, were supposed to have been lost in H.M.S. *Orpheus*, I beg to inform you that neither of these gentlemen was in the ship at the time she was wrecked. Mr. Jas. Clarkson was the only Medical officer lost on that melancholy occasion.

Dr. Tronson died at Sydney on January 30, having been left behind at sick quarters. I have enclosed an account of his death, published in the *Sydney Morning Herald*. Mathew Coates, I imagine, had left the ship previous to her departure from Sydney for New Zealand.

I am, &c. Dr. McN. JOHNSTON,
Assistant-Surgeon H.M.S. *St. Vincent.*

"Mr. J. M. Tronson, M.D., F.R.G.S., R.N., Surgeon of H.M.S. *Orpheus*, died at his residence, No. 43, Hunter-street, on Friday, the 30th Jan. The funeral took place on Saturday afternoon, with all the honours due to his rank as an officer in the British naval service. Dr. Tronson was only thirty-three years of age. He entered the naval sevice in 1852, and accompanied the Arctic Expedition in 1854. He also served through the Russian war, and went up the Gulf of Tartary in H.M.S. *Barracouta*. He was likewise actively engaged in the China war, for which he received a medal."—*Sydney Morning Herald.*

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THE ARMY MEDICAL DEPARTMENT.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In what time may one entering the Army Medical Department reasonably expect the rank of Surgeon? I am, &c. MEDICUS.

[The rate of promotion varies. If it go on as at present, we should think in from fifteen to eighteen years.—ED.]

QUALIFICATIONS IN SYDNEY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I should feel greatly obliged to any one of your numerous readers if I could obtain any definite information whether a Medical man, properly qualified to practise Medicine and Surgery here, is equally so in Sydney, Australia, without his undergoing any further local examination.

I am, &c.

London, May 12. CHIRURGUS.

[We believe so.—ED.]

THE EFFECT OF PERI-RENAL EFFUSION OF BLOOD.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I shall be obliged by a reply to the following queries:—

A boy, aged 7½ years, received a kick from a man in the right loin over the region of the kidney. About three weeks after this he dies, apparently from exhaustion, and with symptoms of enteritis, vomiting, and great abdominal distension. These symptoms came on suddenly. A post-mortem examination was made nineteen hours after death, when the only abnormal appearances noticed were:—1st. The body much emaciated, and a complete absence of fat from the abdominal walls and omentum; 2ndly, An inflammatory redness of the small intestines (no effusion of lymph); and 3rdly, A quantity of coagulated blood in the cellular tissue surrounding the right kidney. All the other organs in abdomen and thorax were healthy. The brain was not examined.

Would a Surgeon be justified in stating that death was the result of the blood acting upon a previously weakened constitution from want of food, exposure, etc.; and would the existence of the clot, together with the bruise over the kidney, be sufficient, in the absence of any other cause, to account for death under such circumstances?

What length of time can blood remain, supposing it to be effused in the cavity of the abdomen, without undergoing change of colour, etc.?

I am, &c.

May 12. A SUBSCRIBER AND CONSTANT READER.

THE PREVENTION OF PITTING IN SMALL-POX.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—With reference to the notice of Dr. Smart's plan for preventing pitting in small-pox, referred to in your last number, and also with reference to the application of calamine with a like object, recommended by Mr. Henry George, of Kensington, in a late letter of his to the *Morning Herald*, allow me to quote a few sentences of a paper of mine "on the Treatment of Continued Fevers and other Acute Diseases," which appeared in the *Dublin Quarterly Journal of Medical Science*, No. LXIX., p. 204:—

"In this, and in the two preceding cases (of small-pox), I had the faces of the patients constantly covered with mucilage of starch, except for a few minutes each morning, when they were sponged off with tepid water, to exhibit the true state of affairs, and to apply the starch afresh. Just seven years ago, when small-pox was present in this city (Cork) and neighbourhood, I tried this application in several cases in the General Hospital in Ballincollig, then under my charge, and I found that in each instance it allayed the sense of heat and itching so much complained of by the patients, and completely prevented their tearing the pustules from their faces. In the *Dublin Hospital Gazette* for 1856, p. 72, I wrote a short account of this plan, and its excellence in small-pox, and other skin diseases of an inflammatory nature; and having used it in the cases just now related, I am able to state that (whether post hoc or propter hoc), no personal deformity ensued."

Since these sentences were written in September last, small-pox has been very prevalent in this city, and I have largely tried the above plan with unvarying success. I have seen calamine used also, and various other applications, but without the good result which has constantly attended the application of starch; and I consider the simplicity of its use in the hands of nurses one of its strongest recommendations.

I am, &c. T. W. BELCHER, M.A., M.D. Trin. Col., Dub.,
L.K.Q.C.P. Irel., Physician Extraordinary
Cork, May 8. to the Cork Fever Hospital.

DR. MAYNE'S ANSWER TO DR. FOWLER'S REQUIREMENTS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I request you will in fairness allow me to correct the wrong impression sought to be created to my prejudice by Dr. Fowler in last week's *Medical Times*.

Mr. Renshaw's note (referred to by Dr. Fowler) to Mr. Churchill of April 21 ran as follows:—"My dear Sir,—Having full confidence in your sense of justice, I must, now the referees have given their decision in favour of Dr. Fowler, ask you to withdraw from further circulation the preface to Dr. Mayne's 'Vocabulary,' which contains charges and statements now declared to be devoid of truth."

Its terms appeared to me to be designedly offensive, inconsistent with fact, and anything but happily conceived for obtaining the rather important favour he asked.

I deny that "the referees have given their decision in favour of Dr. Fowler," as adventurously stated by Mr. Renshaw, but, on the contrary, clearly understand that they have emphatically condemned his and Dr. Fowler's "appropriation" of "the idea, the very title of my original 'Medical Vocabulary' of 1836" as unjustifiable, "so long as the copyright of the original work existed." This charge, at least, and I must still hold that it inevitably involves the other charges, has not been "declared to be devoid of truth." I could not, therefore, comply with the very modest request of Mr. Renshaw, the suggester and instigator, as stated by Dr. Fowler, and as found by the referees, of the entire wrong committed, so easily as that gentleman seemed to wish. Neither can I listen to the similar demand now made by Dr. Fowler, while he has the hardihood to persist in that mal-appropriation which the referees have branded as unjustifiable.

I must first know what he and Dr. Fowler mean to do as to the withdrawal of their indefensibly assumed "Medical Vocabulary." If then satisfied of fair acting on the occasion, I shall willingly modify the preface in my next edition to strict accordance with the findings of the referees. Their decision, I deferentially bow to, out of respect for their disinterested endeavours to carry out a difficult and delicate investigation as pleasantly for the erring party as matters could allow.

It is amusing to remark how Mr. Renshaw grounded his request upon "full confidence in your sense of justice!" Where was his sense of justice when he appropriated my work, and induced Dr. Fowler to take the responsibility of that appropriation which the referees have so unequivocally stigmatised? I am, &c.

Leeds, May 12. R. G. MAYNE.

[We cannot undertake to insert any further communications on this subject.—ED.]

COMMUNICATIONS have been received from—

Mr. SOELBERG WELLS; Dr. CHARLES KIDD; Mr. CHARLES HUNTER; Dr. T. W. BELCHER; Dr. E. A. PARKES; Mr. PINK; APOTHECARIES' HALL; Mr. C. H. ROPER; Dr. D. JOHNSTON; Mr. CHARLES ANTONINI; Dr. R. DUNDAS THOMSON; Mr. CALLENDER; Dr. P. HERON WATSON; Dr. W. S. KIRKES; Dr. LETHEBY; F. H. W.; PHARMACEUTICAL SOCIETY; Dr. DEVENISH; QUÆRENS; ROYAL INSTITUTION; Dr. COTTEW; E. C.; Mr. PEARCE; Dr. W. TURNBULL; Dr. DAVID KING; Dr. T. B. MORIARTY; Mr. J. MACDONAGH; Mr. FURNEAUX JORDAN; Dr. J. DEANE; G. K. P.; Mr. J. SMITH; Mr. WALKER; Mr. H. HODSON RUGG; Dr. W. H. MOOR; Dr. W. ROBERTS; CHIRURGUS; Mr. J. Z. LAURENCE; G.; Dr. C. R. DRYSDALE; Mr. J. G. GERRANS; Dr. W. T. ILIFF, jun.; Mr. N. CHARLTON BASTIAN; The Rev. Prof. HAUGHTON, M.D.; Dr. E. B. SANDERSON; MEDICUS; M.D. Univ. Edin.; Mr. LORD; Mr. JOHN COUCH.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 9, 1863.

BIRTHS.

Births of Boys, 1078; Girls, 1077; Total, 2155.
Average of 10 corresponding weeks, 1853-62, 1737·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	746	713	1459
Average of the ten years 1853-62	574·7	555·9	1130·6
Average corrected to increased population ..	..	..	1244
Deaths of people above 90	..	..	..

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	19	23	1	2	11	4	2
North ..	618,210	18	5	20	4	11	7	4
Central ..	378,058	12	3	17	1	5	5	1
East	571,158	12	2	28	2	13	12	5
South ..	773,175	11	21	7	4	10	11	6
Total.. ..	2,803,989	71	54	73	13	50	39	18

APPOINTMENTS FOR THE WEEK.

May 16. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's 2 p.m.; Charing-cross, 1 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Max Müller, "On the Science of Language."

18. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

19. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Professor Tyndall, "On Sound."

20. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

HUNTERIAN SOCIETY, 8 p.m. Dr. Fowler, "On a Case of Laceration of the Vagina during Labour—a Medico-legal Question."

21. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

HARVEIAN SOCIETY, 8 p.m. Clinical Meeting.

ROYAL INSTITUTION, 3 p.m. Professor Ansted, "On Geology."

22. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

ROYAL INSTITUTION, 8 p.m. Prof. Roscoe, "On the Sun's Chemical Action."

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday (to-day) at 2 p.m.:—

By Mr. Fergusson—Forcible Extension of Elbow; For Fistula in Ano; For Hare-lip (two cases).

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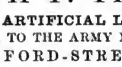

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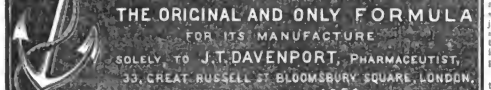

NOTIFICATION.

THE attention of Medical Men is directed to the Piratical application, by some parties in the Trade, of the term "Chlorodyne" to various mixtures compounded of Chloric Æther Opium, Indian Hemp, and Peppermint, in Imitation of the ONLY Genuine preparation of this name.

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1857	572	221,122	7,785 9 5	238,055 1 7
1858	658	235,350	8,582 0 9	274,797 15 4
1859	812	294,493	10,172 19 6	309,444 5 2
1860	902	336,290	11,312 15 9	360,330 3 0
1861	1,115	361,960	12,968 3 11	414,231 5 9
1862	1,097	375,197	12,562 7 9	*484,956 14 0

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* Since this Report was closed, the Accumulated Fund has so increased as to raise it above Half-a-Million.

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ORIGINAL LECTURES.

PROFESSOR HUXLEY'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

LECTURE VII.

(Being the Sixth Lecture on Classification, and on the Characters of the Principal Groups of the Animal Kingdom.)

Mr. President and Gentlemen.—In my last lecture I endeavoured to point out to you the grounds upon which naturalists have arrived at the conclusion that the classes of the animal kingdom may be arranged together in larger groups or divisions, such as have been termed "provinces" and "sub-kingdoms." If the time at my disposal for the consideration of the classification of the animal kingdom permitted me to do so, I should now, in the logical order of my discourse, take the opposite course, and again turning to the list of classes, I should endeavour to indicate in what manner they may be subdivided into sub-classes, orders, and lesser divisions. But it is needless to say that such a task as this would require many lectures, while I have only one to dispose of; and I propose to devote that one to a consideration of the classification of the class, which is in many respects the most interesting and the most important of any in the animal kingdom,—the class *Mammalia*.

A great many systems of classification of the *Mammalia* have been proposed, but, as any one may imagine from the nature of the case, only those which have been published within the last forty or fifty years, or since our knowledge of the anatomy of the class has approached completeness, have now any scientific standing ground. I do not propose to go into the history of those older systems, which laboured more or less under the disqualification of being based upon imperfect knowledge, but I shall direct your attention at once to the important step towards dividing the *Mammalia* into large groups, which was taken by M. de Blainville, a very eminent French anatomist, so far back as the year 1816. M de Blainville pointed out that the Mammalia might be divided into three primary groups, according to the character of their reproductive organs, especially the reproductive organs of the female. He divided them into "Ornithodelphes," "Didelphes," "Monodelphes;" or, as we might term them, *Ornithodelphia*, *Didelphia*, *Monodelphia*. Now, I do not mean to assert that M. de Blainville defined these different groups in a manner altogether satisfactory, or strictly in accordance with all the subsequently discovered facts of science, but his great knowledge and acute intuition led him to perceive that the groups thus named were truly natural divisions of the *Mammalia*. And the enlargement of our knowledge by subsequent investigation seems to me, in the main, only to have confirmed De Blainville's views.

The division of the *Ornithodelphia* comprises those two remarkable genera of Mammals, as isolated in geographical distribution as in structure—*Ornithorhynchus* and *Echidna*,—which constitute the order *Monotremata*.

In these animals the angle of the lower jaw is not inflected, and the jaws are devoid of true teeth, one of the two genera only (*Ornithorhynchus*) having horny plates in the place of teeth. The coracoid bone extends from the scapula to the sternum, with which it is articulated, as in birds and most reptiles, and, as in many of the latter, there is an episternal bone. There is no marsupial pouch, though bones wrongly termed "marsupial" are connected with the pelvis. But the structure of the female reproductive organs is that to which the *Ornithodelphia* owe their name. The oviducts, enlarged below into uterine pouches, but opening separately from one another, as in oviparous vertebrates, debouch, not into a distinct vagina, but into a cloacal chamber, common to the urinary and genital products and to the fæces. The testes of the male are abdominal in position throughout life, and the vasa deferentia open into the cloaca, and not into a distinct urethral passage. Such a passage traverses the penis, but is open and interrupted at the root of that organ. In both sexes, the ureters pour the renal secretion, not into the bladder, which is connected with the upper extremity of the cloaca, but into the latter cavity itself.

In the brain, the *corpus callosum* is inconspicuous, though the question how far it can properly be said to be absent requires much more thorough investigation than it has yet received, and the optic lobes are double and not quadruple,—they are *Corpora bigemina* and not *quadrigemina*. We are but very imperfectly acquainted with the reproductive processes of these animals, but it is probable that the young are devoid of a placenta. The mammary gland has no nipple.

Like the *Ornithodelphia*, the division *Didelphia* contains but a single order, the *Marsupialia*, the great majority of which, like the *Ornithodelphia*, inhabit Australia. They almost all have the angle of the lower jaw inflected, and all possess true teeth. The coracoid is, as in the higher Mammals, anchylosed with the scapula, and is not articulated with the sternum. All have the so-called "marsupial" bones or cartilages—ossifications or chondrifications of part of the tendon of the external oblique muscle of the abdomen—and the females of almost all possess a fold of the skin of the abdomen above the pubis, constituting a "*marsupium*," or pouch, within which the young are nourished and protected in their early helpless condition.

The oviducts open into a vagina, which is commonly more or less completely divided into two separate passages. The testes of the males are lodged in a scrotum suspended in front of the penis, and the vasa deferentia open into a complete and continuous urethra, which, as in the female, is the passage by which the urine escapes from the bladder, and is perfectly distinct from the passage for the fæces.

The corpus callosum is imperfectly developed, but the optic lobes are *corpora quadrigemina*.

The allantois of the embryo is arrested in its development, and gives rise to no placenta. The umbilical sac acquires a large proportional size, but whether it plays the part of a placenta for the short period of intra-uterine life, or not, is unknown.

The young are born of very small size, and in a singularly imperfect condition, but being transferred to the marsupium, and becoming attached to a long nipple, they are supplied with milk until they are able to provide for themselves—the milk being, at first, forced into their mouths by the action of a muscle spread over the mammary gland.

The *Monodelphia* have the angle of the lower jaw not inflected, and they may or may not be provided with teeth. They never possess "marsupial" bones. The uterine dilatation of the oviducts is always considerable, and whether they have common or distinct apertures, the vagina is a single tube, whether partially divided by a septum or not. The testes may vary much in position; but, if they are lodged in a scrotal pouch, it is never pendulous by a narrow neck in front of the penis, as in Marsupials.

The urinary bladder opens into a distinct urethra, which receives the vasa deferentia in the male.

The corpus callosum is very variable in its development; the optic lobes are divided into four portions.

The young are nourished within the uterus until such time as they are competent to suck milk from the teats of the parent, and to this end the chorion always developes processes or villi, which are well supplied with vessels brought to them by the allantois. These processes becoming interlaced more or less closely with corresponding vascular developments of the wall of the uterus, and so forming a "placenta," an interchange of constituents takes place between the fœtal and the maternal blood through the separating walls of the fœtal and maternal vessels. In this manner, throughout its prolonged intra-uterine life, the Monodelphian fœtus is supplied with nourishment and gets rid of its effete products.

As the three groups instituted by De Blainville are capable of being thus clearly differentiated one from the other, the distinctions between them having been only more and more clearly brought out by the subsequent progress of knowledge, I can see no ground for refusing to adopt his classification or for denying him that credit to which he is fairly entitled for apprehending these distinctions. Certainly, the later proposition, to divide Mammals into two great groups only, *Placentalia* and *Implacentalia* (a) cannot be regarded as any improvement upon De Blainville's system, as it ignores the important fact that the two divisions of the "*Implacentalia*" are separated by characters of fully as great importance as those which distinguish the *Placentalia* and *Implacentalia*.

But whether *Ornithodelphia* and *Didelphia* are regarded (as I believe they ought to be) as two of the three primary separate

(a) Substantially originated, as will be seen below, by Eschricht in 1837.

"sub-classes" of the class *Mammalia*, or whether they are looked upon only as subdivisions of the *Implacentalia*, there is no doubt that they are and will remain distinct natural assemblages, the subdivisions of which present no very great difficulties.

FIG. 1.

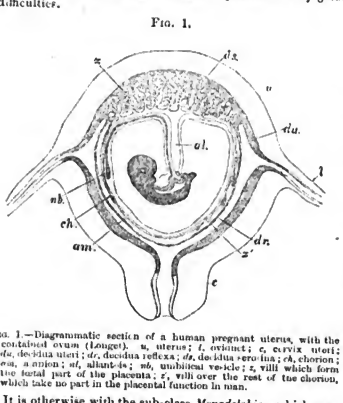

FIG. 1.—Diagrammatic section of a human pregnant uterus, with the contained ovum (Longet). *u*, uterus; *l*, orificium; *c*, cervix uteri; *du*, decidua uteri; *dr*, decidua reflexa; *ch*, decidua serotina; *ch*, chorion; *am*, amnion; *al*, allantoïs; *mb*, umbilical vesicle; *z*, villi which form the fœtal part of the placenta; *z'*, villi over the rest of the chorion, which take no part in the placental function in man.

It is otherwise with the sub-class *Monodelphia*—which contains at least a dozen orders, the arrangement of which into groups, not only in detail, but in principle, is, and long has been, a subject of much difficulty, and consequently of controversy.

Sir Everard Home (b) is commonly quoted as the originator of one of the two systems of classification in vogue at the present day, but his vague statements and confused notions respecting the varying characters of the placenta of the *Monodelphia* hardly entitle him to that honour, which, in my opinion, belongs rather to that eminent man, Karl Ernst von Baer, of whom it can be truly said that he has touched no subject without throwing a flood of light upon it. Towards the end of his famous essay, "Untersuchungen Uber die Gefaßverbindung zwischen Mutter und Frucht," published in 1828, the following passage occurs:—

"In the first place, I have taken pains to show that the ova of mammals are only variations of a single type, and if we except the ova of the Marsupials, concerning which I can form no judgment, all consist of the same parts, all have a placenta, and, in all, some portion of the chorion is smooth. The fœtal placenta consists everywhere of the same elements, but in its external disposition offers the most remarkable differences. It is either—

1. Merely applied to the maternal placenta, and
   a, continuous and zone-like. *First form.*
   b, divided into many parts. *Second form.*

Or 2. It and the maternal placenta grow together, and they lie,
   a, in a zone round the egg. *Third form.*
   b, at one end of it. *Fourth form.*

These differences, however, are gradually developed, and, at first, are less marked."

The *first form*, described in the text of the work, is that met with in the pig. It is what is now commonly termed a *diffused placenta*, but Von Baer, more accurate than most of his successors, indicates the confinement of the placental villi to the middle of the chorion—its prolonged poles remaining bare—by the term" gürtelförmig," zone-like. The *second form* is that exemplified by the cow and sheep, the *cotyledonary placenta*. The third is the carnivorous placenta, termed *zonular*. The fourth, the placenta of man, called now-a-days *discoidal*.

The most important circumstance pointed out by Von Baer, however, is one which has been greatly overlooked, if not wholly ignored, in subsequent discussions—the fact that the differences in the *form* of mammalian placentæ are subsidiary if compared with their differences in structure, more particularly in regard to the extent to which a maternal element enters into their composition.

Eschricht, in the admirable memoir, "De Organis quæ Respirationi et Nutritioni Fœtus Mammalium inservinnt," which he published in 1837, repeats the ideas of Von Baer, apparently without being aware of the fact, and enlarges upon them as follows (p. 30):—

"Restat, ut succinctam expositionem Mammalium afferamus secundum varias quæ in iis observantur, placentæ formas.

"A ceteris omnibus mammalibus marsupialia et Monotremata separanda sunt, quibus nulla est placenta. Cætera omnia in duas familias dividenda, quarum alteri placenta uterina caduca, alteri non caduca est. Huic mammalia primata et ungulata omnia adnumeranda sunt, inter quæ ruminantia ob singularem cotyledorum formam cæteris opponi possunt.

"In mammalibus placentam uterinam caducam habentibus tres mihi occurrere videntur placentæ typi, quorum primus gliribus, secundus feris, tertius simiis et homini proprius est."

In this passage Mammals are clearly divided, in the first place, into placental and implacental; and the former are then subdivided into those which have a non-caduceus and those which have a caducous uterine placenta. The Cetacea and Ungulate Mammals constitute the former group; the Rodents, Carnivores, Apes, and Men the latter.

In 1843, an accomplished English zoologist, Mr. Waterhouse, published a highly instructive paper on the "Classification of the Mammalia," (c) in which the following passage occurs:—

"Taking the general form of the Brain into consideration, the placental Mammalia would appear divisible into two sections: first, those in which the cerebrum is generally of a rounded form, obtuse in front and provided with distinct convolutions; and secondly, those in which the cerebrum is destitute of convolutions, or nearly so, and usually contracted in front. The first division would contain the *Quadrumana*, *Carnivora*, *Glaucea*, *Pachydermata* and *Ruminantia*, and the second would contain the *Cheiroptera*, *Insectivora*, *Edentata*, and *Rodentia*."

But although Mr. Waterhouse puts forward thus clearly the facts upon which a cerebral classification of the *Mammalia* might be based, with his customary judgment, he immediately afterwards expresses great doubt as to the value of any such classification.

"But are we in a condition to take for a basis of classification of the *Mammalia* the structure of the brain? I think not, though in the case of the *Marsupialia* it has afforded characters serving to separate that from other sections, and to indicate its proper position in the system. I am not prepared to follow those naturalists who would, in the present state of information, take this organ as one of primary importance in the distribution of the order of the placental series of Mammals. I cannot adopt the two great sections of this series as apparently indicated by the smooth and anteriorly contracted cerebrum on the one hand, and the convoluted cerebrum, with its rounded anterior portion on the other. Were I to do so, I should find it necessary to remove some of the Lemurs from their group on the highest order of the first section, and to place them in the second section."

In the succeeding year, 1844, M. Milne-Edwards, one of the most distinguished physiologists and zoologists of modern France, proposed, in a highly philosophical paper upon zoological classification in general (d), a method of subdividing the *Mammalia*, essentially similar to that put forward incidentally by Von Baer and Eschricht, but lacking, as I conceive, what is the great merit of the latter writers, namely, the clear perception of the classificatory value of the intimate structure of the placenta and the entrance or not of a decidual uterine element into its composition. M. Milne-Edwards dwells with great force (as Mr. Waterhouse had previously done) upon the closeness of the general structural affinities which unite the *Rodentia*, *Insectivora*, *Cheiroptera*, *Quadrumana*, and *Bimana* of Cuvier together, and shows that

(b) "Comparative Anatomy," vol. iii.

(c) Annals and Magazine of Natural History," 1843, vol. xii., p. 399.

(d) "Annales des Sciences Naturelles." Serie 3. Tome i. "Considerations sur Quelques Principes relatifs à la Classification Naturelle des Animaux."

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these affinities are denoted by the discoid placenta which they possess in common.

The diffused placenta (under which head the cotyledonary placenta is included) is stated to be the characteristic of the *Ruminantia, Pachydermata, Edentata,* and *Cetacea;* while, lastly, the "*Carnivora* and seals (*Amphibies*) are distinguished from all the rest by their zonular placenta."

The singular genus *Hyrax*, which Cuvier endeavoured to prove to be a true Pachyderm, is considered by M. Milne-Edwards to form one of the series of Mammals, with a zonular placenta, and to represent in that series the Pachyderms in the series with diffuse placentation, and the Rodents, in the series with discoid placentation.

M. Gervais, in France, and M. Vogt, in Germany, have adopted the placental classification of Milne-Edwards; while, in 1857, Mr. Waterhouse's proposed, but immediately rejected, cerebral classification was substantially revived by Professor Owen, in his paper "On the Characters, Principles of Division, and Primary Groups of the class Mammalia," published in the Journal of the Linnean Society; though it should be added that Professor Owen made certain additions to the nucleus furnished by Mr. Waterhouse which are unquestionably original.

Thus the *Lissencephala* of Professor Owen is simply a new name for the group of Mammals ("in which the cerebrum is destitute of convolutions, or nearly so") indicated by Mr. Waterhouse; and "*Gyrencephala*" is a like verbal equivalent for Mr. Waterhouse's group of Mammals characterised by having the brain provided with distinct convolutions. But Mr. Waterhouse does not mention Man at all, while Professor Owen creates a new sub-class, *Archencephala*, for the genus *Homo*, and substitutes the name *Lyencephala* for *Implacentalia*, formerly applied to the *Ornithodelphia* and *Didelphia*.

In attempting to decide between the various classifications thus presented to us, the canons by which our judgment must be guided are simple enough. It is obvious, in the first place, that the definition of a group, whether that definition be based on cerebral or on placental characters, must be true, as a matter of fact, if any value is to be attached to the classification of which that definition forms a part.

And, in the second place, it is clear that the definition of each group must be distinctive, that is to say, it must not include the members of other groups.

Applying the second canon to the classification last mentioned, it appears to me to collapse at once.

The sub-class *Lissencephala*, for example, is thus defined:—

"The corpus callosum is present, but connects cerebral hemispheres as little advanced in bulk or outward character as in the preceding sub-class; the cerebrum leaving both the olfactory lobes and cerebellum exposed, and being commonly smooth, or with few and simple convolutions in a very small proportion, composed of the largest members of the group. The Mammals so characterised constitute the sub-class *Lissencephala*."—*L. c.*, p. 14.

On the other hand the sub-class *Gyrencephala* receives the following definition:—

"The third leading modification of the Mammalian cerebrum is such an increase in its relative size, that it extends over more or less of the cerebellum, and generally more or less over the olfactory lobes. Save in very few exceptional cases of the smaller and inferior forms of the *Quadrumana* the superfices are folded into more or less numerous gyri, or convolutions, whence the name Gyrencephala, which I propose for the third sub-class of Mammalia."—*L. c.*, p. 18.

I am quite unable to see what these so-called definitions define. If, for example, we place the brains of an ant-eater, or a capybara side by side with that of a genett—the two former being *Lissencephales*, the latter one of the *Gyrencephala*—either "definition" will apply equally well to either of the three brains. All three have slightly convoluted brains; in all three the olfactory lobes and cerebellum are more or less uncovered; and nothing in the definitions of the sub-classes of this cerebral classification would enable any one to say that any one of these three brains belonged to one sub-class rather than another.

Since Mr. Waterhouse pointed out the fact, no one has doubted that, as a general rule, the brains of the so-called "*Gyrencephala*" are more convoluted, size for size, than those of the "*Lissencephala*;" and the relations of the size and the zoological position of an animal to the characters of its cerebral surface have long since been well discussed by Gratiolet, Daresta, and others. But it is exactly because the rule is only a general one, and has many exceptions, that the degree of cerebral convolution must be rejected as the basis of the definition of any large group of Mammals.

Thus far, we meet, in Professor Owen's definitions, with a certain foundation in fact, though it may not be such as is fitted to afford ground for classification, but the group "*Archencephala*" is in a more unfortunate position. Our first canon comes into operation, and we must reject it, because the matters of fact stated in its definition are untrue. The words stand thus:—

"In man the brain presents an ascensive step in development, higher and more strongly marked than that by which the preceding sub-class was distinguished from the one below it. Not only do the cerebral hemispheres overlap the olfactory lobes and cerebellum, but they extend in advance of the one and further back than the other. Their posterior development is so marked, that anatomists have assigned to that part the character of a third lobe; it is peculiar to the genus *Homo*, and equally peculiar is the "posterior horn of the lateral ventricle," and the "hippocampus minor," which characterises the hind lobe of each hemisphere."—*L.c.*, pp. 19—20.

These are the assertions which have been repeated over and over again during the last few years, but thanks to the exertions of the able Conservator of your Museum, it is in my power to lay before you visible and tangible facts, which prove these assertions to be wholly devoid of foundation.

The third lobe, characterised by extending further back than the cerebellum, is said to be "*peculiar to the genus Homo*."

I place before you casts of the cranial cavity, accurately representing the relative positions of the parts of the brain of a gorilla, of a chimpanzee, of an orang, of a *Cynocephalus*, and you observe that the posterior, or third lobe, of each projects further back than the cerebellum, in just the same sense as a man's can be said to do so, and in some cases, as in the baboon, to a much greater extent.

The assertion that the third lobe, as defined by Professor Owen, is "peculiar to man," is therefore demonstrably contrary to fact.

"*Equally peculiar is the posterior horn of the lateral ventricle.*"

Side by side upon the table are two dissections, made in the same way, the one of the brain of an orang-utan, the other that of a man, taken at hazard by Mr. Flower, who has been good enough to dissect both.

Every one in this theatre, I imagine, can see perfectly well that the orang has a posterior cornu, which, in proportion to the size of its brain, is just as long and nearly as much incurved as that of the man, while it is a good deal wider at its commencement.

In fact, even if the posterior cornu had not been demonstrated (as it has now been) in the brain of numerous genera of apes, this one example would sufficiently demonstrate the assertion, that the posterior cornu is "peculiar to the genus *Homo*," to be simply untrue.

Lastly, as to the hippocampus minor—which is also said to be "peculiar to man"—that structure is, as you perceive, as distinct in the orang's as in the man's brain, so that the third term of the definition of the "*Archencephala*" is as contradictory to plain fact as the other two.

Even were the posterior lobe, the posterior cornu, and the hippocampus minor peculiar to man, as supposed by the definer of the sub-class "*Archencephala*," instead of being, as they really are, structures far better developed in some of the lower apes than in him, their classificatory value would be extremely doubtful, seeing that they are among the most variable of structures in the human brain. The casts upon the table of a Tartar's and of an Australian brain will demonstrate to you how insignificant may be the projection of the posterior lobe in one man and how great it may be in another. While the practical anatomists and demonstrators whom I address will be familiar with the singular variability of the posterior cornu and the hippocampus minor—structures which, without any assignable cause or noticeable external modification of the structure or of the functions of the brain, may present every degree of development, from absence to great size.

So little, indeed, is any zoological value to be attached to such a character as the degree of projection of the posterior lobe, that closely allied apes present us with most sin-

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differences in this respect. Thus the group of South American monkeys which comprises the Squirrel monkey (*Chrysothrix*), the posterior lobes of whose brain project beyond the cerebellum far more than they do in man, contains also the Howling monkey (*Mycetes*), in which the posterior lobes cannot be said to project at all. And within the last two days, Mr. Flower has discovered (and the cast upon the table enables me to demonstrate the fact to you) that in, at any rate, one species of Gibbon, the Siamang (*Hylobates Syndactylus*) the cerebellum projects behind the posterior lobes, while, in the three other genera of anthropoid apes, the posterior lobes of the cerebrum project behind the cerebellum.

Fig. 2.

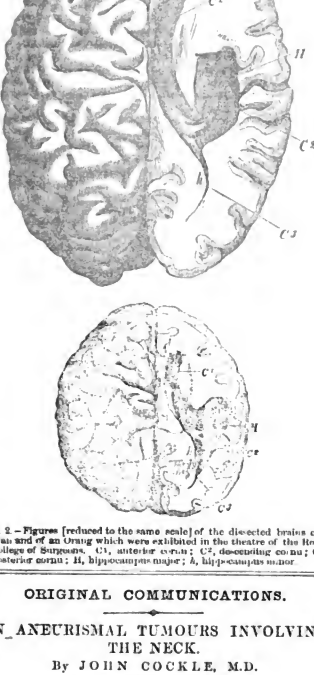

Fig. 2.—Figures [reduced to the same scale] of the dissected brains of a Man and of an Orang which were exhibited in the theatre of the Royal College of Surgeons. C^1, anterior cornu; C^2, descending cornu; C^3, posterior cornu; H, hippocampus major; *h*, hippocampus minor.

ORIGINAL COMMUNICATIONS.

ON ANEURISMAL TUMOURS INVOLVING THE NECK.

By JOHN COCKLE, M.D.
Physician to the Royal Free Hospital.

(Continued from page 505.)

With regard to the sounds that may be heard over an aneurismal sac, the main question to decide is, are they simply conducted from the heart or are they of local origin? If it is maintained that they are generated in the heart, it is clear that every change of sound of sufficient intensity occurring there should be re-echoed in the sac. The sac would, according to this view, be but the reflex of the condition of the orifices of the heart. Should these be normal, simple double sound ascends the sac; if, on the contrary, an obstructed aortic outlet occur, then systolic murmur usurps the place of the first normal sound in the sac. Should regurgitation co-exist, then double murmur replaces there the normal tic-tac of the heart, so that the mere fact of a double sound or murmur audible over certain aneurismal sacs, provided it were simply unchanged in respect of character, or even exaggerated in respect of quantity, would in itself constitute no valid argument against the ordinary assumption that such sound was engendered in the heart, and simply conducted along the arterial walls, or even multiplied over the inner surface of the sac; but any decided change, as respects the very nature and quality of sound, if limited to the sac, would furnish ground for the opinion that such sound was not of cardiac origin. Indubitable, though faint, double murmur, originating either in the heart or aorta, could never change into pure, quasi-cardiac sounds in a sac more or less remote. On the contrary, if the conduction theory were true, such murmur ought, beyond doubt, to be transmitted to the sac. I infer, then, that the sounds heard in the sacs of the case I have detailed resulted from simple collision between the aortic column of blood and the semi-quiescent mass within the sacs, the walls of the latter being entire and in a given state of tension. Such conditions would appear necessary, remembering that, immediately after the rupture of the upper sac, the first sound merged into one of indeterminate character, and the second sound ceased altogether. The ground for the assertion that the sounds were the result of uncomplicate blood reaction is based upon the fact that there could have been no shock either from the expansion and contraction of the sac, as in the upper one mere integument intervened, and all capacity for elastic reaction must have been destroyed.

Now, if this reasoning concerning the mode of production of vascular sound be consequent, a still further generalisation may be attempted. For, if two sounds in orderly succession, and undistinguishable from the so-called cardiac sounds, can be produced in an aneurismal sac, under circumstances which positively exclude all participation of the heart, and, consequently, that of any valvular mechanism, no fallacy is involved in the inference that the sounds produced at the orifices of the heart may acknowledge an analogous simplicity in their mechanism, and that the valves may play less a principal than an accessory part in the acoustic phenomena of the heart than is generally assigned to them.

I do not, however, press the conclusion, or assert that this really obtains, but only urge that we ought, in the face of such facts, to reconsider the current doctrines, and satisfy ourselves whether or not they are beyond further controversy.

It will not be denied that the original valvular theory of the heart's sounds has been sent back more than once to the physiologist to amend, and bring more into harmony with anatomico-physiological facts. It was at first supposed that the blood during ventricular systole forced up the valves from their somewhat angular position, bringing them to a sudden dead lock at the plane of closure, and that this arrest produced the first cardiac sound. Some years subsequently Baumgarten, Chaveau, and Halford much later, demonstrated that the valves rise prior to ventricular systole. In the diagram by Halford the auriculo ventricular valves are represented already dome-shaped before the final contraction of the ventricle. Dr. Markham has also contributed to our knowledge by his anatomical demonstration of those elastic fibres, the recoil of which assists in the direct elevation of the valves. It has been since argued that the contraction of the ventricle upon the contained mass of blood produced sudden valve tension, causing the first sound.

Some years ago I pointed out that during the period immediately preceding ventricular systole, a layer of blood, formed by the confluent streams of the cavæ and of the pulmonary veins, would rest upon the auricular face of the valves, and that the first sound might be caused by the reaction of the lower column of blood, urged by systole against this layer, comparatively at rest. From continued study of the sounds heard in aneurismal tumours, I am still more impressed with the correctness of the view. The common explanation, then, that the sounds result from simple valve

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tension alone, must, I take it, be modified, unless it can be shown that the blood layer alluded to does not exist, or, that existing, it does not modify the cardiac systolic sound.

I take this opportunity of directing attention to the Essay of Dr. Leared upon the "Production of Sounds and Murmurs in the Circulating System." His experiments are very original, and, I think, on most points conclusive.

We both agree that the sounds of the heart and vessels originate primarily in the blood, and that the vibrations of the vascular walls are of subordinate importance. But we differ respecting the outlet at which the sounds, heard over the heart, are developed. Dr. Leared holds that the first sound originates at the aortic outlet, from the reaction between the blood in the ventricle and the superposed column in the aorta. I, as already stated, suggest that it is at the auriculo-ventricular orifices. My reasons for differing are these: Suppose a murmur to be heard at the aortic mouth, and yet a normal sound towards the apex of the heart, how is this on Dr. Leared's theory to be explained? He might, perhaps, anticipate my objection by the rejoinder, that the sound originated at the pulmonic outlet. I then could only meet his assertion by an indirect test. Let us assume that some pathologic change—say at the mitral orifice—had caused a murmur of medium intensity to replace the first normal sound, the line of direction of such murmur is most generally towards the left axilla, rather than up the aorta. This fact would seem to indicate that the origin of sound is rather at this orifice than at that of the aorta. However this may be, such conceptions of the production of sound are not weakened by any of the earlier physiological experiments, such as hooking up the valves or pressing with the finger forcibly on the vessel. It appears to me that from such experiments we may only draw this conclusion,—that any obstacles in the blood-stream excite therein ripple and sonorous vibration; and, viewing the matter pathologically, we must admit that, when valves are curled up by disease, and orifices and vessels have undergone either fibroid, cretaceous, or atheromatous degeneration, they can be but little susceptible of any sensible degree of vibration.

I am, however, quite aware that certain objections offer with regard to this theory of sounds and murmurs excited by primary undulations in the blood; but I do not know that such objections are of more force than those which could be urged against the view that such sounds or murmurs originate in the solid structures. It may be that some musical sounds depend either upon perforation of the valves, or upon the free vibration in the blood-stream of membranes attached to them. Certain grating, sawing, and other harsh murmurs are also possibly produced by physical peculiarities of the orifices. But this much is clinically certain, that they fall most frequently into error who attempt by means of such peculiarities of sound either to interpret the precise nature, or to measure the extent, of the organic change existing at the orifices of the heart.

Diagnosis.—In few affections, whether of purely Surgical or Medical character, is the differential diagnosis of more importance, or, at times, of greater difficulty than in cases of aneurismal tumours which involve the neck. The records of Medicine supply an unusually large contingent of cases as unanswerable evidence that the diagnosis has been occasionally so mistaken that, to say the least, very many unnecessary operations have been sanctioned by high authority, sometimes from confounding these tumours with lesions of essentially diverse nature; at others, from an erroneous estimate of the vessels involved, or even of the precise nature of the affection involving them.

It may therefore be advisable to consider briefly, first, with what non-aneurismal affections of the neck true aneurism may be confounded; and, second, the difficulties incident to the attempt to isolate disease in any vessel connected, either directly or more remotely, with this region. It seems scarcely credible how many aneurismal tumours have been mistaken for ordinary strumous abscess. The difficulty of diagnosis must, beyond doubt, have been at times extremely great, or experienced Surgeons would scarcely have been misled. It is not to be supposed that anyone would mistake for abscess a tumour with well-marked pulsation. We must bear in mind that the cervical region is a special and most common seat of glandular engorgement; and that suppurating glands, though occasionally receiving impulse from the underlying artery, may be with safety opened should it be desirable. But we are also equally to remember that an aneurismal tumour may, from the coagula within, become quiescent, and impart, from the narrowed column of blood effecting a channel through the clot, a very diminished impulse, while the discoloured and softened state of the integument may convey a sense of simple fluctuation. Or, again, an abscess may actually occur either within the aneurismal sac, or in the connective tissue between the sac and skin. The error of diagnosis adverted to might probably be thus explained. Certain cysts, again—such as simple hydrocele of the neck, or those more compound growths connected with, or caused by, degeneration of the thyroid gland, when lying directly over, or even at the side of the artery—are, from the very liquid nature of the contained fluid, susceptible of impulse so marked as most accurately to simulate aneurismal tumour.

A interesting case in point occurred some years ago at the Hôtel Dieu. One of the most promising of its Surgeons, Dr. Gosselin, was almost on the very point of operating for supposed carotid aneurism, when the late Baron Roux entered the ward. His opinion being asked, he simply placed his hand upon the tumour, "Swallow," said he. Then, turning to his colleague, whispered, "It is a cyst," and left the ward.

This ready and correct diagnosis was made from the fact of the elevation of both cyst and larynx in one common mass during the act of swallowing, thus proving the tumour to be independent of the artery.

The disease described by the late Dr. Graves, and lately designated "exophthalmic goitre," is characterised by a marked exothism of the thyroid gland, combined with protrusion of the eyeball, and has at times throbbed so violently, and so exactly simulated aneurismal impulse, as to have left even the experienced Dupuytren in doubt respecting the real nature of the case.

Lastly, encephaloid tumour of the neck, embedding and moulding itself around the artery, and receiving, not impulse alone, but causing and conducting murmur, has more than once betrayed the operating Surgeon into error. The circumstance of non-aneurismal tumours causing and conducting murmur is a fact too important to pretermit.

From the earlier application of auscultation, almost to the present time, it has been thought that the stethoscope could enforce the diagnosis almost without appeal. But this is unquestionably an over-estimate of the power of the instrument, or, more correctly speaking, a false conclusion from the observed phenomena. Many aneurisms yield few or no peculiar signs, and none certainly that are pathognomonic. While, on the other hand, non-aneurismal tumours in contact with, and pressing upon, an artery may yield both shock and murmur. Other glandular tumours, as the thyroid, may, from their own special arterial excitement, yield both shock and fremitus, coincident with murmurs of the harshest and loudest character. But, dismissing these several sources of error, and assuming the general diagnosis correct, that the tumour is actually aneurismal, we have still left the difficult, if not impossible task, of assigning limitation to the track engaged. When we consider, on the one hand, that an aneurism, originating in the aorta, and involving its tributaries, may ascend the neck, even to the angle of the jaw; and, on the other hand, that an innominate or even subclavian aneurism, within the scaleni, may descend the chest, pressing on, or even displacing, the aorta, giving rise to intra-thoracic percussion dulness and murmur, it is obvious that we are at once deprived of the more ordinary grounds of differential diagnosis. In one well-known case the tumour corresponded to the track of the common carotid, and apparently descended to the clavicle. For this supposed carotid aneurism the carotid artery was tied, according to Brasdor's method. After death the case proved to be one of aneurism of the arch of the aorta, which, at its point of emergence from the chest, was so constricted by the first rib as entirely to have deceived the operator. Conversely, in another case, a pulsating tumour appeared between the second and third right ribs, finally extending over the sternum. The symptoms were—cough, hæmoptysis, dysphagia, feeling of cold down the right arm, with burning pain in the throat, syncopal phenomena, and irregular action of the heart. After death, the aorta was found intact, and the innominate artery alone aneurismal. In this case the most practised explorer would, probably, have been at fault. In other instances, so great has been the difficulty of diagnosis, that, although the carotid artery has been ligatured on Brasdor's plan, the operator has confessed himself unable to state what vessel was actua

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involved. It was not that his sagacity was at fault, but that the difficulties of differential diagnosis were insurmountable.

It can scarcely be urged that these selections are exceptional, inasmuch as the special literature of this department offers many similar examples. I have only adduced a few, to illustrate the difficulties which beset the solution of the general problem.

(To be continued.)

A CASE OF PROBABLE VACCINO-SYPHILITIC INOCULATION.

By ROBERT B. CARTER, M.R.C.S.E.
Fellow of the Royal Medical and Chirurgical Society.

The researches of Mr. Hutchinson have made Medical Practitioners familiar with certain diseased conditions, long confounded with true struma, but now known to be produced by indirect syphilitic contamination. Mr. Hutchinson's own mind leans, I think, towards a belief that this contamination is invariably derived from one or both of the parents, and that its results may always be properly described as those of inherited syphilis.

During the last few years I have had opportunities of seeing many cases of the kind described by Mr. Hutchinson, and have always endeavoured to trace the history of the disease. In the great majority this history has been perfectly clear, and has led irresistibly to the conclusion that Mr. Hutchinson so ably advocates.

In a few cases, from the absence or death of parents, no confirmatory evidence of inherited disease could be obtained; but in these there was nothing to render the fact of such inheritance improbable. Until lately, I felt myself able to adopt Mr. Hutchinson's conclusions without reserve, and entertained no more doubt that the diseased states in question were always inherited than I now entertain that they are invariably syphilitic. A single case has, however, led me so far to modify my views, that I think it necessary to admit the possibility of other sources of contamination.

Some time in August last my attention was called to a little girl, eleven years old, who presented the characteristics of inherited syphilis in a very marked degree. With the exception of the labial cicatrices, she presented all the signs that Mr. Hutchinson describes. She was undersized and feeble, with mis-shapen extremities, earthy complexion, senile aspect, prominent frontal eminences, and depressed ossa nasi, giving to the face a peculiar look of concavity. Her teeth were dwarfed and peggy, the upper central incisors with marked crescentic notches. Her eyes had suffered severely from iritis and interstitial keratitis, and the lymphatic glands of the neck were enlarged. Altogether, her appearance was so striking, that no one conversant with the matter could have passed her in the street without observation.

The parents of this child, and her brothers and sisters, are not only healthy, but are positively exceptional specimens of vigour and good condition. It is nothing to the purpose to say that the father is a magnificent animal, who will not admit having had any illness of any kind within his own memory. The mother is a robust, active woman, who has had no abortions, and no ailments during pregnancy. The other children, taken collectively, form about as fine a family as I ever saw; and one of them is, I think, the finest child I ever saw. The syphilitic one is the eldest; and the next, eighteen months younger, presents no trace of contamination. She is strong, well-formed, active, with pretty features, good teeth, clear complexion, plenty of red blood, firm muscles, and well-shaped extremities;—a general description that would apply to all the rest. The mother states that the eldest child was in perfect health, and as fine a baby as the others have been, until, at between six and seven months old, she was vaccinated. From that time forward she has never been free from a succession of syphilitic ailments; and before that time she showed no sign of anything amiss.

Now, after paying due regard to the tendency of human nature to tell lies about syphilis, and after taking into account popular prejudice against vaccination as a cause of infantile disease, I think the case I have described is inexplicable on the hypothesis of hereditary transmission. I do not think it possible that disease of such severity could have remained dormant until an infant was nearly seven months old, nor that it could have been so completely exhausted by the first child as to show no trace in the second, or in any subsequent ones. I do not think it possible that the mother of a child so thoroughly tainted could herself altogether escape; and I am driven to the conclusion that in this particular instance the syphilitic virus was derived from some other source than the ordinary one. Except inheritance, I can imagine no other likely source for this form of infection than the vaccination, and I see no difficulty in believing that lymph or blood might convey the poison as readily as spermatozoon.

A single case, of course, proves nothing; but I have thought this one worthy of publicity, in the hope that it may direct the attention of others to the questions it suggests. Hitherto the accusations against vaccination have been vague; but, if we assume that Mr. Hutchinson has proved the specific character of certain conditions, and if we then find these conditions under circumstances that preclude the probability, if not the possibility, of inheritance, we are surely driven to recognise another source of infection besides that with which we are familiar, and to take especial care that we are not ourselves the unwitting means of propagating "inherited syphilis."

Stroud, Gloucestershire.

ON A NEW MODE OF PROCEEDING IN PLACENTA PRÆVIA.

By W. H. MOOR, M.D.

The ordinary treatments of placenta prævia are so unsatisfactory in their results, especially with respect to the offspring, that any modification of, or change in them, likely to be of benefit in saving life, should at once be laid before the Profession, that it may be tried, and adopted, if found of use, or rejected, if otherwise; as the opportunities of one man are but slight for testing any new proposition in a thing of rare occurrence.

During the past ten years I have had in my practice six cases of placenta prævia, and, although all the mothers are living, the results with respect to the children have been exceedingly unsatisfactory. My usual practice has been to turn, but in my last case I adopted a different proceeding, an account of which I now give.

Mrs. K., aged 36, was taken in her fifth labour at 8 a.m., the first pains causing hæmorrhage. On examination, the os was sufficiently dilated to permit of the presentation being accurately made out, and nothing could be felt but placenta. During the day pains kept off; but towards 5 p.m. they recommenced, were short and slight, and each one brought blood. About 6 p.m., the os being sufficiently dilated to allow of the introduction of the fingers, I carefully separated the placenta from around the sides and front of the os, leaving its attachment behind untouched. I then passed my fingers beyond the part I had detached, and found the head bearing down. Seizing a portion of the membranes covering it between my fore and middle fingers, I withdrew my hand, loosing my hold of the membranes when they were in vagina, by which means I plugged the os with the detached portion of the placenta and the unruptured membranes. Hæmorrhage ceased at once. After waiting fifteen minutes for pain, I gave a dose of ergot with brandy, and repeated it in half an hour, shortly after which good pains came on, and labour progressed and terminated in the natural manner, without further loss or danger, and the mother made a good recovery.

The child, to all appearance a seven-months' one, was still-born, but revived under the Marshall Hall method of artificial respiration; and, although badly nourished and weak, has got on well, and is likely to live.

From these facts I think I may reasonably conclude that had I delivered by turning, the child would have been irrecoverably still-born.

On examining the placenta, I found I had separated about one-third of it from its attachment to the uterus.

Buntingford, Herts.

We hear that Mr. Henry Thompson, F.R.C.S., is on the point of leaving London for Brussels, to attend on the King of the Belgians, who still continues to suffer from calculus.

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REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CASES OF AMAUROSIS IN CEREBRAL DISEASE.

BLINDNESS is a common symptom in diseases of the nervous system, and in almost all cases of cerebral amaurosis the condition found by the ophthalmoscope is that known as white atrophy of the optic disc. Sometimes, when seen early, the optic disc is swollen, and the vessels gorged, as if the return of blood from the eye were impeded, as in one of Dr. Russell's patients, but after a time the appearance is pretty much the same as in the other cases—the disc is white, flat, and the vessels small. Atrophy of the optic nerve is sometimes found in patients who appear to be in other respects in perfect health, and again it is found clinically in cases so various that it seems difficult to gain any clear idea as to the value of this symptom. It is found in epilepsy (epileptiform convulsions), paraplegia, hemiplegia, and in association with minor paralysis, as paralysis of the motor nerves of the eye, the third, fourth, etc. A very common series of symptoms preceding this kind of amaurosis is violent pain at the back of the head and in the superciliary region, and frequent and distressing vomiting. These are the kind of symptoms so often associated with tumour of the cerebellum, in which blindness is so common. What is wanted are autopsies in which careful ophthalmoscopic examinations have been made at various stages of the disease during life. In cases of tubercular meningitis in children, when the very rare result—recovery—follows, blindness is not uncommon; and during life, if the ophthalmoscope were used, we should find, no doubt, changes in the eye either analogous to those in the brain, *i.e.*, disease of the choroid, the pia mater of the eye, or the results of pressure on the optic nerve, or the vessels at the base of the brain. The writer has twice made an ophthalmoscopic examination in tubercular meningitis, but in these cases the results were not very definite. In one the note is as follows:—"The optic disc (one eye only was examined) seemed white, but flecked with red minute points, the arteries were small, and the veins very large and dark. The edges of the disc were indistinct, and as if swollen." In another case in the last stage of meningitis, "I found simply that the disc was injected. It had lost the slightly rosy hue of health, and looked like a white spot coarsely smeared with red. The arteries were small and the veins large."

Not long ago the writer saw a young woman, who at first had severe headache on one side, distressing vomiting, and, after a few days, slight numbness in the left hand and left foot. She had then also great intolerance of light, but unfortunately no ophthalmoscopic examination was made. Altogether her illness was of about two or three weeks' duration. Her mind was quite good at that time; but after a few days she became delirious, then blind, and at length died in convulsions. In such a case an ophthalmoscopic examination during life, and a post-mortem examination would have been very valuable. Had she recovered she would probably have been permanently blind. The following case, in the severe pain and the sickness without evident cause, resembles the above, but it differs from it in being infinitely more chronic, and in ending in quasi recovery. The patient did not die, but was blind, epileptic, and hemiplegic. It is interesting, too, as regards the diagnosis early in the case, as the symptoms lead to the suspicion of "gastric fever." In young children sickness very commonly ushers in head symptoms, and it is singular how common it is for patients who have white atrophy to say that "it began by bilious vomiting." In all cases in which a person previously healthy has distressing vomiting, with dimness of sight and pain at the back of the head, the diagnosis should be made very carefully. Of course the vomiting and the amaurosis are not supposed to be necessarily the result of one cause. All we say is, that clinically they often occur together. In one case under the care of the writer there was a distinct cause for each. There was a small tumour near the pneumogastric, which probably, by irritating the nerve, produced the, apparently, purposeless vomiting. There was another tumour at the sella Turcica affecting the optic nerves. Very often the corpora quadrigemina and the pneumogastric are affected by the same tumour, as in tumour of the cerebellum.

HOSPITAL FOR THE EPILEPTIC AND PARALYSED.

SEVERE PAIN AT THE BACK OF THE HEAD, AND FREQUENT VOMITING, FOLLOWED IN A FEW MONTHS BY COMPLETE AMAUROSIS—EPILEPTIFORM CONVULSIONS AND PARTIAL PARALYSIS.

(Under the care of Dr. BROWN-SEQUARD.)

[Communicated by Dr. HUGHLINGS JACKSON, Assistant-Physician to the Hospital.]

A young woman, aged 19. She had had excellent health up to the age of 18. All the usual questions as to health in infancy, hereditary tendency, etc., were asked, but nothing throwing any light on the origin of the case was found, except that she had had rather a hard place in domestic service.

In August, 1861, she began to suffer sickness and severe pain at the back of the head, and also on the vertex. The sickness came on several times in the day, and she vomited frequently, not after food. At the same time, the eyes "turned into the inner corner," (paralysis of the sixth pair?) and she saw double, but in about a month the eyes were again normal, and the double vision was gone. The headache and sickness still continued. She was admitted into a Metropolitan Hospital, where, she says, she was told her illness was gastric fever; but this is doubtful, as she was cupped at the back of the neck. She was in the Hospital several months, the vomiting still continuing, and when she was discharged she was quite blind. The sight failed gradually, a "thick mist coming over the eyes." She has been blind ever since.

She had subsequently nine fits at various times in the year 1862. They began by a pain in the forehead; her head was drawn back; she fell, was insensible and rigid all over, and afterwards slept a quarter of an hour. She did not bite her tongue. When she came to the Hospital, in the May of that year, she had great weakness of all the limbs, especially in the left side, but no notable paralysis. She was quite blind. The pupils were widely dilated, so that they did not increase in size by atropine. The optic disc was flat, very white, and the vessels very small. The disc was slightly irregular, its edge being ill-defined.

She improved in health, and has been for several months quite well, with the exception of the blindness. This has not improved in the least.

VOMITING AND HEADACHE FOLLOWED BY AMAUROSIS AND EPILEPTIFORM SEIZURES—INCREASE IN SIZE OF THE HEAD.

(Under the care of Dr. HUGHLINGS JACKSON.)

A boy, aged 10, had been quite healthy until eleven weeks before Dr. Jackson saw him. His mother said that he then had "a bilious attack," and severe pain at the back of the head and at the forehead. He had the sickness, which was very distressing, only one day, but the headache continued for some time. Three or four weeks later he began to see badly, and in three weeks more was quite blind.

When Dr. Jackson saw him, except that he was quite blind, he was in apparent good health. He had no notable paralysis anywhere, but his mother said that in the streets he walked badly. He was also subject to "fits." He would suddenly fall down, but whether there was any convulsion or any real insensibility could not be ascertained. There was another symptom, however, which may perhaps throw some light on the case. His head was getting larger, but his mind was still very good. In many respects the case is like one recorded in the *Hospital Reports* for August 30, 1862, p. 224, and possibly may be due to a similar cause, viz., cancer of the cerebellum. If possible the result of this case will be given. It is noted now chiefly as showing the insidious onset of severe intracranial disease. As usual, the optic discs were very anæmic, and the vessels small.

CASES OF TUMOUR OF THE BRAIN.

BIRMINGHAM GENERAL HOSPITAL.

INTENSE PAIN IN THE OCCIPUT, COMING FORWARD TO THE TEMPLES—URGENT AND FREQUENT VOMITING—RIGIDITY OF THE MUSCLES OF THE BACK OF THE NECK—IMPERFECT VISION—TUMOUR IN THE MIDDLE LOBE OF THE CEREBELLUM.

[Communicated by Dr. JAMES RUSSELL, Physician to the Hospital.]

THE case from which the following imperfect notes were made

occurred to me in the practice of the General Dispensary in the year 1851.

J. B., aged 51, glass-worker. His last illness commenced about six months before the date of my attendance, but he stated that he had suffered from an attack similar to the one under observation sixteen years previously. He then had severe pain in the head, and giddiness, and was ill, more or less, for three months. He was relieved by the application, at different times, of five or six dozen leeches. After his recovery he continued in perfect health up to the period noted above, save that his bowels were exceedingly costive. His habits were described as being temperate.

During the past six months he had suffered from repeated attacks of severe pain in his head, shifting from the occiput to the temples, and accompanied by giddiness. He had been at home for three weeks with these symptoms when I saw him, and had kept his bed for the three days immediately preceding my visit; he never left it again.

I found him lying on his right side, with his neck immovable, and his head buried in the pillow. He complained of very severe pain in the region of the occiput and of the posterior cervical muscles, and throughout our conversation never moved his head. He stated that he walked well, and I did not think it right to test his power in this respect, from the great pain excited by any movement. His eyesight, he said, had been rather dim for some time, but much more so for the preceding three days. His pupils were natural. He had frequent nausea.

His illness lasted from November 21 to January 18. The intense pain in the head never underwent more than slight and temporary abatement, until about five weeks before death, when it was disguised by delirium, and probably lessened by increasing dulness. It was seated in the occipital region, whence it passed round the head. The neck retained its fixed attitude, so that at last he could not be changed, and was fed by a spoon, and he often lay moaning from his suffering. Some tenderness was felt when the cervical muscles were grasped near their insertion, but no evidence of disease in that situation appeared.

By a strange omission, the state of vision is not again described, but the pupils are repeatedly stated to have been natural until December 13, when they had become dilated and torpid, and the eyes presented a peculiar stare. The only evidence of paralysis which was noticed was indistinctness of articulation, a symptom which increased as his illness progressed. Delirium made its appearance first by night, then frequently, but at first for a brief period only, by day, until he finally declined into a state of fatuity, and passed his evacuations involuntarily. Vomiting was present almost from the commencement of my attendance, and was throughout a very prominent, and sometimes a very urgent symptom. He emaciated progressively, and finally sank.

The functions, other than those noted, were performed naturally; his urine was free from albumen.

Autopsy.—The examination was of necessity confined to the head. The cerebrum was examined with great care, but was everywhere perfectly healthy. A tumour was found in the cerebellum, but so entirely buried in that organ, that not the least indication of its presence was afforded until the cerebellum was divided. It was globular, an inch and three-quarters in diameter, and lay chiefly in the middle lobe. It appeared to have an organic connexion with the central white matter of the cerebellum over its entire surface, though the nervous matter was easily separated from it. The surface of the tumour was covered with a gelatinous-looking matter, apparently from infiltration of straw-coloured fluid into the connecting material. It contained a small cavity at its upper part, filled with straw-coloured fluid; the mass part lay below this cavity; it was very firm, and seemed made up of a white and grey material intermixed. The tumour had not altered the form of the inferior vermiform process, nor was it connected with the processes passing to the cerebrum.

GIDDINESS, FOLLOWED BY INDISTINCT VISION, AND IN THREE WEEKS BY COMPLETE BLINDNESS—HEADACHE—OPHTHALMOSCOPIC EXAMINATION.

[Communicated by Dr. Russell.]

The following case is, and, unfortunately, will probably always remain, incomplete, as the patient has left the Hospital. Its details, however, are very interesting, and, together with the ophthalmoscopic examination, derive much illustration from the cases lately reported in the *Medical Times and Gazette*. (a) The entire report coincides in some particulars with that of the case by Dr. Bader, inserted in the last number of *Guy's Hospital Reports*.

The patient left the Hospital eleven days after his admission. The history was taken by Mr. Haywood Smith.

H. H., aged 45, boatman. The replies he gave to very minute and careful inquiries indicated a state of perfect integrity as regards all the functions up to the date of his present illness. He has been perfectly temperate and very steady, never having placed himself in the way of contracting syphilis. He has been a hearty eater of meat. His trade has exposed him to cold and wet, and he says that lately he has been living in a damp house. He never met with any accident of importance.

Careful examination elicits a perfectly healthy family history, save that his father drank and had one fit; his mother died of a "bilious complaint."

About ten weeks ago the patient had had a pint or two of beer, but not enough to affect him. Three or four days after he observed a "sort of dazzling sensation" before his eyes, with a dull, heavy pain at the back of his head, but no vertigo. The dazzling left him in a day or two, and has not returned; but the pain increased, and obliged him to leave off work. His appetite failed, and what he took seemed not to digest; but his bowels were not costive, and he had no nausea. After the pain had continued about four weeks the sight became dim; he "could see his way about all right," but could not read; the eyeballs also felt cold. He did not observe that his vision was influenced by differences in illumination; but the blindness increased day by day, and at the expiration of three weeks his sight had totally left him, and he was obliged to be led about. During this time he noticed that his left eyelids would "sometimes stick together." The pain in the head remained little changed; it shifted about, but for the last three or four days has been principally confined to the region indicated by the junction of the occipital with the left parietal bone. His appetite has continued bad, and he felt low. There has been perfect absence of vertigo. He has the aspect of a healthy man, though his face is considerably injected. The eyes have the peculiar stare indicative of blindness; they are frequently winked. A pencil of vessels runs from the inner canthus of the left eye to a very limited patch of opacity at the inner edge of the cornea. The pupils are in a medium state, and quite uninfluenced by light; but during his stay in the Hospital they varied in size. His vision also underwent some changes; generally the blindness was all but complete, but once or twice he distinguished a sheet of white paper, once a wash-hand basin, though not its shape, and once he saw his dinner. The movements of the eyeball were unaffected.

When admitted, his hearing was perfect, but on the next day he complained, for the first time, of "a numbing sensation" in his ears, as of steam let off. At the end of a week it was noticed that he did not appreciate the distance of the speaker. Two days afterwards he was manifestly deaf, required the voice to be considerably raised, and evidently had no idea of the direction whence it came, for he turned his head quite away from the person who addressed him.

Muscular power was intact, with this exception, that he required five minutes to commence expulsion of his urine. He spoke of slight numbness in the ends of his fingers. His intellectual powers were remarkably acute; memory was unimpaired. The sounds of the heart were normal. His urine was quite healthy.

For the ophthalmoscopic examination, I am indebted to my friends, Mr. J. Beddard and Mr. T. H. Bartlett.

The transparent media of each eye were normal. Right eye: the choroid at the fundus appeared unusually vascular, but its vessels were normal. The optic disc, however, could not be distinguished from the surrounding fundus; it was exceedingly red and indistinct, and its position could only be traced by three or four tortuous veins passing into it. With this eye, at the time of the examination, the patient could distinguish strong light from the mirror, and white spots on his bed. Left eye: the vessels of the choroid appeared natural, but the optic disc and its margins presented marked deviations from health; its borders were in part ill-defined, and there were several spots scattered through it of pearly whiteness, as in atrophy of the nerve. The arteries could not be seen, but the veins, four or five in number, were large and tortuous,

(a) Series of eight cases of Disease of the Cerebellum, August 30, and October 18, 1862.

and appeared distended with blood. On the temporal side of the optic entrance (inverted image), at its upper part, were four or five irregular spots of ecchymosis, of florid red, lying close to the edge of one of the veins. On the nasal side (inverted image), at the lower part, was one spot of a brownish hue, looking like blood beginning to change. All these ecchymoses were about the size of a pin's head. With this eye the patient could not distinguish the strongest light from the mirror.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

AMAUROSIS — OPHTHALMOSCOPIC EXAMINATION—HYDROCEPHALUS—AUTOPSY—TUBERCULAR DISEASE OF THE LEFT LOBE OF THE CEREBELLUM — MICROSCOPIC EXAMINATION OF THE EYE.

(Under the care of Mr. HULME.)

For the notes and history of this case we are indebted to Mr. Aldridge:—

L. B., aged 5, a fine healthy-looking child was brought to the Hospital, November, 1862, with the following history:—About March of the same year the child was observed to show an unsteadiness upon her legs, attended with giddiness in her head, the general health being tolerably good; loss of power in the left hand supervened to this; she could not grasp anything, and gradually the left leg began to fail her. All these symptoms slowly increased till June, when the child could hardly stand at all. She was ordered into the country for two months, and returned home with improvement as to the power over her limbs, but complaining of headache, sickness, and gradual impairment of vision.

The symptoms on admission in November were—loss of vision, dilated and insensible pupils; loss of power over the lower extremities; head large; anterior fontanelles closed, but posterior open; pulse 100; tongue clean; skin natural; bowels regular.

Ophthalmoscopic Examination.—Media clear; optic disc large and white; outline indistinct and irregular, being encroached upon by the choroid; retinal arteries small and fine, but the veins much enlarged, tortuous and dilated with dark blood, especially beyond the margin of the disc; choroid much injected, and of a universal cherry-red colour.

Small alterative mercurial doses with iodide of potassium were prescribed; the sickness was relieved, but the symptoms gradually progressed, tenderness of the scalp being well-marked, with great intolerance of sound. Towards the end of the month the motions passed involuntarily. The patient then absented herself from the Hospital for two months. When Mr. Aldridge visited the child at the mother's house in March he noted that the head had considerably enlarged, with flushed countenance, clenched hands; motions involuntarily passed; the patient unable to rouse herself up; the right hand was oedematous. On March 18, the child became comatose and convulsed, and died on March 20.

Post-mortem Examination Thirty-six Hours after Death by Messrs. Hulme and Aldridge.—The bones of the cranium expanded; posterior fontanelle open; the membranes of the brain perfectly healthy; no deposits on their surfaces either at the upper or lower part of the brain; no effusion between their surfaces. All the ventricles greatly enlarged and full of fluid, distending the infundibulum and membranes at the base, the fluid escaping to the amount of 8 or 10 ozs. by rupture of the brain on its being lifted up; the lining membranes of the ventricles healthy and smooth, free from any tubercular deposit; the substance of the cerebrum healthy; but, on examining the cerebellum, the left lobe was almost entirely occupied by a hard, well-defined tumour, as large as a hen's egg, the condensation of the brain substance around it giving it an appearance as though surrounded by a capsule; the tumour itself was composed of a yellow, cheesy matter, which presented under the microscope the characters of tubercle; the remainder of the cerebellum was hollowed out into a cyst containing fluid, the walls of which were covered with an opaline transparent substance. The optic thalami tracts and nerves all appeared healthy; no tubercle was found in any other part of the brain. There never having been any manifestation of any visceral disease, the lungs and abdomen were not examined.

Microscopic Examination of the Eye Fifty-six Hours after Death.—The media were all transparent, the vitreous being of normal consistence; the retinal vessels fine, direct in their course, no rupture or extravasation to be detected, although the capillaries showed here and there distensions of their diameters, with an accumulation of blood globules at these parts; the optic nerve fibres of the retina were almost entirely wanting, while the nerve-cells retained their normal relative conditions, the rods and bulbs rarely to be found; the choroid was stained with red colouring matter, but no extravasation of blood into its structure. Examination of the optic nerves showed some of the tubes shrunken, others filled with granular contents; cells with dark outlines being infiltrated between the tubules. The course of the disease, Mr. Hulme remarked, appeared to be:—1st. Tubercular deposit with effusion into the cerebellum, further extensive effusion into the ventricles, by which pressure was kept up upon the parts entering and leaving the orbital foramina. The loss of vision probably depended upon the atrophy of the elements of the retina most important to vision, viz., the retinal nerve fibres, and the rods and bulbs, by pressure on the optic nerves and their commissure. The eyes were preserved for examination in a weak solution of chromic acid.

GUY'S HOSPITAL.

This is another case in which blindness followed vomiting and headache. It resembles very much cases of disease of the cerebellum, in which these three symptoms are very common, but this part of the brain was free from disease. It is rather singular that there was no paralysis, as the thalamus opticus and the pons Varolii were pressed on. Nerve-substances will, however, bear a great deal of gradual pressure without manifest impairment of function:—

VOMITING — BLINDNESS — CEPHALALGIA — SUDDEN DEATH—FIBRO-NUCLEATED TUMOUR IN POSTERIOR LOBE OF CEREBRUM—DISEASE OF OPTIC TRACTS.

(Under the care of Dr. WILKS.)

A. A., living in Tiverton-street, in the Borough, aged 17. Had generally had good health. For more than a year she had suffered from violent retching, coming on several times a day; had also had difficulty in deglutition, so that she seemed to be choked while eating, as though she ate too fast, which was not usually the case.

About eight months before her death she gradually became blind; both eyes were simultaneously and equally affected (it is said). The blindness at last was absolute. She also suffered from pain in the head, especially at the back, but also in front; and on turning her head to the right, and then sharply back to the left, she used to feel something "move in her head," and had an impression of "light on one side," though without really seeing anything. For these symptoms she was attending as an out-patient at Guy's Hospital, under the care of Dr. Wilks. The night before her death she was unusually restless, complaining of headache, and "vomiting a dark blue fluid." In the morning she walked into the front room of the house, complained of "being very bad," lay down on the bed. Her friends thought that she had fainted, but found that she was dead. There was no dyspnœa or lividity.

Autopsy and Microscopical Examination by Dr. Hilton Fagge, made the same day.—Body scarcely cold. Head opened first. A considerable quantity of cerebro-spinal fluid escaped on removing it. A large tumour, more than three inches in diameter, was found, raising the convolutions on the left side posteriorly. This tumour was attached by its lower surface, and the greater part of its circumference was covered by the lining membrane of the ventricle, into which it projected. The lateral cornu was in front of it, so that it appeared to have originally grown from some spot in the position of the eminentia collateralis; it pressed forwards, so that the left thalamus was altered in shape; it was less grey in colour than the right, but not very soft. The growth also projected out beyond the median line, so that the pons was much flattened posteriorly and the parts about the origin of the optic tracts. The corpora quadrigemina were so distorted, that only two of them were distinct. The ventricles were dilated, and their angles rounded. The fornix and velum interpositum were present, but appeared stretched out.

On microscopical examination of the tumour, a great deal of it was found to have undergone fatty degeneration, containing fat globules and granule masses. The remainder contained nucleated fibres, elongated nuclei, and much transparent matter (periplast?) with a delicate border. The parts pressed on by the tumour were also carefully examined more than once. The left thalamus, though so altered in appearance, appeared to be of normal structure, a few granule

masses only being found in one specimen. The interior of the pons showed nothing abnormal, nor the corpora quadrigemina. The optic tracts, which were both very soft (the left so much so that it was not traceable as far as the corpora quadrigemina), were found to contain immense numbers of granule masses in their whole length, as far forward as the optic commissure. One of the optic nerves in front of the commissure showed nothing abnormal. The crura cerebri at the base, close to the diseased optic tracts, were normal in structure. The heart was natural in size, not contracted; lungs healthy; liver rather large; other viscera not examined. There can be no doubt that the diseased condition of the optic tracts extended towards the base in the course of their fibres, as the adjacent tissues were healthy. The exact cause of the right tract being involved was not made out; the greater part was out of the way of direct pressure, but its origin from the corpora quadrigemina may have been pressed upon. The patient's complaining of feeling something move in her head, with a subjective sensation of light, when she turned her head sharply, is perhaps worth noting, as the tumour was unusually movable, projecting freely into the ventricle.

SEVERE ABDOMINAL PAIN AFTER EATING, FOLLOWED BY FEBRILE SYMPTOMS, INSENSIBILITY, AND GENERAL TONIC CONVULSIONS—DEATH THREE DAYS LATER—SMALL TUMOUR PROJECTING INTO THE FOURTH VENTRICLE.

(Under the care of Dr. WILKS.)

Hannah A., aged 20, a servant living in Bermondsey. Her health was generally good, but she was a sulky, bad-tempered girl. On Tuesday, July 22, after eating a hearty meal of pork, she complained of severe pain in the abdomen. She went up to her room, where an hour or two afterwards she was found lying on the floor insensible, having apparently fallen out of bed. The doctor was called in, who found her gasping for breath, and holding her throat, but he considered it to be "nervous cerebral." During the following day she remained insensible, and the day after that, the 24th, she was admitted into the Hospital. She was then insensible; high febrile symptoms; there was a general tonic convulsion, the arms and legs being stretched out stiffly, and the fingers and toes curved. There was a general lividity and mottling all over the body, but no maculæ. These symptoms continued until death next day, the 25th, about exactly three days after the attack.

Autopsy by Dr. Wilks on the following day.—The membranes and the brain were quite healthy, except as follows:—On laying open the lateral, with the third and fourth ventricles, a small tumour was seen, of the size of a small bean, attached by a little delicate areolar tissue to the right wall of the iter a tertio ad quartum ventriculum, below the corpora quadrigemina. It projected into the fourth ventricle, so that on opening the latter it was seen filling up the iter. It was detatched by a slight touch. It was soft, and apparently composed of cerebral tissue, but the microscope showed that it consisted of delicate nucleated fibre tissue. The lungs were congested, but not excessively so, as found in fever. All the other organs were healthy.

TYPHUS FEVER—CONGESTIVE PNEUMONIA—STRUMOUS TUBERCLE IN THE CEREBELLUM.

(Under the care of Dr. GULL.)

William F., a labouring man, aged 28, was admitted into Stephen Ward, under the care of Dr. Gull, on January 12, 1856. He had had a cough for three months. There was no history of contagion. On December 28 he went to work, but was obliged to return in the afternoon, as he was then seized with severe headache and sickness. For three days before he had not felt well. He continued to grow worse until admission. He was then in a high state of fever, the body covered all over with a mulberry rash. He had also cough and expectoration. On the following day the sputa were streaked with blood, and on the 4th, the rash which covered every part of the body had become in places petechial. Ammonia and wine were ordered. At night he was very delirious. He daily grew worse; brandy was then administered, but the breathing became quicker, the spots more livid, and at the same time some small pustules appeared on the legs.

Autopsy.—Sinuses and veins filled with blood, pia mater congested, arachnoid slightly opaque in parts, and serum beneath the membrane in excess. The ventricles contained rather more than a normal quantity of fluid. The surface of the choroid plexus, as well as their substances, contained irregular, firm granular deposits. The internal surface of the lateral ventricles was minutely granular. The septum lucidum was very thin. The lining membrane of the fourth ventricle was somewhat opaque. On the left side of the cerebellum, near the mastoid portion of the temporal bone, the membranes were firmly adherent from the development of hard tubercle nearly half an inch in diameter. Its centre was composed of cheesy substance, and this was bounded by firm semi-transparent tissue about one-eighth of an inch in width. It was composed of fibro-albuminous substance containing highly refracting particles. A somewhat similar but somewhat smaller tubercle was formed in the same lobe of the cerebellum, near the other, and embedded in the grey matter near the surface.

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Medical Times and Gazette.

SATURDAY, MAY 23.

THE MEDICAL COUNCIL.

The Medical Council begins its next session on Monday. We are not amongst those who had great expectations of the benefits to be derived from its operations. There are many grievous wants of the Profession which it never can fill up. It cannot make men modest, studious, and public-spirited; it cannot cure Professional jealousy and back-biting; it cannot convert the pretentious semi-charlatan into a scientific man and a gentleman, and it cannot hinder the public from being fools, and running after and rewarding noisy and shallow quacks, whilst they neglect honest working men. Yet it may do something. It may attract the best of our youth from the best public schools by proper arrangements for the preliminary education of future members of our Profession, and it may discourage idleness and want of liberal education. If it cannot make the present what we wish, it may sow seeds for the future.

Should its deliberations be conducted with open doors, and be reported? All English human nature says, yes. If, as the apologists of the close system intimate, some members of the Council are so vain, unpractical, and self-seeking, that they will waste the time of the other councillors by making speeches to the reporters, why the sooner this is known the better. We, as a great Profession, want a Representative Council worthy of us. We want to know what they say and do, and to fix them with the responsibility.

The new Pharmacopœia will no doubt appear in time. Come when it may, it will be received with a chorus of discordant criticism, and will of necessity share the fate of most things which are intended to please everybody. We want settled formulæ for the combinations in most frequent use; but any attempt at an enumeration of drugs, or at presenting the Profession with "prescriptions" will fail. Every man chooses to prescribe for himself.

On the subject of repression of quacks and protection of legitimate Practitioners, we hope the Council will act up to

the limits of its authority. We cannot exterminate quackery; but we can every now and then give it a hearty kick, and hold it up to the derision of the multitude.

THE FOSSIL MAN OF ABBEVILLE.

By the time that our readers peruse these remarks they will have probably learnt that all controversy respecting the authenticity of the human jaw found by M. Boucher de Perthes, on March 28 last, in the high level gravels of Moulin-Quignon, near Abbeville, is set at rest. The narrative of this most important discovery—important not only to anthropology but to geology—has been placed before the readers of the *Medical Times and Gazette* week by week during the last month, and they, like ourselves, have no doubt been struck with the discrepancy which prevailed between the opinions of the French and English geologists on the subject. Those who were well versed in the matter were, however, cognisant of the fact that nearly a fortnight ago Dr. Hugh Falconer, M.D., F.R.S., Mr. Joseph Prestwich, F.R.S., and Professor Busk, F.R.S., proceeded to Paris for the purpose of arriving, in concert with the French geologists, at some definite and reliable result. The scientific "champions of England" met by appointment with Professor Milne-Edwards, Professor de Quatrefages, President of the Anthropological Society of Paris, M. E. Lartêt, Professor Delesse, the Marquis de Vibraye, Professor Hébert, M. Desnoyer, Professor l'Abbé Bourgeois, Dr. Garrigou, M. Gaudry, M. Delanoue, and M. A. Milne-Edwards. Two entire days were spent at Abbeville, during which the whole of the evidences were thoroughly sifted. Much suspicion had been evoked in England respecting the fact that when the jaw from Moulin-Quignon was washed a dirty white colour was exhibited by the condyle, and also that when the flint implements from the same bed were thoroughly washed a dingy whitish colour was shown, markedly distinct from the metallic bronze-like tint of the flint implements and the jaw previous to being washed, and from the well-known colour of the "black seam band" of Moulin-Quignon. According to the statement in *L'Abbevillois* of May 15, on Thursday week last, Professor Busk, who had been making various experiments on the colour, etc., of the beds, let a drop of the soil of the "black seam band" fall on the white ivory handle of his penknife. Next day, when it was dry, it exhibited a metallic reflection. However, on washing it, he perceived that the handle of the penknife remained as before, perfectly white. To Professor Busk this explained the *vera causa* of the non-colouration of the flint implements, and of the whiteness which the interior of the jaw still exhibited. Mr. Busk communicated this discovery at once to Messrs. Falconer and Prestwich, who admitted the fact.

Messrs. Milne-Edwards, Quatrefages, and Lartêt—perhaps the worthiest representatives of French palæontology who could have been selected to perform this difficult task—never doubted the authenticity of the jaw. In the inception of the controversy, while the eloquent and masterly arguments of Dr. Falconer were being published in most of the scientific journals of Europe, the French palæontologists did not experience the slightest doubt of the truth of M. Boucher de Perthes' conclusions. In England a few voices were uplifted in favour of Boucher de Perthes, but out of the circles of practical anthropologists or geologists. Last Friday week, May 15, a day to be ever memorable in the history of geology, the French and English geologists, after due examination, arrived unanimously at the following conclusions:—1. That the jaw found on March 28 by M. Boucher de Perthes at Moulin-Quignon is really fossil. 2. That it was extracted by M. Boucher de Perthes himself from this virgin and undisturbed bed (*bane vierge, ou non remanié*). 3. That the flint implements which had been said to be fabricated by the workmen are incontestably ancient. After all these conclusions had been arrived at, the commission waited on M. Boucher de Perthes to offer him their congratulations for this, the most important discovery which has ever been associated with his name. After examining into all the reasons, mostly of a technical character, which have actuated these distinguished geologists in the conclusions at which they have arrived, we feel it to be our bounden duty to declare our opinion that the first and second of their conclusions are unequivocally correct. The jaw is ancient; the soil containing it was undisturbed. As regards, however, the flint implements, we cannot, of course, give any opinion on those we have not seen, and of which Mr. Prestwich is stated to admit the authenticity. But the specimen which M. Boucher de Perthes gave to Mr. Alfred Tylor, and which the latter gentleman exhibited publicly at the Anthropological Society on April 21, as well as another specimen which is in England, and which were both derived from the "black seam band," we still consider to be rank forgeries, and we feel gratified at seeing that Dr. Falconer declined to concur in the verdict which declared their authenticity. The presence of these forged implements, and of the admittedly spurious detached molar from Moulin-Quignon, with the jaw, has no doubt led to a large amount of the suspicion which was attached to the genuine human jaw. Other sources of scepticism were aroused, by reason of the dubious character of the original announcement of the discovery of the jaw to the scientific public, in which the alleged grounds on which its authenticity was inferred were not of a nature calculated to awaken the faith of men conversant with the subject. The jaw has, however, survived all this; the indiscreet support of its ardent friends, the steady opposition of so many illustrious geologists, and the load of rough flints which immediately overlaid it in the gravel-bed, have severally been unavailing to crush it. The fact has now to be admitted, and we trust the sooner the better, that the jaw from Moulin-Quignon is contemporaneous with the deposition of the "black seam band," which was antecedent to the superjacent high-level gravels of the Somme valley. The bed belongs therefore to one of the most ancient of the drift deposits. We believe that Mr. Prestwich will shortly furnish a paper on the subject to the Geological Society. "What trick, what device, what starting-hole" is now left to the anti-geologists, who allege that because no human bones were to be found in the Somme drift, *therefore* no men lived in it, *therefore* the flint implements were not made by man, *therefore* they were fortuitous fractures, *therefore* man is exactly 6000 years old? We trust that the assailer of the principles of inductive science will pause before he reproduces this flimsy argument; since the days when De Vibraye explored the cavern of Arcy, it has been contrary to the actual fact; and now we have human remains in the tool-bearing drift of Moulin-Quignon, the repetition of the fatuous allegation should at once cease. Man, as evidenced not only by his works of art, but by his actual bones, was contemporary with the *Elephas antiquus*, and *primigenius*, with the old tichorhine rhinoceros, cave-bear, and cave-hyæna, while as yet the waters which then flowed in the Somme valley flowed 100 feet above their present level. One word more, as regards the moral aspect of the question. Too much credit cannot be given to Dr. Falconer, to Mr. Prestwich, and Professor Busk for the frank and manly way in which they have avowed their change of sentiment. The first-named gentleman especially was foremost to recognise the error of his previous written opinion, and to acknowledge the correctness of M. de Quatrefages' conclusion. The opinion which the French zoologist expressed, that the jaw resembles the jaws of many Esquimaux, is one in which we would ourselves be strongly inclined to concur. The following characters were observed by Professor Busk, who made a minute examination of the jaw, and sawed it across in the presence of the commission:—

"The black coating was washed off readily by means of

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sponge, and the residuary spots in the minute hollows were removed by the aid of a tooth-brush. The general colour of the washed surface was a light buff, mottled with brown stains. The outer surface was tolerably smooth, presenting little indication of the superficial erosion commonly seen in old buried bones. There was no appearance of dendritic patches either on the exterior or within, and no infiltration of metallic matter. The substance of the bone was dry and friable, especially towards the alveolar border, but, on the whole, it was tolerably firm under the saw, and the fresh section afforded a distinct odour of sawn bone. The internal cancellated structure was of a faint brownish tinge, and the cells free from any incrustation. The most remarkable appearance observable in the section was the lining of the dental canal with a thin layer of fine gray sand, free from admixture with the black metallic matrix which blocked up the orifice of the canal below the condyle. The section of the fang showed that the dentine, so far as exposed, was white, and in no respect different from that of a recent tooth. The enamel was white and brilliant. The socket towards the upper part was not completely filled by the fang, and the interval was partially occupied by black matrix and sandy particles."

While conceding to the Paris anthropologists, especially to MM. Quatrefages, Paul Broca, and Lartêt, the credit of having been the first to interpret correctly the facts of the case, we consider that English science may be justly proud of such representatives as Dr. Falconer, Mr. Prestwich, and Professor Busk. Though these gentlemen at first, and with insufficient materials at their command, may have been led into an erroneous belief, they have been governed by that deference to the inexorable laws of truth to which all scientific men should bow, and they have by their full, frank, and manly admission of the accuracy of Boucher de Perthes, added new honours to the reputations which scientific England has long conferred on them.

THE WEEK.

PARLIAMENTARY.

During the past week the principal subjects discussed in Parliament have had no particular bearing on Professional interests, or claims on Professional attention. On the 14th, the Irish Vaccination Bill passed through committee, and on the 18th it was read a third time, and passed. The Naval Medical Supplemental Fund Society Winding-up Act Amendment Bill was read a third time on the 15th, and passed. On the same night, in reference to the traffic in diseased meat, and in answer to a question put by Lord Raynham, Mr. Lowe, the Vice-President of the Committee of Education, announced that her Majesty's Government had received Professor Gamgee's report, and that it would shortly be laid on the table. On Tuesday night, Sir G. Grey promised that the voluminous papers in reference to the trial and commutation of the sentence of Jessie McLachlan should be submitted to the house.

On the 19th, in answer to a question put by General Buckley, as to the admission of fresh cases of small-pox into the workhouse of St. George's, Hanover-square, and other workhouses in the populous parts of London,

"Mr. Villiers said that he had not heard of any fresh cases of small-pox in the workhouse of St. George's or in any other of the workhouses of the metropolis; but he had heard that the malady generally was on the decline. Some weeks ago the Privy Council issued a circular to all the metropolitan unions, urging them to take precautionary measures with a view to the extension of accommodation for patients suffering from small-pox, and the Privy Council further issued a circular to the Poor-law Board, requesting them to urge upon Boards of Guardians to take such measures. Since that time answers had been received from no less than 25 out of the 40 metropolitan unions, stating that their accommodation was more than adequate for the number of patients. With respect to the workhouse of St. George's, it might be satisfactory to the hon. and gallant general to hear a report had been made with respect to that workhouse within the last few days, from which it appeared that a wing of the building had been set aside for small-pox patients, that the said wing was capable of accommodating 40 patients, that the greatest number in at any one time had been 30, that the total number admitted since the outbreak of the malady was 58, and that at present there were only 15 in it, the major part of whom were convalescent."

On the same evening, the Lord Advocate obtained leave to introduce a bill to make provision in regard to vaccination in Scotland.

ACQUITTALS ON THE GROUND OF INSANITY.

Last week we noticed a case in which a public officer was condemned and fined by the verdict of a jury for placing a person whom he believed to be a dangerous lunatic under restraint. This week we have to record two instances in which murder was committed by persons who, although clearly insane, were allowed to continue at large. At the Central Criminal Court, on May 14, a woman named Harriet Goodliffe, the wife of an ostler, was indicted for the murder of her infant child by throwing it out of window. Her landlord deposed that "she had on several occasions acted in a manner that induced him to believe she was of unsound mind. Her conduct on April 25, the day of the murder, was particularly strange and incoherent, and it induced him to go to her apartment on three different occasions during that day. The last time he went he saw her standing at the window, the upper part of which was open, and she was hanging with her hands outside the window. The child James was not then with her; on the two former occasions she had the child in her arms." Still the woman remained at liberty, and the result was that shortly after one of her neighbours saw the child fall from the window. Mr. Tandy, of Spital-square, and Mr. Gibson, the Surgeon to Newgate, gave evidence that she was of unsound mind, and the jury on that ground acquitted her. In the Second Court, on the same day, Samuel Robinson, a deaf imbecile, was charged with the wilful murder of Charlotte Haines. Mr. Ribton, who defended the prisoner, raised the question whether a person who was both insane and deaf could be put on his trial. The judge, Mr. Baron Channell, said that the law required that, although a prisoner might be incapable of hearing, the indictment should be read in his presence, and witnesses as to his insanity and deafness examined. The only evidence taken was that of Mr. Gibson, who stated that

"Since the prisoner's committal he had seen and examined him frequently, and believed him to be insane. He had formed this opinion when he first saw him. The prisoner was, moreover, intensely deaf. When addressed in writing he could to a certain extent comprehend the questions put to him, but he had not sufficient intellect to understand the proceedings at a trial or the details of evidence, nor could he challenge a jury."

The jury immediately returned the same verdict as in the former case.

Such occurrences speak for themselves. The public and press will perhaps in time discover that it is a more serious error to treat madness as sanity than to mistake brutality and violence for madness.

THE SCOTTISH REGISTRATION OF DEATHS ACT.

The Profession in England will sympathise with their brethren in the North in any attempt they may make to obtain a repeal of that penal section of the Scottish Registration of Deaths Act by which certificates of the cause of death are exacted by compulsion from the Medical Practitioner. At a recent meeting of the Medico-Chirurgical Society of Glasgow, a resolution was passed to petition Parliament "that the penal section of the Act, as far as it affects injuriously the honour and interests of the Profession in Scotland, be repealed." To say nothing of the manifest injustice of compelling any class or Profession to render gratuitous services to the State, the invidious distinction made between the Profession in England and Ireland

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and in Scotland alone calls for a revision of the Act. How humiliating to an honourable and pre-eminently public-spirited body of men the law as it at present stands is, may be gathered from the admission of Sir Robert Peel, who, in introducing the Irish Registration Bill, distinctly alluded to the penal clause of the Scottish Act, and—as quoted by Mr. Walker at the meeting referred to—stated:—

"That from conversations he had had with the President of the Royal College of Surgeons of Ireland, and from information derived from other sources, he had learned that the method of obtaining Professional aid in the compilation of the statistics of the causes of death, as practised in Scotland, was altogether unsuited to the Irish character—that the Professional men in Ireland would never submit to be considered in the least degree inferior to their class in England—that they must be treated as gentlemen, and any attempt to coerce them to submit to the penal system as practised in Scotland would be met with contempt and scorn. Sir R. Peel therefore abandoned all idea of introducing a penal clause in his bill."

The experience of the working of registration in England shows that a penal clause is entirely unnecessary. Its enactment for Scotland was a piece of mischievous legislation—fastening an insult on a body of highly-educated men, who have been ever foremost to serve the commonwealth, and utterly useless as a means of insuring greater statistical accuracy. We congratulate the Medico-Chirurgical Society of Glasgow and Dr. Ritchie, Mr. Walker, Dr. Thomson, and other speakers, on taking the initiative in this matter.

BRANDING IN THE ARMY.

We understand that instruments for branding soldiers with the letters B.C. have been supplied to some of the military stations. We venture to repeat, what we have already said, that the branding of a soldier at his Regimental Hospital by his Hospital Sergeant, under the superintendence and instruction of his Medical Officer, is a most improper proceeding, and an indignity to the members of the Medical Department. The authorities may depend upon it that there will continue to be a paucity of candidates so long as these things exist.

THE WATER OF ST. GALMIER.

We have to thank the St. Galmier Water Company for a specimen of their water. It is a cool, beautifully clear, sub-alkaline water, possessing most of the virtues of Seltzer water, and containing a good deal of carbonic acid, in such a state of combination that the water does not readily become flat. It is imported in Bordeaux wine bottles, each holding nearly three tumblers, and as the price per bottle is 7d., it follows that one glass costs about 2½d. St. Galmier may compete with Seltzer in the treatment of arthritic and dyspeptic maladies with acidity, and may be used at dinner or supper with any light sub-acid wine or with brandy. The London depôt is at 9, Duke-street, Portland-place.

LOCAL REPORTS ON SMALL-POX.

(Continued from page 514.)

X. *Holborn District.* By Septimus Gibbon, M.D., Medical Officer of Health for Holborn District.

The epidemic is passing, if it has not already passed, over this portion of the metropolis much more lightly than did that of 1859-60. During the former epidemic there were forty-six cases and fourteen deaths, whereas in the present, out of sixty-one cases, there have been only seven deaths.

This satisfactory result is doubtless owing to the stimulus given to vaccination—a result satisfactory only as compared with other years, for it must be borne in mind that this district is seldom *free* from sporadic cases of small-pox, owing to the character and habits of the population, which includes a large number of Irish and Italians, whose tramping habits expose them to infection, and whose children, if registered at birth, which perhaps is oftener the *exception* than the rule, are never vaccinated without extraneous pressure. The annual average of small-pox cases amongst the paupers during the six years ending Lady-day, 1862, was thirty-five, and the average number of deaths amongst all classes was fifty-six.

A few cases occurred here in November and December last, but no death resulted. In the week ending January 24, the disease was again imported into the district simultaneously in widely separated localities. It has never exhibited a tendency to spread, even from room to room, much less from house to house, but has for the most part victimised the members of the same family, who had seldom been protected by efficient vaccination. The deaths all occurred to unvaccinated children, five out of the seven to children of ages varying from *four months to two years*, and only two to boys aged ten and eleven years respectively. A like proportion holds with reference to ages of the children attacked, who did not die, viz., about 70 per cent. of the cases were amongst children under three years of age. These facts warrant me in attributing our comparative immunity from the disease to the great extension of vaccination which was effected in the first three months of 1860. That we have had so few deaths, although many of the cases were unprotected and of the severest character, is undoubtedly due to the assiduous attention and skilful treatment of the parochial Medical officers.

As it is one of my specified duties "to take cognisance of all sources of unwholesomeness arising from neglect of vaccination," in common with other Medical Officers of Health I have endeavoured, as much as practicable with the means at my disposal, to promote vaccination. The measures adopted have been the examination of all school children, the issue of public notices, the service of orders on the unvaccinated, and, lastly, a measure I consider the least troublesome, the cheapest, and the most efficacious plan in a population such as this, where many births go unregistered:—Some of the public vaccinators, at my suggestion, have made a house to house inspection of the children in the poorest and most populous courts and alleys, with a view to vaccinate any who are found not to have been vaccinated. Of course, to have the full value of such preventive visitations, they ought to be periodical, annual, or biennial. The main obstacle to carrying out this plan is the miserable fee allowed by the guardians for the operation, to meet which difficulty I propose that the local sanitary authorities should pay the public vaccinator at so much per house or per family for the inspection, in addition to the 1s. 6d. fee for each successful operation paid by the Poor-law Guardians. In order to prevent any abuse of such visitations—and they might lead to great abuse in respectable streets and places—they ought only to be instituted on the requisition of the sanitary authority and the Medical Officer of Health.

During the former epidemic I had my attention directed to several cases of wilful neglect or refusal of vaccination, the particulars of which I was directed to forward to the Board of Guardians for prosecution; but for various reasons, such as the illegitimacy of the children, the poverty of the parents, etc., that Board did not think fit to institute proceedings. During the present outbreak I have only met with one such case,—it was that of a working coach-builder, who declined to act upon the advice of his Medical attendant and have his two young children vaccinated. The youngest, aged two years, died of small-pox; when, as the parents persisted in their refusal to have the other child, about a year older, protected, I threatened them with a coroner's inquest, and gave the particulars to the summoning officer. This had the desired effect, which I doubt whether a penalty of 20s. would; the child was vaccinated in time to modify but not prevent the infection. The cow-pox and small-pox ran a simultaneous course.

About three weeks ago, when acting as examiner for a life insurance company, I declined to certify a life aged twenty-seven as eligible for insurance until the man had been vaccinated. He informed me that he was one of a family of nine children, all of whom refused to be vaccinated, because their parents had been prejudiced by some particular case in which they believed that serious disease had been inoculated together with the vaccine matter. His scruples were overcome by my telling him that he must either forego the assurance or be vaccinated. I postponed my report for a week to afford him an opportunity of having the operation performed, at the end of which time he presented himself duly vaccinated. The

are the only two cases of conscientious objection to vaccination that I have met with during the present year. I think that the neglect in my district arises more from apathy and ignorance than from prejudice.

The following extract from the *Times* of Friday, May 15, 1863, has reference to one of the most dangerous *foci* of contagious disease in London:—

"Clerkenwell.—Michael Roach, William Hayes, and Michael Collins, the keepers of Nos. 1, 2, and 3, Charlotte-buildings, Gray's-inn-lane, were summoned, at the instance of the Board of Works for the Holborn District, for having their houses so overcrowded as to be prejudicial to the health of the inhabitants.

"Charlotte-buildings is a narrow court, which has long been known as one of the fever dens of the metropolis, and for years past the owners of the houses have been summoned for permitting nuisances and overcrowding. The houses are very small, and contain no more than eight rooms. According to the evidence of Mr. Charles Henry Brown, the inspector of nuisances, he found in the house No. 1, 28 persons; in No. 2, 35 persons; and in No. 3, 29 persons. Several notices had been served on the defendants to reduce the number of their lodgers, but without effect; hence the present summonses.

"Dr. Septimus Gibbon, M.D., Medical Officer of Health for the Holborn District, said that none of the houses should have more than 24 inmates. Each inmate should have at the very least 300 cubic feet of air, but in the rooms in the houses complained of it ranged from 140 to 240 feet. In Charlotte-buildings small-pox and fever were raging, and, if this overcrowding was not put a stop to, he was afraid that the most dangerous results might arise to the community generally.

"The defendants, in reply to the charge, said that they were not aware that they were doing wrong.

"Mr. Barker made an order for the reduction of the number of inmates, so that they should not exceed 24, and gave the defendants until Monday next to comply with it, at the same time telling them that if they did not carry out his order he should inflict the full penalty of 40s. per day."

XI. *Rotherhithe.* By W. Murdoch, M.D.

In the early part of this month I ascertained that there were in this parish about twenty-five cases under treatment, the most of them being of a very mild character. Since January 1, 1863, there have only been three deaths from small-pox among a population of nearly 25,000 souls; namely, one in February, and two in April. During the last week the disease appears to have considerably declined.

All the children in the public schools have been examined by the Medical officers of the parish, and many of them been re-vaccinated. The Board of Guardians also have passed resolutions to meet any emergency which may occur.

I do not think that Rotherhithe has suffered so severely during this present epidemic as many other metropolitan parishes.

XII. *St. George, Southwark.* Henry Bateson, M.D.

I willingly give all the particulars I can gather respecting the present epidemic from the materials in my possession. The time included will commence with the week ending Saturday, January 3, 1863, and conclude with that ending Saturday, May 2. During this period there have been registered 39 deaths from small-pox; of these 18 were males and 21 females. The ages reach from 10 days to 48 years: there were 9 under 1; above 1 and under 5, 15; above 5 and under 20, 7; and above 20, 8.

The district of St. George the Marytr is divided into three sub-districts, in which the deaths were distributed as follows:—In the Kent-road sub-district, 16 died out of 19,652 persons; in the Borough-road sub-district, 17 died out of 16,668 persons; and in the London-road sub-district, 6 out of 19,190 persons. Thus 0·81 died per 1000 in the first sub-district; 1·02 in the second; and in the third 0·31.

What has given such immunity to the London-road sub-district I cannot tell, as it abounds with all those causes which tend to foster and spread epidemic diseases, if not create them. The Borough-road sub-district, in which the mortality has been highest, is the worst of the three as regards its sanitary condition, having within it more courts, alleys, narrow streets, and houses unfit for habitation, as well as being more overcrowded. Six deaths were registered from small-pox in one week. Three deaths are the most that have occurred in one street, and that was Mint-street—one of the worst in the above sub-district; and two deaths in each of two other streets; hence the deaths have been pretty fairly divided. Eleven deaths happened in January, 6 in February, 11 in March, and 11 in April. Amongst the victims were a mother and infant ten days old. The majority of the cases were stated to have been vaccinated; but in coming at the truth upon this point considerable difficulty exists; for when death has taken place, and inquiry is made, the parent or relation, when the child has not been vaccinated, thinks an important duty has been neglected, and will give an evasive answer, or will not speak the truth; consequently, some are said to have been vaccinated when this is not the case. Sometimes there is ignorance about the fact; and sometimes the family have left the house. In two cases, where two of the children who had the small-pox had been vaccinated and two not, the two former died, whilst the latter recovered; and in another case, where three children suffered from this disease, the one out of the three which had alone been vaccinated had the disease the most severely, and was the only one marked.

It is perfectly clear that a single vaccination is not sufficient to ensure freedom from an attack of small-pox, and it is quite as clear, I think, that re-vaccination would; hence it only remains that this subject be strenuously urged upon the attention of the public. If *every* child was vaccinated within the time prescribed by the law, this might not be necessary, as the generating fresh supplies of the poison would cease. Apparently, however, there exists great difficulty in carrying this out, owing to obstinacy, ignorance, and other causes. The only way open for the present, then, is re-vaccination.

XIII. *Whitechapel District.*

The following are the cases of small-pox among the pauper population which have been attended by the Medical Officers of the Union, and also the deaths of all persons who have died from small-pox from October 4, 1862, to May 9, 1863. I have no means of knowing the number of cases which have occurred among the ratepayers generally.

For the week ending October 4, 1862, the Medical Officer of the Union attended three cases of small-pox, and one death in the district was recorded by the Registrar-General:—

	Pauper Cases.	Deaths in the Entire District among all Classes. (a)
October 4, 1862.	3	1
,, 11	2	1
,, 18	5	0
,, 25	8	3
November 1	4	1
,, 8	3	2
,, 15	4	1
,, 22	2	1
,, 29	3	1
December 6	6	0
,, 13	7	3
,, 20	7	2
,, 27	9	1
	63	17

Nineteen cases were admitted into the Small-pox Hospital, of which number one died:—

	Pauper Cases.	Deaths.
January 3, 1863.	8	2
,, 10	4	4
,, 17	7	1
,, 24	13	0
,, 31	11	6
February 7	10	0
,, 14	6	2
,, 21	10	4
,, 28	5	1
March 7	6	5
,, 14	10	5
,, 21	7	1
,, 28	6	0
	103	31

(a) The deaths in this column have no reference to the cases among the paupers. The deaths of paupers are, of course, included among the deaths.

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Twenty-two cases were admitted into the Small-pox Hospital, of which number two died.

		Pauper Cases.	Deaths.
April	4, 1863.	7	2
,,	11	5	1
,,	18	7	2
,,	25	10	3
May	2	14	2
,,	9	7	1
		50	11

We extract the following from Mr. Liddle's report on the health of Whitechapel in the first quarter of the present year:—"The present epidemic of small-pox has now prevailed during the last six months, 48 deaths having been registered, and 167 cases of the disease having been recorded by the Medical Officers of the Union during that time. As early as February 2 last, I addressed a letter to the guardians, drawing their attention to the fact that small pox was very prevalent in the Union. Upon the receipt of my letter, the guardians held a conference with the several vaccinators of the district upon the subject, and the result of the conference was the issuing of notices calling the attention of all persons to the penalty for neglecting to have their children vaccinated. The issuing of these notices has been the means of extending vaccination among the children residing in the district. If the public vaccinators of the district were required not only to perform vaccination at the appointed stations, but also to call at every house in their respective districts where there had been a child born within three months of such call being made, and then to offer to vaccinate the child, the usual excuses on the part of parents, such as the want of time, etc., to take the child to the public station, could not be made, and the result would be that many more children would be vaccinated. It is no doubt certainly better for the successful performance of vaccination that all children should be taken to the public station, but as all parents cannot be prevailed upon to do so, it is absolutely necessary, if vaccination is to be extended to all, that a similar mode to that generally adopted by Medical Practitioners to their private patients should be acted upon, viz., to vaccinate children at their homes. The benefits resulting from vaccination are not exclusively confined, as is often supposed, to the child successfully vaccinated, but the public generally are benefited by each successful case of vaccination, for as the greater is the security given to any child from an attack of small-pox by vaccination, so is the public rendered more safe from the ravages of the disease by diminishing the number of *foci* of communication."

XIV. *Short Report on Small-Pox in Islington.* By Edward Ballard, M.D., Medical Officer of Health.

The present epidemic of small-pox I consider to have broken out in Islington towards the close of the month of October last. The institutions, etc., from which I habitually receive returns of sickness are the Workhouse, the Infant Poorhouse, two Dispensaries, and the Pentonville Convict Prison, and, in addition to these, I have returns from eight parochial Medical Officers. Now, amongst all these, prior to the month of October, there occurred only 12 cases of small-pox during 1862. During 1861, only 27 cases altogether had occurred. In the month of October, 1862, there were 4 cases returned to me, in November 9, and in December 55. To take the deaths from small-pox. The parish embraces an area of 3127 acres, and a population at the last census of 155,341 persons. During 1861, there occurred but 6 deaths from small-pox. With the exception of 2 in March, there were no deaths registered from small-pox in 1862 until November, when 2 were registered, both cases occurring in unvaccinated children. In December the fatal cases rose to 9. It is scarcely necessary to say that I do not include in the enumeration any deaths in the Small-pox Hospital in this parish, unless of persons who have entered it from Islington. In January of the present year the cases returned to me were 25, and the registered deaths 9; in February the cases were 32, and the deaths 3; in March the cases were 40, and the deaths 13; in April the cases were 60, and the deaths 10; and in the course of the first three weeks of May the cases have been 84, and the deaths in the first two weeks 7. A large proportion of the cases are modified by vaccination. In the workhouse only one case occurred—in a tramp—and none have occurred at the infant poorhouse. Few cases occurred in the practice of private Practitioners until March, when numerous cases were reported to me, the earlier cases having been almost confined to the poor. Altogether the largest number have been met with in the lowest neighbourhoods, where at all times disease is most rife, and mortality highest. The first cases occurred in that part of the parish in which the Small-pox Hospital is situated, but almost simultaneously the disease also broke out at the opposite extremity of the parish. The largest number of cases have been in persons approaching or above the age of puberty, the young have appeared protected even by an indifferently successful vaccination. Cases of small-pox, indeed, amongst children, with one, two, or three indifferent cicatrices, are by no means rare, but the disease is so greatly modified as to be reduced to little more than a trifling ailment. One can scarcely contemplate without a shudder what this epidemic would have been but for vaccination. To decry it, as some are now doing in the public papers, is cruel and wicked. The fatal cases have been either in unvaccinated or very badly vaccinated children, or in adults whose arms have only exhibited the marks of indifferent vaccination performed in infancy, or who have never been vaccinated at all. One unvaccinated man, who died, had lived for fifty-nine years without having taken the disease before. I have yet had no fatal case registered where vaccination had been thoroughly well performed in infancy.

Preventive Measures.—As early as the month of October last year I drew the attention of the Poor-law authorities in Islington to the commencing epidemic, and on my advice they issued a circular to the public vaccinators, urging them to increased vigilance and activity in seeking out unprotected children; and, as the disease extended, small hand-bills were printed, and distributed to every family residing in any street where a case of small-pox was known to have occurred. The parochial Medical Officers were also directed to re-vaccinate all adults who were willing to submit to the operation. In consequence of these measures both the primary and re-vaccinations were enormously increased.

Where small-pox broke out, any charitable schools in the neighbourhood were visited, and the arms of the children examined. As the disease progessed during the early months of the present year, the children in private schools, and other establishments to which the public vaccinators have no access, were re-vaccinated by the Medical attendants of the institutions, etc. The Poor-law authorities decline to put into force their powers under the Compulsory Vaccination Act. For many years past this parish has had a carriage for the conveyance of small-pox cases to the Hospital; but, notwithstanding, numerous cases both from this and other parishes go there in cabs, which, on depositing their fares, immediately go upon the stand in Upper Holloway. Persons have been seen to enter such vehicles shortly after the latter have left the premises of the Small-pox Hospital. Some of the more respectable cab-proprietors in Islington, I am informed, refuse the use of their cabs for the conveyance of such cases.

The parochial officers have directions to send as many of their cases as they can persuade to go there to the Small-pox Hospital, and many have been thus accommodated. There prevails, however, a good deal of prejudice among the poor against taking advantage of this Institution, and large numbers refuse to go there, and consequently have to be treated at home.

During the past week I have had afforded me the assistance of a special vaccine inspector, a Medical man, whose duty it will be to visit all the low neighbourhoods where cases of small-pox may occur, to vaccinate all that he finds unvaccinated, to re-vaccinate all who will submit to the operation, to inspect schools, and to report to me all unsanitary conditions that he observes. The Sanitary Committee of the Vestry have determined to insist upon immediate amendment of the latter conditions, and the Poor-law authorities to receive from me recommendations for the destruction of infected bedding, etc., and for the supply of fresh articles in place of them. The contractor has orders to cleanse *daily* such of the low courts and alleys as I may place upon a special list for the purpose, and a man is engaged to see that the privies in the Irish courts are kept clean, and to disinfect them daily with MacDougal's powder.

In consequence of the great extent to which re-vaccination is now being carried on among all classes of persons, there arose great inconvenience among private Practitioners from the difficulty of obtaining lymph, and keeping up their own supply from primary cases. To meet this, after consulting with several of those in most extensive practice, I have

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arranged to receive lymph upon points from all who have primary cases, and to be a medium of communication between them and such as happen to lose their supply. By this plan no time is lost, and any Practitioner on any day that he may be in difficulty can be replenished from the lymph in my hands. The system is working well, and to the satisfaction of all parties. During the past fortnight I have thus supplied over 300 charges to the private Practitioners in Islington, several of whom have publicly thanked me for taking this step.

XV. *North District of Poplar Union, comprising Parishes of Bow and Bromley. Joint Population upwards of 40,000.* By THOMAS ANSELL, M.D., Medical Officer of Health for North District, Poplar.

IN this district I am gratified to state that small-pox—at least of a fatal character—has not prevailed extensively; sixteen deaths from that disease only have been registered during the current year. Of these, ten were never vaccinated, three died after vaccination, and three were not recorded—whether vaccinated or not.

The various parochial schools, numbering 1150 scholars, have been re-vaccinated.

Dr. Woodforde, Parochial Surgeon of the Bromley District, informs me that, out of 670 children examined by him, he found 29 unvaccinated, and about 30 per cent. of the scars of previous vaccination unsatisfactory. He also calculates that about 3 per cent. is a probable average of cases of small-pox after vaccination.

All the fatal cases above mentioned took place in that part of the parish adjoining Poplar, where the disease raged violently, and the people of the poorest class.

I would suggest that every Medical man attending small-pox cases should fill up a form similar to the following:—

Small-pox.

A.B., modified or severe. Vaccinated or non-vaccinated. Fatal or not. } As the case might be.

And would direct it to be forwarded to the Medical Officer of Health. We should thus get at some test of the preventive value of vaccination.

I may add, as a matter of curiosity, that we have an old woman here who took small-pox, having been vaccinated by Jenner himself.

UNIVERSITY COLLEGE, LONDON.

As promised in our last number, we now lay before our readers some of the remarks made by Dr. Parkes at the late distribution of prizes in this College, feeling as we do that they are deserving of the attention of every student of medicine, no matter to what school he may belong.

LADIES AND GENTLEMEN,—I am quite sure that you will permit me to offer in the name of this assembly our hearty congratulations to those gentlemen who have so distinguished themselves to-day; not merely because they have gained in honourable rivalry so many medals, but because in gaining them they must also have acquired the things which these prizes typify. They must have acquired habits of industry, accuracy of thought, excellence of memory, and, to a given extent, knowledge of their Profession. And, in congratulating them, I will also express a hope that they will consider these prizes merely as steps, not as goals; as means, not as ends; as incentives to perseverance and progress, not as signals for cessation from labour. Cessation from labour comes to no man, least of all to men of our Profession, with its incessant progress and its ever-widening area. But if there be no cessation from labour, yet as we advance labour becomes less laborious; the grooves of thought become smoother, and the habits which required emulation, and rivalry, and prizes, and medals to excite and sustain them in our youth, become a part of ourselves, and, ceasing to be labours, are transformed into pleasures. Into that career of wholesome and pleasant labour our prizemen of to-day have entered; they must hold fast by what they have won, remembering and encouraging themselves by the remembrance that the first steps of application are the most difficult, and that they have happily passed over that rugged introduction to science which doubtless has both tested and developed their resolution and their industry.

But in congratulating our prizemen, we ought not to forget the unsuccessful competitors, the gentlemen who have won no prizes. It is possible that these gentlemen will think it rather paradoxical if I congratulate them also, and will consider it no compliment to be told that they are all the better men for being beaten. But something may be said on that score. There is an old saying:—"He stands not surely who never falls;" and certainly there is no such teacher as Failure; how usefully not only in our college exercises, but throughout life, does failure come in to show us our deficiencies, and to admonish us that there is something which must be probed and mended.

Ask any man of experience what has acted most beneficially on his character, and he will refer, not to his successes, but his failures. "Sweet are the uses of adversity." And even in a failure for a college prize may arise an improvement which may act on the whole character. Let any man who has failed ask himself whether there is not something to amend; a want of industry, a want of purpose or method, an over-estimate of himself or an under-estimate of others, and if he rightly conducts and acts upon this self-examination then we may safely venture to congratulate him even on his failure.

There is, however, in every college a third class of students—here I hope a small one—who cannot I am afraid in any way be congratulated, viz., those gentlemen who have not contended for prizes at all. There are some who will not compete, either from idleness, or from fear of being beaten, or by a fancy that one subject may take up too much time, or by what they consider a philosophical contempt for such rewards. But search well into the motive for such inertia, and we shall very seldom find it a sound one. And every one should remember that the working for the prize is the real gain, not the prize itself; and certainly in the working for prizes, in the sustained industry it calls out during the whole session, in the reconsideration of all that has been gone through which it renders necessary before the day of competition, nay, even in the task of answering a number of questions rapidly in a short time on the day itself, are precious means of education which no student is wise to throw aside.

On the whole, the advantages of the prize system so preponderate over its disadvantages, that without it there would be a great falling off in the aggregate amount of learning acquired in a given session; but the full uses of the system will never be called forth until the emulation extends to the whole college; till every student competes, not with the mere wish of proving superior to his neighbours, but as a means of compelling himself to war against idleness and carlessness, and inaccuracy, and distaste, and to sustain the feeling of duty by the stimulus of an honourable emulation.

And now let me say a few words to those students, some of whom, I hope most of whom, are among the prizemen of to-day; I mean those to whom this is last prize anniversary, and who are about to pass out of these gates into the crush and turmoil of the world. They will enter in fact into another college, where education, if differently conducted, is not less real and continuous. And I believe that it may be said for our Profession that intellectually and morally it educates those who practise it as well as any other, and probably better than most. For intellectually what can be a better training for the mind than the science of our day, bold yet cautious; wide yet deep; sceptical yet believing; holding what is old, yet striving for what is new; like Janus having two faces, one looking to the past and one to the future. The true science of our day does really carry out the precept given us for a different matter, viz., "Prove all things, hold fast by that which is good." And in this proving all things lies one of those difficulties which are our best educators. It is no easy matter for the mind to hold the balance even between old and new, and to be neither too stubborn to retain, nor too rash and eager to receive. And yet this is a state of mind which we must sedulously watch and strive to acquire. And I believe that those who are leaving this college will hereafter say that the education they have received here has greatly aided them in the acquirement of this power. For it is the legitimate boast of those who administer University College that, standing on the old ways, they have yet often been the first to open fresh roads, and by happy innovations, which are not destructions, they have greatly advanced and benefited the teaching of Medical Science.

WE understand that Dr. Alex. A. Macdowall, of Helensburgh, was, on Wednesday last, elected a Fellow of the Royal College of Surgeons, Edinburgh.

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REVIEWS.

Lectures on Syphilitic and Vaccino-Syphilitic Inoculations; their Prevention, Diagnosis, and Treatment. Illustrated with coloured plates. By HENRY LEE, F.R.C.S., Lecturer on Surgical Pathology at St. George's Hospital, Senior Surgeon to the Lock Hospital and Asylum, etc. London: Churchill and Sons. 1863. Pp. 335.

"THE first edition of these Lectures was published in 1854. The distinctions between the different *modes of origin* of different syphilitic affections were then for the first time pointed out." Mr. Henry Lee must have the full credit of this important step in the acquisition of the true natural history of syphilis. "As observed in practice, the results of (syphilitic) inoculation afford considerable variety; when artificially performed they are much more uniform. Four distinct and well-marked processes may follow syphilitic inoculation: 1st. The inoculated part may become affected with the adhesive form of inflammation, in which lymph is poured out either in the substance or on the surface of the part. 2nd. The absorbents may assume an active share in the morbid process, taking up some of the infected parts, and with them portions of the syphilitic poison." This Mr. Lee calls "lymphatic absorption." "3rd. The inoculated part may, within a few days of the application of the poison, be affected with suppurative inflammation; and 4th. The morbid action may terminate in mortification." Although these processes, "essentially distinct, when once developed, usually maintain their original character until the termination of the disease," the action will, nevertheless, occasionally become changed, and this, if careful attention be not paid, may lead to an error in diagnosis. Thus "it must always be borne in mind that the character of a sore at one time is no certain indication of what it may previously have been, or of what it may ultimately become." A tendency to production of more than one morbid action may arise from a "twofold inoculation" at the same time at one spot. This summary of our author's introduction will put our readers in possession of the truths which Mr. Lee established in 1854. In 1855, M. Clerc arguing from the dogma of Ricord, then in the ascendant, that a person can have syphilis but once, announced the doctrine that the secretion from an indurated sore could not be inoculated on a patient whose system had once become syphilised. As an *à priori* deduction this was well enough, but as no cases were published, the credit of establishing the doctrine in the only way that can be satisfactory to Medical men lies again with our own countryman, who proved the fact and published in the eighteenth volume of the *Brit. and For. Med.-Chir. Rev.* (1856) the cases on which he based its truth. The present edition of the Lectures brings into a focus the results of MR. Lee's labours and experience from that period to the present time. We will endeavour to point out what some of these results are, for although they may mostly be gathered from other sources, yet the information is scattered over the pages of a variety of transactions and periodicals.

1. As to the question of unity or variety in syphilitic poison, Mr. Lee takes the view that it is not necessary to assume the existence of more than one syphilitic poison in order to account for the various kinds of sore met with in practice. It is true that the indurated sore and its modifications, a form of disease which has a long incubation, the secretion of which is not pus, but consists of epithelial *debris*, globules of lymph, more or less perfect, or disintegrated, and of turbid serum, which produces a papule, and not a pustule, on artificial inoculation, which is (after the formation of the induration) not auto-inoculable, and which is accompanied by multiple indolent enlargement of the lymphatic glands, and followed by constitutional syphilitic manifestations, is distinct in its course and results from the sore which suppurates, has not a lengthened incubation, produces a pustule when the secretion is inoculated, is throughout auto-inoculable, is accompanied by suppurative enlargement of the lymphatic glands, and is not followed by secondary symptoms. Nevertheless, he is of opinion that the poison may be one, but acting in different modes. The reason he assigns is that "it does not follow, because we can distinctly trace so many morbid processes, that there are the like number of morbid poisons. . . It is more in accordance with strict inductive science simply to describe the different *modes of action* which occur after impure contact, than to ascribe each to a different poison." As Mr. Lee wisely abstains from asserting anything more than the possibility of the unity of syphilitic poison, we must say that, while the question is *sub judice*, his hypothesis forms a neutral ground upon which all parties may meet to discuss phenomena. There is much to be said on both sides, and analogy will furnish arguments to each.

2. The diagnosis of the "suppurating sore" is not always to be made at once. It may present at its base an induration resembling that of the indurated or infecting form, and as this induration may terminate quite abruptly, it may be impossible to distinguish the character of the sore by the touch alone. This "phlegmonoid" variety is, however, to be distinguished by the purulent character of the secretion, its auto-inoculability, the suppurating character of the accompanying glandular enlargement, and by the history not giving evidence of a prolonged incubation, etc. The pus from the bubo is specific, reproducing the suppurating sore.

3. The infecting, indurated, or Hunterian sore is not auto-inoculable. But there is a stage when it is so, and that is at a period before the specific induration has formed. And there is a condition when it is so, and that is the condition of irritation, such as may occur accidentally, or be produced by the application of a blister. But the progress of such an inoculation does not resemble the results of inoculation on a patient not previously infected. There is no period of incubation, there is no induration, the spot rarely ulcerates, and, if it does, soon heals. There are some interesting statistics quoted by Mr Lee in relation to this question of auto-inoculability, which we must not omit to refer to. "In 1856, M. Fournier inoculated a hundred patients from their own infecting sores, and succeeded in his experiments once or twice only. His results were not published until 1858. M. Rollet, in his recent work, mentions having inoculated two hundred patients who had infecting sores with the secretions from their own chancres. He found that those in whom the inoculation succeeded were 6 per cent." "Now," says Mr. Lee, "Fournier's experiments and Rollet's experiments coincide in a wonderful manner with practical statistical details, as carefully observed. During the year 1855-56, I kept an accurate register of such cases, and out of one hundred that had been diagnosed as suppurating non-infecting sores, secondary symptoms followed, as far as I was able to ascertain, in two instances only. . . . The exceptions in all three series of observations may be attributed to the same cause—a *twofold* inoculation. . . . This conclusion is confirmed by the results of the inoculations. . . . The affection produced by the inoculation from the supposed indurated sores was, not an indurated sore of the same nature, but a *pustule*, the characteristic origin of the local suppurating disease."—P. 28.

4. One of the most interesting portions of Mr. Lee's book is that which discusses the pathology of lymphatic absorption, and the mode in which the system becomes infected with syphilis. The greater part of the Fourth Lecture and part of the Second are devoted to this subject, and the whole that he has written upon it deserves careful study. Admitting, as everybody now does, that the lymphatics and blood-vessels are both absorbing organs, we may briefly follow our author in pointing out in what way they act as respects the poison of syphilis. In the first place, there is the fact that lymphatic absorption really does take place in both forms of syphilis, as testified by the development of disease of the same specific nature as the original sore in the lymphatic glands; plastic effusion occurring in the enlargement accompanying indurated chancre and suppurative inflammation in that accompanying the suppurating sore. Next, there is the fact that in neither instance are the glands "of the second order" affected. The contamination does not go beyond those "of the first order." But up to them there is evidence of lymphatic absorption, in the occasional appearance of specific disease in the course of the lymphatics between the sore and the glands. Hence the poison, so far as the lymphatics are concerned, is peace arrested in its course to the thoracic duct by the first glandular structures it meets with. "A wonderful change is here brought about. The specific virulent poison, which before was liable to contaminate every living part that it came in contact with, cannot be traced beyond this point. The absorbent vessels between the inflamed gland and the thoracic duct do not ulcerate or suppurate, the glands into which they empty themselves do not become enlarged or inflamed. The influence of the poison is here then gone."—P. 30. What then becomes of it? Mr. Lee says that "neither

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observation nor experiment afford any proof that the syphilitic virus is conveyed, *as such*, through the absorbent glands, . and we cannot therefore admit that this is the way in which the system becomes infected *after* the specific primary adhesive action."—P. 84. [The italics are ours.] Granting that the veins are the media by which the syphilitic poison gets into the circulation, where does Mr. Lee consider that the venous absorption commences? at the inoculated point, or in the lymphatic glands of the first order? There is evidence of absorption in local disease of the lymphatic vessels, what is there corresponding to this in the instance of the vascular system? Is it quite inconsistent with the facts to imagine that (taking the period of incubation of indurated chancre into consideration) the poison might have passed through the first order of glands, and have been so modified there as to have become incapable of producing in other glands the specific plastic inflammation, at a period *prior* to that at which the induration takes place, either at the inoculated spot, or in the first order of glands? and, finally, on arriving at the blood, together with the process of assimilation of the lymph, it may acquire again during its reproduction in the system, or when this is completed, some of its original properties? At any rate, the words "as such" and "after," introduced by Mr. Lee into a sentence we quoted above, seem to furnish the clue to a difficulty which he himself appears to have felt. In other diseases, as the exanthemata, the period of incubation is the period of reproduction of the poison in the circulation, and this period, during which various complicated changes occur, commences from the moment that the original morbid germ gains access to the blood. It is not complete until the period of incubation is at an end. A patient who has received the poison of small-pox, the incubation of which is about a fortnight, may be vaccinated successfully at a time that reproduction of the variolous poison is going on in the system. So it may be with the syphilitic virus. The system, so far as the introduction of the poison into the blood is concerned, may be infected not *after*, but *before* the specific primary adhesive action occurs. The latter event marks a stage in, and not the beginning of, the process of infection. Let us again use the analogy derivable from small-pox. When this is inoculated, what happens? We have produced a local lesion, what Dr. Gregory calls "a hard, inflamed phlegmon," and after an interval (incubation) an eruption (differing in appearance from the first local result), the true eruption of small-pox. This is the effect of infection of the system. We do not say here that the infection occurs *after* the development of the local lesion, because the constitutional manifestations are consecutive to it. We count the period of incubation from the day of inoculation, and say that the poison then introduced has been incubating, reproducing itself till the day of eruption. Why not apply the same method of explaining phenomena to syphilis? Why not say that the fully developed syphilis is manifested by what we may be incorrectly calling the *secondary* accidents, and that the local lesion only marks *a stage* in the process? We do not wish to be understood as denying that the veins may also be concerned in taking up the poison, we only demur to what we understand to be the conclusion of Mr. Lee, that the absorbing action of the lymphatics necessarily ceases at the glands of the first order. But perhaps he does not mean to assert as much as this.

5. Syphilisation, as it is called, remedial syphilisation, is the subject of the Third Lecture, and is treated of in a masterly manner. When we hear that in Christiania and elsewhere it is the accepted method of cure in cases of secondary syphilis, and find (as we showed in a former review) that it is advocated by so distinguished a syphilographer as Dr. Boeck, no one can say that it is undeserving the prominent place which Mr. Lee has afforded it in his treatise. Mr. Lee admits that in such cases as Boeck and others record an effect is produced. It is not at all necessary to his argument to question the assertion of its advocates that the cure is more satisfactory under this than under any other method of treatment, but he does deny that in these cases the effect is produced by the absorption of the syphilitic virus and the saturation of the system supposed to occur by Sperino and Auzias-Turenne. He denies it on the ground that the absorption of syphilitic poison is marked by a well-ascertained series of symptoms, which leave no doubt as to its presence, and asks, if saturation of the system takes place, how we are to explain the seeming contradiction that the symptoms do not become worse instead of better. It is further worthy to be observed, as those will recollect who read our review of M. Boeck's work, that Boeck considers that the best matter for syphilisation is to be derived from the soft chancre; in other words, from the form of chancre which is non-infecting. But M. Boeck believes that the soft and hard chancres are the same disease in different degrees of intensity. But, will syphilisation saturate the system? If it does so in the case of a person suffering from constitutional syphilis, it ought equally to be able to do so in persons not suffering in this way. What are the facts? Mr. Lee quotes some experiments of Danielssen, who used the process in the treatment of lepers not affected with syphilis. This observer gives the history of six cases, and with reference to them says: "It appears from the above details that neither one chancre, nor two, nor three, nor six, nor thirty-six, nor one hundred and thirty-six have in the preceding cases induced secondary syphilis, and that therefore the direct operation of the inoculations has been exclusively limited to the spot where the chancres showed themselves." Danielssen, then, cleanly used the matter from soft chancres, as directed by Boeck. "If such be the case, we are justified in assuming that no greater number of chancres will produce a different result. And this is confirmed by our experience; for, with one exception, to which we shall subsequently allude, not one of these individuals, previously free from all syphilitic taint, whom I have syphilised, has been affected by secondary syphilis; nor have they shown any signs of the existence of the venereal diathesis in their systems." The exception is this,—it is such a one as serves to prove the rule, —"Syphilisation had been performed upon a leper with the virus of the soft chancre to the extent of nearly four hundred inoculations, when the secretion of an indurated chancre was accidentally inoculated. The inoculated parts healed, but a month afterwards an indurated sore appeared, followed by unmistakeable signs of secondary syphilis, showing that the previous inoculations with the chancroidal virus, which had been strictly local in their action, had afforded no protection whatever against true syphilis."—P. 49.

6. *Blood Inoculation of Syphilis.*—In an article last year upon syphilis and vaccination we withheld our assent to the doctrine that syphilis could be conveyed by the inoculation of the blood mainly on the ground that the evidence was unsatisfactory. The case was not proven. The experiments adduced by Viennois, Rollet, and the supporters of the doctrine were open to damnatory criticism. The possibility of this mode of conveyance is, however, now proved quite to our satisfaction, and we give in accordingly. All the conditions of a fair experiment have been fulfilled in that performed by Professor Pehizzari upon Dr. Bargioni. The inoculation was successful; an indurated chancre was produced, accompanied by the specific glandular enlargement, and succeeded by secondary eruption. And, in conceding this point, we necessarily also concede the probability that where vaccine and syphilis have been communicated together by vaccination, the presence of blood mixed with the lymph used may have been, as Rollet and Viennois maintain, the cause in certain instances of the conveyance of the twofold virus. Mr. Lee enters at length into the discussion of the Rivalta cases, which we made the subject of criticism, and carries the investigation to its extreme limit. We must content ourselves, however, considering the length to which we have been drawn on in this review, and because we have a good deal yet to say, to refer our readers to Mr. Lee's admirable chapters upon the subject.

7. There are in the book some acute remarks upon the influence of hereditary syphilis in preventing the inoculation of syphilis, both primary and secondary, and as modifying the course of the disease when contracted. We will quote Mr. Lee's own words:—"Among those who habitually expose themselves to syphilitic infection, it occurs every now and then that an individual is found who never has had the infecting form of the disease, and the question naturally arises, Why has he not suffered in the same way as others who have been similarly exposed? . . . If we say that a patient can have syphilis once only during his lifetime as a rule, and if we find that a certain number of children have hereditary syphilis, does it not appear probable that these children, when they grow up, would have some kind of immunity from further infection, or that, if the disease did appear again in them, it would be in a greatly modified form? . . In 1812, Dr. Ferguson came to the conclusion that syphilis had become so much mitigated in Portugal, by reason of general diffusion, or other causes, that, after running a mild course, it exhausted,

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itself and ceased spontaneously." He compared it to the exhaustion of land by cropping for the same kind of seed, while the seed will grow vigorously on another, though inferior soil. "Corresponding with this description appears to have been the effects of the inoculation of the exhausted syphilitic virus of Portugal (though evidently the same disease) into the constitution of the British or other strangers. . . The Portuguese through apathy, and at a dreadful price levied on the generations that are passed, and never, in all probability, to be redeemed by their descendants, appear to have gained a high exemption from both syphilis and variola."—P. 213, et seq. He then proceeds to quote the experience of Mr. Rose, in one of our regiments of Guards, in support of a notion that a similar cause may account for a similar modification of syphilis in some of the lower classes in this country. Mr. Rose found that he could treat such cases among the men without mercury, but that this plan was unsuccessful when attempted with the officers. Mr. Lee suggests this as an explanation of the failure of some experimenters in inoculating syphilis from secondary accidents upon persons who had never had the primary disease.

8. But we must hasten on, passing over the facts which relate to the wearing out of syphilitic protection, as conferred by infection, just as the protection of vaccine against small-pox wears out in time, to draw attention to our author's remarks upon the communication of syphilis through the medium of non-specific secretions of infected persons. Mr. Lee thus puts it: "There is reason to believe that the ordinary secretion of the body, when derived from a part in a state of increased action, or of inflammation, may produce the same effect" as "the secretions of what are usually called secondary symptoms." We cannot follow him in all the evidence he adduces on this head. The cases he adduces are conclusive, and the doctrine appears to account for those remarkable cases where syphilis has been conveyed by connection, when no local manifestation of specific disease has been discovered on examination of the suspected party.

9. Among all the modes of administering mercury in syphilis, that which Mr. Lee prefers is what he terms the calomel vapour bath. The apparatus for administering it is very simple, so that a patient can give himself his own bath. From fifteen to twenty grains of calomel only are used, but that quantity is allowed to become deposited upon the skin, and there to remain to become absorbed. It is not desirable that any great amount of perspiration should be induced. From time to time the patient may also be permitted to inhale the vapour. Mr. Lee considers that the effect of the bath thus administered, unlike that of the other modes of fumigation that have been proposed, can be regulated and controlled with great precision.

In concluding now at length our review of this book—and to satisfy ourselves we should almost have to transcribe the whole of it—we can only say that we have read it with the deepest interest. Did not Mr. Lee already hold the highest rank among British syphilographers, these Lectures alone would suffice to place him in that position.

GENERAL CORRESPONDENCE.

FARRINGDON DISPENSARY—VACCINATION OF A RICKETY CHILD TWO YEARS OLD—ON THE NINTH DAY PAPULAR ERUPTION—ECLAMPSIA—DEATH ON THE TENTH.

LETTER FROM DR. DRYSDALE.

[To the Editor of the Medical Times and Gazette.]

SIR,—The following case appears to me to present some features of interest, and I trust you may find it worthy of insertion:—

On May 9, I saw with Mr. Lowne, near Holborn, a child, aged two years, of whose case the following is an account:—

History.—The child was vaccinated on April 30. The vaccination was successful, and the vesicles appeared regularly, and progressed towards maturation. On the ninth day the vesicles were large and filled out, and there was a papular eruption over the body. At 11 a.m. on this day the fits first appeared. These fits were thus described by the father, a tailor, and rather intelligent. The child during the fit frothed at the mouth, its eyes were fixed, its jaws stiff, and it was quite unconscious. The legs, arms, and body were rigid during the attack, which lasted about one minute. The stiffness was not apparently greater on one side of the body than on the other. The child cried out before the fit came on. No clonic spasms were noticed. Of this fact I convinced myself, by varying the form of my interrogation. From 10 a.m. of May 8 until night there were only two fits; but from 10 p.m. until the following evening at 5 p.m., when I saw the child, the attacks followed each other in rapid succession, sometimes with only five minutes intervals, sometimes much longer. The child cried much, and did not sleep. It was quite conscious during the intervals. On inspection, the child was found to be rickety. The ends of the radii were large, and the other joints tumid; the lower limbs were crooked; the anterior fontanelle was open widely; the chest barrel-shaped. There was a groove on each side of the sternum, and at each laboured inspiration made by the child the softened chest walls sank in. There was no cough nor catarrh. Child had all its teeth, except the canines. The vaccine vesicles were well matured. There were two on the left arm, circular-shaped, and pearl coloured. Around each vesicle there was an inflamed ring, and a red blush and induration extended down the arm. There was also a papular eruption over the body and lower extremities. Breathing was laboured. The child died some hours afterwards, and apparently from extension of the spasm to the muscles of respiration.

It appears to me, Sir, that the above symptoms of spasmodic seizure and death were attributable to the presence of the vaccine poison in the blood of a rickety child. . . Epilepsy is frequently to be traced to the presence of some poison in the blood, such as urea, retained menstrual fluid, or syphilitic poison, when prevented from leaving the constitution by mercurials.

Writers on vaccination have pointed out the danger of non-attention to the periods of dentition. The best time for vaccinating a child is from the second to the fifth month after birth. Before this epoch, children are not liable to be attacked with rickets. Those who have observed the extreme liability of rickety children to spasmodic disease, may agree with me, that, had this child been vaccinated before the cachexia set in, it would most likely have escaped this form of death.

I may mention that I find it by no means an uncommon occurrence among dispensary patients to entertain a superstitious horror against vaccination; and thus, either to have left their children unprotected, or to have been forced into a tardy recourse to this invaluable preventive.

But we can scarcely blame the poor and ignorant in this, when we find members of the Medical Profession so ready to listen to promises of cure for small-pox from saracenia, or some other ephemeral drug, instead of insisting upon the fact, so patent to all good observers, that the present epidemic is due to the neglect of vaccination, or its imperfection.

I am, &c.

CHARLES DRYSDALE,
M.D., M.R.C.P. Lond., F.R.C.S. Eng.

HOW TO PREVENT PITTING AFTER SMALL-POX, IN A LETTER TO A PHYSICIAN FROM F. BOWEN, ESQ., M.D., ETC.

MY DEAR SIR,—With much pleasure I accede to your wish expressed this morning with regard to the means I adopt to prevent pitting in small-pox.

An incident happened to me some thirteen years ago which induced me to devote much attention to this subject ever since, not only in this country, but in some of the large continental cities.

In the year 1850, I was connected with the Marine and Emigrant Hospital, Quebec, Canada. I had been directed by the Senior Surgeon, Mr. Douglas, to puncture the vesicles on the face and neck of one of the Hospital patients then suffering from small-pox with a needle dipped previously in a strong solution of nitrate of silver. I felt sceptical as to the success of this treatment, and secretly determined to apply the needle and solution to the vesicles on one side of the face and neck only, and watch the result. I did so. The patient recovered; but the disfigurement was really frightful, for while one half of the face was deeply pitted, the other half was smooth and free from spots, as before the attack. The superintending Medical Officer was not inclined to discharge this patient, but ever and anon produced him before the class

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in the lecture-room, where he, poor fellow, was laughed at, while I was twitted. At last the man turned rusty, and threatened to do me some personal injury. To my great relief, he was induced to leave the country, not before a purse, however, had been collected for him, towards which I subscribed most liberally.

Among the many plans recommended, and all of which I have tried over and over again,—charcoal and starch and mercurial plasters; collodion; solution of india-rubber with chloroform; sulphur; iodine; nitrate of silver; down to tripe-water, much in vogue among the poor,—I have found none so effectual, none so easy of application, and none so altogether free from annoyance to the patient, as puncturing the vesicles with a needle dipped in a solution of nitrate of silver. I have used it, I may safely say, over 300 times with most satisfactory results.

1. When do I puncture the vesicles?
2. What kind of needle do I use?
3. What strength of the solution of nitrate of silver?
4. What results from this treatment?

1. About the fifth to the seventh day,—it depends on the development of the vesicles,—when the small vesicles, somewhat depressed in the middle, surrounded by an inflamed margin, and circular, can be seen on the top of each pimple; certainly before the contained matter assumes the appearance of pus. Even in the confluent forms I would puncture, and have always done so; but I cannot speak with the same confidence with regard to results as in the more common or modified small-pox. In the former cases there are generally grave and serious complications of one form or other to deal with, and which tend to an unfavourable issue of the case.

2. The kind of needle I use is the one commonly employed for twisted suture, flat and sharp at the point; it makes its way very easily, carries with it enough of the solution for each vesicle, and its shape favours a slight discharge, on withdrawing the instrument, which can be absorbed by lightly touching the part with a piece of soft cotton wool held in pliers.

3. The strength of the solution I use is ℈iss. to the ℥ of water; it is strong enough to effect the change sought to be produced; what more can be required? In twenty-four hours the result is apparent, the vesicle has dried up, no itching or unpleasantness remaining.

4. This results from the treatment; the application in the way recommended is not tedious; the nurse can do it; it does not cause the patient the slightest inconvenience, which is more than can be said of the many disgusting appliances one sees in daily use; and it prevents pitting.

I do not pretend for one moment to say that I offer a new idea to the Profession. I only wish to say, that, having tried all modes of treatment recommended, I am satisfied, after much experience in treating both rich and poor, to abandon them all in favour of puncturing with the needle and solution of nitrate of silver at the time indicated.

I shall feel glad if you will ask some of your Medical friends to try the puncturing, especially now when small pox is so prevalent in London. The plan proposed may be modified, perhaps improved upon; sooner or later, the time will come, I feel sure, when, from a conviction of the value and advantage of this mode of procedure, it will be adopted as a settled rule for future guidance.

Believe me, my dear Sir,
With great respect,
Your obliged and faithful friend,
F. Bowen.

62, Upper Berkeley-street,
Portman-square, W., May 16.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, April 1, 1863.

Dr. Oldham, President, in the Chair.

Dr. Tyler Smith presented a specimen of

TUBULAR FŒTATION WITH TWINS,

sent to him by a Medical friend.

Some discussion having arisen between Dr. Barnes, Dr. Oldham, and Dr. Tyler Smith regarding the relative ages of the twins, it was agreed that the last-named gentleman and Dr. Braxton Hicks should be asked to examine and report upon it.

Dr. Oldham was anxious to direct the attention of the Society to the possibility of performing gastrotomy in some cases of tubal pregnancy where death was about to result from internal hæmorrhage. The main difficulty was the diagnosis, which, however, in sudden tubal rupture was well marked. The danger was so great that it justified any expedient which might have a hope of success.

Dr. Barnes joined with the President as to the importance of the question. He had witnessed two cases in one month; both of them were diagnosed during life, and in one the expediency of gastrotomy had been discussed. In the early stages he thought the difficulty of getting at the sac very great, but after the third or fourth month the operation would be not only feasible but expedient.

A paper was then read by Dr. Gervis on "A Variety of Chronic Pains in the Back."

Dr. Eastlake described, in a short paper, a

CASE OF AMAUROSIS FOLLOWING PARTURITION.

This phenomenon had occurred on seven previous occasions under the same conditions, but it did not appear after the first labour. The patient was married, and thirty-four years of age. The blindness, which was total, occurred in both eyes suddenly about the third day after the birth of each child, and lasted on an average from three to five weeks. The patient had never lost more than the normal quantity of blood; she had never taken ergot; there was no suppression of the milk or lochia, nor was the urine albuminous. A careful ophthalmoscopic examination had been instituted, but the evidence adduced was entirely negative. Dr. Eastlake regarded the case as unique, and concluded his paper by stating that the only author who had described any case at all similar was Beer, in his "Lehre der Augenkranheiten."

Dr. J. G. Swayne related a case of

CÆSAREAN SECTION.

The woman operated on was a dwarf over forty years of age; her height was only four feet and half an inch, and the deformity of the pelvis was congenital. She was unmarried, and did not apply for Medical advice until the time of labour, when she was first seen by Mr. Henry Grace, of Kingswood, near Bristol, and brought by him to the Bristol General Hospital. Here Dr. Swayne saw her, and advised the Cæsarean operation, which was accordingly performed by Mr. Coe, the senior Surgeon to the Hospital. The section was made in the usual manner by an incision in the linea alba. The child was extracted alive, but the mother died forty-two hours after the operation, from peritonitis. The pelvic deformity was chiefly occasioned by the very peculiar form of the sacrum, the anterior part of which, instead of being concave, projected forwards towards the symphysis pubis, and thus reduced the antero-posterior diameter of the pelvic cavity to one inch and four-fifths. The child is now living.

Mr. Spencer Wells wished to know whether the opening in the uterine wall had been left to close spontaneously, or had been closed by sutures. He was not aware whether sutures had been used in any case, but it had struck him that the escape of blood, or of the secretions from the uterine cavity, into the peritoneal cavity might be one cause of mortality after the Cæsarean section; and if so, that sutures might be useful. It was evident that the ordinary interrupted sutures could not be used, because they would have to be left in the spots where they were applied; but it would be easy to use the uninterrupted suture, so that it might be withdrawn through the uterine cavity and vagina. It would only be necessary to leave both ends long enough, and not tie any knot. There could be no difficulty in doing this, if it were thought desirable; and it might possibly prove to be a means of lessening the mortality after the Cæsarean section.

Dr. Greenhalgh said that four cases of Cæsarean section had occurred in his own practice, besides which he had witnessed three cases in the practice of others. He spoke therefore from some experience of this formidable operation. In two of his own patients, who had arrived at the full period of pregnancy, it was necessitated by extreme distortion of the pelvis; in the one resulting from mollities ossium, who survived the operation three weeks, and then died from rupture of the transverse colon; in the other from rickets, who lived only four days. In both cases the children were born alive, and continued to live. In all the cases the uteri contracted shortly after the removal of their contents, more rapidly in

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those where the incision was made in the body, and less so in one case where the opening was effected in the neck of the uterus, on which account Dr. Greenhalgh did not approve of Mr. S. Wells' suggestion of bringing the cut edges together by sutures. He (Dr. Greenhalgh) regretted that in more than one case the operation was not undertaken until much valuable time had been lost, and until after great and ineffectual attempts had been made to deliver, which placed the patients in a bad condition for any operation, and more especially for the one under consideration. He attributed our great want of success, as compared with our continental brethren, to a want of attention to these lesser points. He emphatically expressed his opinion that no Practitioner was justified in performing this operation with a view of saving the child where delivery could be safely effected by craniotomy. Still he considered that if any patient, who had had one or more children destroyed by craniotomy, desired from conscientious motives, after having had all the difficulties and dangers to herself and child from this operation placed before her by several eminent accoucheurs, to risk this operation, with a view of saving her child, as in one of his (Dr. Greenhalgh's) cases, the Practitioner would be fully justified in undertaking its performance.

Dr. Barnes rose to make one or two observations upon the case referred to by Dr. Greenhalgh. In the view of the case and the principle of treatment which guided Dr. Greenhalgh he quite agreed. He was, however, more disposed at first to persevere in attempts to deliver the woman by the natural passages. He was chiefly influenced in this direction by the fact that the child was premature. Had the child been of full size, the idea of so delivering could not have been entertained. But he hoped that if a leg could have been seized and brought down, the body and head might have been drawn through, flattened out between the tumour and the pubic bones; and that the tumour itself, which, although very firm, was not osseous, might yield a little. In this they were disappointed. It was impossible to seize a leg. The course at first entertained by Dr. Greenhalgh, and ultimately adopted, was proved by the post mortem examination to be right. The suggestion made by Mr. Spencer Wells to sew up the wound in the uterus made in the Cæsarean section, Dr. Barnes did not approve. He thought accoucheurs would prefer to rely upon the contractile property of the uterus, to which they were accustomed to trust in the more ordinary emergencies of labour. The blood and other matters did not escape through the wound, but found a ready outlet through the cervix and vagina.

Dr. Graily Hewitt remarked that the case brought before the Society by Dr. Swayne was one which could not fail to excite a great amount of attention. There were two aspects under which it was necessary to consider this grave question—the decision as to the performance of the Cæsarean section, and which were likely to present themselves in actual practice. The first class of cases were those in which the delivery of a live child in the natural way was impossible, and the operation was had recourse to in order to save the child. In the second class of cases the operation was resorted to because delivery of the child was found to be impossible under any circumstances. With regard to the first class of cases, it was quite evident that the circumstance determining the decision would be the importance attached to the life of the child compared with that of the mother, respecting which it was well known that differences of opinion existed. This was a question which would probably still continue to be in some degree an open one. In respect to the second class of cases, in which the Cæsarean section was had recourse to for the reason that the fœtus could in no other way be extracted, he wished to make a few remarks. There were doubtless some cases in which the amount of distortion and narrowing was such that no operative attempts, however well directed, would succeed in bringing away the uterine contents; but he believed that some of the cases which had been thought hopeless, except by recourse to the Cæsarean section, would be found capable of being relieved by application of the cephalotribe. This instrument was as yet little if at all practically known in this country, but it appeared deserving of a trial, and was better adapted for breaking up the structures with which we had to deal than other instruments. He quite concurred in the observations which had fallen from Dr. Greenhalgh as to the selection of the proper time for the operation of Cæsarean section. There could be no doubt that the operation was successful in proportion as it was undertaken early; this was shown by statistics. On the Continent the Cæsarean section was more frequently undertaken. Winckel had operated in thirteen cases, of which eight recovered; this showed what might be done with the operation under favourable circumstances.

Dr. Barnes would beg to intrude once more, prompted by the remarks of Dr. Hewitt concerning the cephalotribe. He had some knowledge of the application of this instrument. In the first case of Cæsarean section which he had seen, which occurred in Paris at the Clinique d'Accouchements twenty years ago, the cephalotribe had been strenuously used all night, yet the Cæsarean section had to be resorted to at last. The deformity was not greater than in this case of Dr. Swayne's, and there was more room at the sides of the aperture of the brim. In Dr. Greenhalgh's case the application of the instrument would have been simply impossible. The cephalotribe was a bulky instrument; it took up a good deal of room where there was none to spare. He did not think the cephalotribe would prove of much service in diminishing the number of cases in which it would be necessary to resort to the Cæsarean operation.

Dr. Oldham considered it important to make the incision into the uterus as low down as possible, regarding wounds towards the fundus more dangerous than those towards the cervix. His experience of severe operative Midwifery rather led him to think that Cæsarean section might be performed oftener than had been generally deemed right.

Dr. Swayne stated, in answer to the question from Mr. Spencer Wells, that no sutures were used to bring the edges of the uterine incision together, and that entire dependence was placed on the contractility of the organ for effecting that purpose. It was generally considered that sutures were not to be used on account of the danger of uterine inflammation. Mr. Coe, however, regretted that he did not give ergot of rye previous to the operation. Dr. Swayne mentioned that just before the meeting his attention had been directed to the particulars of a case of Cæsarean operation which had been lately performed by Dr. Dyce, of Aberdeen. The woman operated on was a dwarf, and the case was in all respects similar to his own, except that the pelvis was slightly larger. In Dr. Dyce's case unsuccessful attempts had been made to extract the child before the Cæsarean section was resorted to. Dr. Swayne said that this case justified the course he had taken in at once advising the Cæsarean section, without making any previous attempt to deliver by craniotomy.

Dr. Skinner, of Liverpool, read a paper on the

GALACTAGOGUE PROPERTIES OF FARADIZATION.

He illustrated the effects by the records of eight cases, in which the secretion returned after one or two sittings. The effect was permanent, and was produced by a galvanic-coil machine, using from three to six cells of Smee's battery. The current was applied both direct from the axilla to the nipple and intermammary, for about ten minutes for both breasts, and was of no greater intensity than bearable.

A paper by Dr. Shortt, "On the Medical History of Women in Southern India," was also read.

THE PATHOLOGICAL SOCIETY.

Tuesday, May 5.

Mr. Prescott Hewett, President, in the Chair.

A report, by Dr. Wilks, Dr. Murchison, Dr. Harley, and Dr. Bristowe, was read on

DR. DICKINSON'S SPECIMEN OF AMYLOID DISEASE.

Having examined Dr. Dickinson's case of "so-called" amyloid disease of the kidney and in the brain, we find that the diseased tissues of the kidney, although not coloured blue under the combined influence of iodine and sulphuric acid, assume, when submitted to these reagents, a deep dusky reddish tint, such as is commonly observed under similar conditions in tissues affected with the amyloid disease; but we find that the tumour from the brain acquires simply the ordinary yellow colour which iodine imparts to albuminous tissues. We are of opinion, therefore, that the deposit in the kidney is undoubtedly of the "so-called" amyloid character; but we do not find any evidence from the reaction that the cerebral tumour belongs to the same class. We should add that the specimens had been kept some time in spirit, and that hence, possibly, their readiness to respond to the usual tests had become impaired.

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A report, by Dr. Peacock and Dr. Bristowe, was read on

MR. MARKHAM'S SPECIMEN OF CYST OF THE MITRAL VALVE.

In Dr. Markham's case of mitral-valve disease we recognised:—1. Great thickening of a considerable portion of the mitral valve itself, dependent on the presence of a tough, somewhat glistening fibroid deposit. 2. Continuous with the upper part of this, a quantity of dense but somewhat friable and slightly reddish coloured material; and, 3, in the lower part of this latter material a small horizontal cavity with a linear vertical section, the margins of which had a pale yellowish tint, and were somewhat pulpy. Under the microscope, the fibroid substance first mentioned was found to consist of a coarse fibroid material, which was readily swelled up and rendered transparent under the influence of acetic acid, and which then displayed in the interstices between the fibres a moderate number of elongated, but somewhat indistinct, nuclear bodies. The substance appeared to be as nearly as possible identical with that of fibroid deposits commonly found within, and on the surface of, other organs. The more friable material presented in some places a delicate but irregular fibrillated texture, closely resembling that of coagulated blood; in others, an indistinct gelatinous-looking network, such as is often observed in old clots, or in some forms of inflammatory exudation. It was studded irregularly, but nowhere thickly, with minute granules and oil-globules. Acetic acid acted on it readily, but brought no traces of nuclei into view. The microscopic structure of this material was quite compatible with its origin in mere coagulation of blood. The margins of the small cavity, and the pulp scraped from its inner surface, consisted apparently of exactly the same elements as the material just described. But the tissues were more broken down, and were intermixed with a great abundance of granular matter and of oil-globules of all sizes. The opinion at which we have arrived is, that the disease consisted originally of some fibroid degeneration or change in the mitral valve itself; that subsequently, from some cause or other (possibly, in the first instance, roughness of surface produced by disintegration), the fibrin of the blood deposited itself on the upper aspect of the diseased portion of the valve, and slowly accumulated there; and that the small cavity, like cavities so often found in old clots in various situations, was simply the result of the degeneration and breaking down of a small portion of the coagulum in which it was found.

Mr. Gay brought forward a child who had

SEVERE HYPOSPADIAS.

The penis was imperfectly developed. The urethra opened at the base of the penis. The scrotum was partially cleft, and one testis only had descended. In this, as in the other cases shown by Mr. Gay, there was no defect of development elsewhere.

Mr. Buxton Shillitoe then showed a specimen of

HYDATID FROM THE TONGUE.

The patient had had several small tumours, which extended through the whole thickness of the tongue. They were hard, but elastic.

Dr. Bristowe thought the specimen was a cysticercus, and not hydatid.

Mr. Hilton had removed three such tumours from the tongue. They were cysticerci, and not hydatid.

Mr. Wilks was requested to report on the specimen.

Dr. Bristowe then showed a specimen of

TUMOUR OF THE KIDNEY.

It was like the specimen exhibited by Dr. Dickinson at a previous meeting. It was taken from a man who was killed by an accident. All the organs were healthy except one kidney. The tumour consisted of fibrous tissue mixed with fat.

Dr. Wilks thought that such tumours were not so uncommon as was supposed; they were often called cancer. The so-called cancer of the lung often turned out to be recurrent fibroid. He believed that recurrent fibroid was just as commonly met with in internal organs as in external tumours.

Dr. Fuller then showed the

KIDNEYS OF A PATIENT WHO HAD NOT PASSED URINE FOR THIRTEEN DAYS, AND WHO HAD NO SYMPTOMS OF UREMIA.

A healthy-looking man came to St. George's Hospital, saying that for four days he had not passed any urine. He had always had good health, except that two years before he had passed some blood in his urine after a squeeze. When he was admitted into the Hospital, except that he had slight pain in his back, and had not passed urine for four days, he felt quite well. His pulse was quiet and his tongue was clean. A catheter was introduced, but the bladder was empty. For the first three days he was in the Hospital he passed no urine, and then passed about two ounces, pale, and of low specific gravity. He had afterwards pain in the loins, and passed four ounces of urine. He died suddenly on the thirteenth day, whilst sitting up in bed and talking. It was found after death that each ureter was occluded by a calculus.

Dr. Murchison showed

A PIECE OF SKIN AFFECTED WITH TYPHUS RASH AND MOLLUSCUM.

The skin was cut from the body soon after death and immersed in spirit, and showed clearly that the rash of typhus was permanent after death. The molluscum, which had affected more or less every part of the body, was in every degree of size, from a distended sebaceous follicle to a tumour the size of a hazel nut.

Dr. Murchison also showed a specimen of

OBSTRUCTION OF THE FEMORAL VEIN.

A patient, 60 or 70 years of age, was sent to the Fever Hospital for typhus. He had no very definite symptoms, and was probably convalescing. At first he went on well, when on February 13 the right leg became very much swollen, being tense and brawny from the feet up to the groin, and was red on the surface. This came on in one night. Then a tumour was discovered in the right side of the abdomen, about four inches above the pubes. It was very tense and fluctuating, and its upper margin was convex and easily defined. This tumour was punctured by a trocar, and about two pints of clear urine were drawn off. The leg diminished in size, but the patient gradually sank exhausted. At the autopsy it was found that there was a large sacculus on the right side of the bladder, and this had pressed on the veins, and thus obstructed the return of the venous blood. There was a very slight stricture of the urethra.

The President said that he had known a case in which a sacculus of the bladder, with a stone in it, was found in a hernial sac. In another case, in which a patient had had a tumour in the right iliac fossa, which was supposed to be disease of the cæcum, the tumour was found to be due to a calculus in the pelvis of the right kidney. The kidney was dragged down by the calculus.

OBITUARY.

MR. RICHARD QUILLER COUCH.

Mr. Richard Quiller Couch died on Friday, the 8th inst., from sub-acute inflammation of the lungs. He was the son of Mr. Jonathan Couch, of Polperro, the celebrated ichthyologist and naturalist, now publishing a "History of the Fishes of the British Isles." Mr. Couch was born in March, 1817, educated at Plymouth, and subsequently articled to his father, whose tastes he inherited, and, instead of being teacher and pupil, they soon became fellow-students, investigating the natural history of fishes, making observations on the crustacea, and examining the fossils of East Cornwall. Mr. Couch's researches into the metamorphoses of the crustacea were appreciated by naturalists generally, but more especially by Professor Bell, who was then engaged in writing what is now the standard English work on that subject, availing himself of the result of Mr. Couch's investigations, quoting him for many facts then new to science, and in the preface to his work bearing gratifying testimony to the originality and value of his discoveries. The geology of the eastern part of Cornwall was explored with equal thoroughness by Mr. Couch, so that he became an authority on the fossils of the entire neighbourhood. Twenty years ago he wrote the third part of "The Cornish Fauna," published by the Royal Institution of Cornwall, his father writing the first and second parts.

After passing his pupilage, he entered at Guy's, where he was alike esteemed by students and professors for the breadth and accuracy of his knowledge, and his great industry and general ability, gaining, in 1837, the medal for the prize essay for Ophthalmic Surgery, to which branch of his Profession he continued particularly attached, enjoying ever afterwards a widespread reputation as an Ophthalmic Surgeon. In 1844, he settled at Penzance, where he gained a large and respectable practice. He was at once made one of the Secretaries and

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Curators of the Natural History and Antiquarian Society, for which he wrote a variety of papers on British fishes, crustacea, and kindred subjects. He became a member of the Royal Geological Society of Cornwall, then Curator, and subsequently Secretary and Curator, contributing to its *Transactions* many valuable papers, and annually writing an elaborate report of the progress made in examining the geology of Cornwall. As a proof of the repute Mr. Couch enjoyed as a man of science, and a naturalist especially, we may state that when the late Prince Consort printed for private circulation "The Natural History of the Dee Side," three copies only found their way into Cornwall, two of which were sent to the Couch family; one to Mr. Couch, of Polperro, another to Mr. R. Q. Couch, and the third to the Royal Institution.

Mr. Couch was a member of the town council and alderman of the borough, and would soon have been mayor.

As President of the Penzance Institute he delivered numerous able and interesting lectures on scientific and general subjects, and was an authority on everything relating to the county— its antiquities, mining, fisheries, and natural history. His publications on the diseases and mortality of miners were elaborate and striking, the results of many years' careful study, and probably did much towards creating the present commission on mining, before whom he gave valuable evidence. His multifarious knowledge on science, literature, and the arts, was such as seldom falls to the lot of one man, and he was as generous in imparting as he was able in acquiring it. His writings were highly appreciated in the United Kingdom and America, and he was held in high esteem by men of science on the Continent of Europe. The deepest sorrow is expressed for his loss.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary Examinations for the Diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 19th inst., viz.:—

Alfred Sisson, M.D. St. Andrew's, Leicester, Charles White, Newbury, Berkshire, John Chaundy Clarke, Brill, Bucks, Robert Thomas Nichols, M.D St Andrew's, and L.S.A., Greenwich, William Jones, Carmarthen, and Roderick William Henderson, Lower Halifield, Middlesex, students of Guy's Hospital; Robert Maxwell Johnson, Kaffraria, Joseph Brampton Wright, Great Yarmouth, Sagar Veevers Smirthwaite, Burnley, Lancashire, and Evan Thomas, Liverpool, of Edinburgh; Edward Mahony, L.S.A., Richmond-road, Dalston, Samuel Jones Gee, M.B. Lond., Oxford-street, George Miles, Gillingham, Dorsetshire, and David Thomas Williams, Llangistho, Cardiganshire, of University College; Tregenna Biddulph Goss, Newington-place, of the Middlesex Hospital; Charles John Myers, Tottenham, of Charing-cross Hospital; Louis Augustus Norgate, East Dereham, Norfolk, of St. Bartholomew's Hospital; John Mathews, Brecon, S. Wales, of King's College; Brownlow North Hyatt, Shepton Mallet, of the Westminster Hospital; Henry Hammersion Burford, Hamilton-terrace, St. John's-wood, of St. Mary's Hospital; William Jones, Pwllheli, Carnarvonshire; David Jones, Bala, North Wales.

Admitted on the 20th inst.:—

Charles Henry Battersby, Dublin, William Robert Thomas, Manchester, David Evans, Barmouth, North Wales, and Anthony Maun Hawkes, Gloucester-street, Queen's square, students of the Dublin Schools; Thomas Charters White, Upper Eccleston-place, Belgravia, Arthur Ernest Adamson, Dublin, Alfred John Matthew, London road, St. John's-wood, and Henry Law Kempthorne, Wadmore, Somerset, of King's College; William Frederick Butt, Gloucester, and William Henry Dison Menco, Cambridge, of University College; William Profit Dukes, Brixton, and Charles Richard Price, Bayswater, of the London Hospital; Maurice Cohen Rogers, New Burlington-street, and Thomas Langston, Manchester, of Charing-cross Hospital; Henry Robert Davis, Addison road, Notting-hill, of the Westminster Hospital; Frederick Lawton, Chiddingfold, Surrey, of Guy's Hospital; William Coleridge Kiernander, Calcutta, of St. Bartholomew's Hospital; Thomas Henry Goodair, Hull; John Nicholson, Silloth, Cumberland; John Douglas Lawrie, Bradford.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, May 14, 1863:—

Albert Edward Boulton, Horncastle; Alfred Thomas Radcard, Bexhill; James Atkinson West Spence, Bedale, Yorkshire; George Robert Norris, King's College; Charles Perks, Queen's College, Birmingham; William Artley Sherratt Dykes, Londesbrough, Yorkshire; George Clapperton, Lower Broughton, Manchester; George Hurlstone Elliott, Chichester, Sussex; Samuel Hall, Belper, Derbyshire; Thomas Starbuck Woolley, Codnor, Derbyshire.

The following gentleman also on the same day passed his First Examination:—

Henry Edward Armstrong, Newcastle-on-Tyne.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BOODHURST, BERNARD E., F.R.C.S. Eng., has been appointed Assistant-Surgeon to St. George's Hospital.

BROWN, DAVID DYCE, M.A., M.D. Aberd., has been appointed Assistant House-Surgeon to the South Staffordshire General Hospital, Wolverhampton.

CAYLEY, WILLIAM, M.D. Lond., has been appointed Superintendent of Post-mortem Examinations at the Middlesex Hospital.

CLARKE, A. CARSON, M.D., has been appointed Resident Medical Officer to the New Workhouse, Crumpsall, Manchester.

COWAN, JOHN B., M.D. Glasg., has been appointed Professor of the Practice of Medicine in Anderson's University, Glasgow.

DOBBIE, ROBERT, M.D. Edin., has been appointed Surgeon to the County Prison, Ayr, Scotland.

EDWARDS, A. M'KENZIE, F.R.C.S. Edin., has been appointed Assistant-Surgeon to the Royal Infirmary, Edinburgh.

LATHAM, PETER W., M.B. Camb., has been appointed Physician to Addenbrooke's Hospital, Cambridge.

MCLINTOCK, JOHN R., M.B. Aberd., has been appointed Resident Medical Assistant to Murray's Royal Institution for the Insane, Perth.

ORD, GEORGE R., M.R.C.S. Eng., has been appointed Surgeon to the Royal Asylum of St Ann's Society, Brixton-hill.

PADLEY, DR. GEORGE, has been elected Physician to the Swansea Infirmary

PROSSER, THOMAS, F.R.C.S. Eng., has been elected one of the Surgeons to the Monmouth Dispensary.

STARLING, J., L.R.C.P., has been appointed Medical Officer to the Chelsea, Brompton, and Belgrave Dispensary.

WILLEY, H., M.R.C.S. Eng., has been elected House-Surgeon to the Poplar Hospital.

DEATHS.

ATKINSON, JOHN, at Kilham, Yorkshire, on May 10, aged 62.

BIRCH, JOHN, M.R.C.S. Eng., at Portland-street, Manchester, on May 3, aged 35.

CLARKSON, JAMES, J.R.C.S. Edin., at New Zealand, on board H.M.S. *Orpheus*, Assistant-Surgeon R.N.

CLIFFORD, ROBERT, M.D., at Brooklyn, New York, late of Dublin, aged 63.

CUTFIELD, ALFRED BAKER, M.D. Aberd., at Deal, Kent, on May 11, aged 47.

FIELD EDWARD, M.D., J.P. of the Oaks, Framlingham, Suffolk, on May 10, late Royal Artillery.

HILLIARD, DANIEL, L.R.C.S.I., at Balmullin, Tralee, County Kerry, on May 7.

MCGREGOR, J. BONAR, L.R.C.S. Edin., at College-square North, Belfast, on May 6.

POWER, JOHN HATCH, M.D. Glasg., at Harcourt-street, Dublin, on May 14, aged 56.

SIBBALD, GEORGE, late of the Royal Navy, at Argyle-square, Edinburgh, on May 4, aged 78.

THE Peabody Trustees are going to build in Victoria-street, Holborn-hill.

WE learn that a testimonial to Dr. Budd will be presented on Saturday (this day), at four o'clock, at King's College.

WE learn that two persons at Leith have been mulcted in £12 damages, for injuring a person's health by mesmerising him.

WE are glad to learn that Dr. Priestley, who has recovered from a severe attack of diphtheria, is wisely going abroad for a few months, before resuming practice. Dr. Priestley shows his long-sightedness and prudence in thoroughly recovering his vigour before he enters on the arduous duties of his Professorship and private practice.

ACADÉMIE DES SCIENCES.—Admiral Fitzroy has been elected Corresponding Member in the section of Geography and Navigation in the room of Sir James Clark Ross, by the suffrages of thirty-nine of the forty-five voters who were present. The other candidates were Dr. Livingstone, Captain MacClure, and Admiral Washington.

WE are glad to see that the Liverpool people are testing the qualifications of one Mr. Thornton Jordan, M.D., a gentleman who practises in the "nervous debility" line. He has been summoned before the magistrates, but the case was dismissed in consequence of the absence of the person who prosecuted. We hear, however, that a fresh summons is to be taken out.

SALE OF DISEASED MEAT.—At the Central Criminal Court, on Saturday, the 16th, a butcher named Underwood was sentenced to three months' imprisonment with hard labour for sending to Newgate-market 300 lbs. weight of beef, well knowing the same to be unfit for human food.

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THE ROYAL MEDICAL BENEVOLENT COLLEGE DINNER.—The total amount of subscriptions announced in the room was about £970. The following is a statement showing the totals of the ordinary income and expenditure of the Royal Medical Benevolent College for the year 1862:—Annual subscriptions, £3114; donations, £1006; dividends, £168; school payments, £5052.—Total, £9340. Ordinary expenditure, £8638.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—Dr. Corrigan, President of the above College, received the Fellows and Licentiates of the College, and a large number of other visitors, at a *conversazione* at his residence in Merrion-square, on Saturday evening, the 16th inst. Among those present on the occasion were the Right Hon. the Lord Chancellor of Ireland; the Right Hon. Joseph Napier, ex-Chancellor; Sir Bernard Burke, Ulster King-at-Arms; Dr. Stadfeldt, of Copenhagen, etc.

UNIVERSITY OF ST. ANDREW'S.—We are sorry to have to announce the retirement of Dr. Day, on the ground of ill health, from the chair of Chemistry and Anatomy in the United College, St. Andrew's. The old students and graduates of the University will hear of Dr. Day's resignation with great regret. The appointment of Dr. Day's successor is vested in the University court.

MISS ANNIE RUSSELL.—At the Court of Bankruptcy, on May 15, Miss Russell, the defendant in the case of Russell *v.* Adams, who had declared herself bankrupt on being arrested for £315 costs, incurred by Mr. Adams in defending the action, applied for her release from custody. Mr. Commissioner Fane characterised the case as "monstrous," and said that he should not release her until she had suffered four months' imprisonment. On the removal of the bankrupt, the Commissioner added with a smile—"I hope she will not sue me."

DEATH OF DR. JOHN HATCH POWER, F.R.C.S.I.—It is with very sincere regret we announce the death of Dr. Power, which took place on Thursday, the 14th inst., at his residence in Harcourt-street, Dublin. For many years he ably filled the chair of Anatomy in the Royal College of Surgeons in Ireland; and on the lamented death of Dr. William Porter he was appointed his successor as Professor of Surgery. Dr. Power was an accomplished Surgeon. His valuable work on the "Surgical Anatomy of the Arteries" gave him a widely-extended fame, and his kind, courteous, and gentle manner won for him many friends among his Professional brethren, the students, and the public, by whom his unexpected death will be deeply deplored.

FEIGNED LAMENESS.—On Friday, the 15th inst., a private named Smith, of the 5th Fusiliers, was drummed out of his regiment. Smith had been for some time in Hospital for treatment of rigidity of the knee. The Medical Officers, believing that his lameness was feigned, administered chloroform, and the knee was instantly and easily bent. He was tried by court-martial, and sentenced to be expelled the army, and to undergo six months' imprisonment. During the whole proceedings Smith inflexibly maintained his composure, and persisted in his pretence that he is lame.

HEALTH OF SCOTLAND.—The monthly return for the eight principal towns of Scotland shows that small-pox has now almost died out in Edinburgh, but has given some signs of becoming epidemic in Greenock. That formidable disease, diphtheria, is on the increase, and in the month of April caused 43 deaths in the eight towns, their aggregate population being less than a third of the population of the London of the Registrar-General. The deaths from small-pox in the eight towns in April were only 20. Of the 2173 persons who died in the month, half were under five years of age. The meteorological returns for April show a month with south-westerly winds prevalent, and much moisture both in humidity of the air and depth of rain.

ETHNOLOGICAL SOCIETY, MAY 19.—GENERAL ANNIVERSARY MEETING.—John Crawfurd, Esq., President, in the Chair. The following were elected office-bearers for the ensuing year:—*President*—John Lubbock, Esq. *Vice-Presidents*—B. Botfield, Esq., M.P.; John Crawfurd, Esq.; Robert Dunn, Esq; Lord Talbot de Malahide. *Hon. Treasurer*—F. Hindmarsh, Esq. *Hon. Secretaries*—Thomas Wright, Esq.; F. Galton, Esq. *Hon. Librarian*—L. J. Beale, Esq. *Council*—Luke Burke, Esq.; Professor Busk; T. F. D. Croker, Esq.; Sir A. W. Clavering, Bart.; H. Christy, Esq.; J. Dickinson, Esq.; T. Hodgkin, Esq.; Professor Huxley; David King, Esq; Malcolm Lewin, Esq.; Joseph Mayer, Esq; W. Napier, Esq.; C. R. Des Ruffières, Esq.; E. O. Smith, Esq.; S. R. Solly, Esq.; W. Spottiswoode, Esq.; Dr. Tuke; Stephen Ward, Esq; S. Wood, Esq.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.—The seventy-fifth anniversary of this excellent Society was celebrated on the 20th inst. at the Albion Tavern. Mr. Stone occupied the chair, and was supported by the Hon. George Denman (the grandson of Dr. Denman, one of the founders). Mr. Baillie (son of Dr. Matthew Baillie, the celebrated President of the College of Physicians), Dr. Watson, Sir Charles Locock, Sir W. J. Fisher, Dr. Babington, Dr. Pitman, and a large number of the most distinguished of the metropolitan Profession. The evening passed off in a very agreeable manner, and donations to the amount of £300 were announced.

SIR B. BRODIE'S SURGICAL WORKS.—We are glad to hear that the works of the late eminent Surgeon will be shortly re-published. Mr. Charles Hawkins is engaged in the task of selecting and editing these. The long period during which Mr. Hawkins enjoyed a connexion with the late Sir Benjamin, and the access which he has had to his various manuscripts and papers, afford some guarantee that the reproduction of these important contributions to Surgical science will be judiciously and adequately executed.

MEDICAL PROFESSION IN THE CANTON OF ZURICH.—The population of this Canton in 1860 amounted to 247,668. The number of Physicians is 181, *i.e.*, 1 to every 1478 inhabitants. There are also 309 Surgeons of the lower class, or 1 to 866 inhabitants; 1 Apothecary to 9559 inhabitants; 1 midwife to every 661. Dividing the 405 midwives by the number of children born, which in 1861 was 8084, there would be but 19 births for each.

PESTILENCE IN INDIA.—The following is extracted from the letter of the Calcutta correspondent of the *Times*, dated April 9:—"The country of Jessore, on the confines of which the Ganges loses itself in those innumerable creeks which constitute the rich Sunderbund marshes, is well known as the source of that cholera which in 1817 infected Lord Hasting's army, and then became, for the first time, the scourge of Europe. In the same country a pestilence like the Egyptian plague, generally preceded by cholera, has long been endemic, and during the last three years—since June, 1860—has spread all round Calcutta and along the line of the East Indian Railway to Burdwan. It has slain no less than 40,000 victims, or 60 per cent. of the whole population affected. By dispensaries and native doctors, Government, always benevolent, in vain attempted to arrest it, but last November, with the last fall of rain, it spent its fury. For miles whole villages are abandoned, and there were none left to bury or burn the dead, whose corses still pollute the air. The report of Dr. Elliott, appointed to investigate the epidemic, reveals horrors which even the technical language of the Medical man does not modify. All is attributed to malaria, and water so filled with decaying organisms that an oily scum floats on its surface. A Bengalee village is always covered with the densest vegetation, for the sake of privacy and fruit, and is destitute of the simplest means of conservancy. Orders have gone forth for the clearance of jungle and the filling up of pestilential pools, but the people are apathetic and hate cleanliness, and probably the next rainy season, in June, will see a recurrence of the plague, described as a remittent, congestive fever, which carries off the victim in periods of from five hours to fifteen days. Fortunately for the tropics, where vegetation is so dense, the great heat destroys or checks malaria; but the four months of rain are deadly."

PROFESSOR SIMPSON, of Edinburgh, has just left Paris, where he has been staying for the last ten or twelve days. He devoted a large portion of his time to visiting the numerous public Hospitals and private "cliniques" for which this capital is so famous. His presence in these institutions created an immense sensation. By the leading Surgeons and Physicians he was received with much courtesy and attention, while by the students he was regarded as a veritable "lion," all present being anxious to catch a glimpse of, and to derive information from him. The child-like simplicity of Dr. Simpson in his Professional researches is very remarkable. Unlike too many of his *confrères*, at least on this side of the channel, his entire bearing is characterised by a total absence of anything like "scientific pride," while his bland, yet quiet and earnest manner, readily conquers the esteem and admiration of all.

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who come in contact with him. On more than one occasion the Professor had an opportunity of showing his peculiar method of putting patients under the influence of chloroform; this we were glad to see, as it has often occurred to us that chloroform is carelessly, clumsily, and very imperfectly administered in France generally; indeed, the abolition of pain, the real object of this most invaluable agent, and one of the scientific glories of the present century, is, through the improper application of the anæsthetic, not accomplished; we are very much mistaken if a similar impression was not made on the mind of Dr. Simpson himself during his stay in Paris. The Doctor, both by precept and by practical demonstration, took great pains to remedy this crying abuse of an agent so intimately associated with his own name, and we hope his remarks may produce the amount of success they are so justly entitled to. Professor Simpson exhibited a great number and a great variety of instruments, obstetrical and surgical, many of them his own invention; and he not only fully explained the peculiarities of their mechanism, but also showed the manner of their application. The greater part of these instruments were greatly admired even by our French brethren. The leading instrument makers of the capital, who, in France may be regarded as hardly of less importance than the Hospital Surgeons themselves, listened to Dr. Simpson's explanations with much interest and attention. The instruments in use here were minutely examined by Dr. Simpson, and their application keenly scrutinized.

BOOKS RECEIVED.

Fifth Annual Report of the General Board of Commissioners in Lunacy for Scotland.

*** The enormous amount of labour, thought, and material buried in these blue-books is absolutely lost on the class who are most fitted to profit by them. Uninviting appearance, painfully elaborate tables, and rigorously business-like style are quite enough to deter a Professional man from assailing them, unless he be the owner of an asylum that has been subjected to criticism, or a junior member of a statistical society anxious to distinguish himself. The present Report, besides its numerical information, from which we learn that the total increase of recognised lunatics during the past year in Scotland has been only 71, furnishes, in the "Entries made by the Commissioners in the Patients' Books of Asylums and Poorhouses," a mass of facts to be hereafter of the greatest value as authentic pictures of the hygienic and moral treatment of insanity in our own times, many of which will speak more forcibly in favour of the civilisation of the nineteenth century than even railroads and ironsides. What would kind hearted Bailie Nicol Jarvie have thought of bagatelle-boards, bowling-greens, and periodical literature provided within the precincts of Glasgow City Poorhouse for pauper lunatics?

Zur Diagnostik und Behandlung der Chronischen Laryngitis. Von Dr. H. Vogler. Berlin. 1863.

Notes on the Treatment of Continued Fevers, and other Acute Diseases. By T. W. Belcher, M.A. and M.D. Dublin: Fannin and Co. 1863.

Journal of the Workhouse Visiting Society for May, 1863. London: Longman and Co.

Outlines of a New Theory of Muscular Action. By the Rev. Samuel Haughton, M.D., F.R.S. London: Williams and Norgate.

The Dublin Quarterly Journal of Medical Science for May, 1863. Dublin: Fannin and Co.

Beiträge zur Casuistik der Melliturie. Von Prof. Dr. J. Seegen. Berlin, 1861.

On Diseases of the Heart and Great Vessels. By Henry William Fuller, M.D. Cantab. London: John Churchill and Sons. 1863.

Practical Lithotomy and Lithotrity; or, an Inquiry into the best Modes of Removing Stone from the Bladder. By Henry Thompson, F.R.C.S. London: John Churchill and Sons. 1863.

Reports in Operative Surgery. Series the Eighth. By Richard G. Butcher, M.D. Dublin: John Falconer. 1863.

Practical Advice to Amateur Photographers. By Henry Matheson. London: James How. 1863.

Studies in Physiology and Medicine. By the late Robert J. Graves, F.R.S. Edited by William Stokes, Regius Professor of Physic in the University of Dublin. London: John Churchill and Sons. 1863.

Fifth Annual Report of the General Board of Commissioners in Lunacy for Scotland. Edinburgh. 1863.

Dentition and its Derangements. By A. Jacobi, M.D. New York: Baillière, Brothers. 1862.

The Natural Laws of Husbandry. By Justus Von Liebig. Edited by John Blyth, M.D. London: Walton and Maberly. 1863.

The Causes and Treatment of Imperfect Digestion. By Arthur Leared, M.D. Third Edition. London: John Churchill and Sons. 1863.

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29 693 in.
Mean temperature	52 8°
Highest point of thermometer	61·5
Lowest point of thermometer	42·2
Mean dew-point temperature	46·3
General direction of wind	S W.
Whole amount of rain in the week	0 50 in.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Inquirer.—Dr. Kidd promises a reply next week.

Who to Consult shall be noticed in our next. It appears to be a miserable attempt to injure the honourable and well-informed General Practitioner, and to puff the book-making, case-forging, advertising specialists.

Veritas points out the frequency of disgusting advertisements in the American newspapers, promising the relief of *female obstructions*, etc. etc. The ugly part of it is, that one of the worst of these advertisements proceeds from a She-Physician. If the Americans go on fighting, they will not want to limit the number of their offspring.

We regret that we cannot publish anything more with regard to the Fowler and Mayne controversy.

Wronged.—1. We consider that every Medical man is bound to give his opinion to the person who consults and pays him. 2. If a Medical man is employed by A. B.'s wife's mother, he will naturally give his opinion to the wife's mother, and will act upon his own discretion as to any replies he may choose to make to questions from the husband. 3. According to the facts put before us, the vaccination could not have been the cause of syphilitic infection of the child, for secondary syphilis would not break out three days after vaccination. 4. From the report given, it would appear that the child's malady *was* syphilis. 5. Also, there can be no doubt that, on December 20, 1861, the Surgeon who examined the wife found warts, excoriations, and other signs of diseases which are usually communicated by infection during connexion. 6. There is nothing in the dates given by *Wronged* which negatives the notion that the wife may have contracted her illness in October, although she made no complaint till the end of November. 7. The ocular inspection by the Surgeon who was sent for by the wife's mother on December 20, 1861, was quite proper and necessary. 8. If, as *Wronged* says, he never had disease himself, he clearly could not have given it; but as to how the wife got it, this is a question upon which we have no other evidence, and will not volunteer an opinion. 9. The Surgeon who finds syphilis in the wife of a man who left her six weeks before, and who is employed by the wife's relatives, may use his own discretion as to advising that the fact shall be communicated to the husband or not. It is a question of general discretion, not of Professional conduct.

Queensland.—Another Andrew Battell.—A white man named James Morrill, a native of Maldon, in Essex, has just been discovered in the Burdekin district, having lived for seventeen years among the aborigines of the north without seeing a white man. He was wrecked in March, 1846, on the Horse-shoe Reef, near the entrance of Port Denison, and escaped in a boat with the captain and other passengers. They drifted northward for many days, and at last were thrown on the coast. All but Morrill soon died. His long residence among the blacks had not caused him to forget his native tongue. He is at present in Brisbane.

The Discoverers of the Source of the White Nile.—Sir R. Murchison has announced in the *Times* that Consul Petherick, who was supposed to be dead, has effected a junction with Captains Speke and Grant at Gondokoro, on the White Nile, on the 23rd of February. He writes:—

"This discovery of Speke and Grant, by which the southernmost limit of the basin of the Nile is determined to be four degrees south of the equator, is the most remarkable geographical feat of our age, and is, indeed, an achievement of which all our countrymen may well be proud."

Flogging.—A respected provincial Surgeon thus writes to the *Standard*:—

"I am an old gaol Surgeon, and I notice with much regret the progressive increase of crime. I am an ardent admirer of the present system of prison discipline, as far as regards 'separate confinement,' but I believe that the good which is thus obtained is more than counterbalanced by the almost entire discontinuance of corporal punishment. There is nothing which a man or a boy dislikes so much as flogging, and I firmly believe that if the prisoner who is now sentenced to some years of transportation or penal servitude had as many months of hard labour in his present gaol, with a flogging once a month, the decrease of crime would be immense. It might be made known to the said prisoner that if he is ever re-committed he will be flogged twice a month."

Erratum.—P. 523, in the announcement respecting Dr. Jenner, for *statements* read *statement*.

Marriages of Consanguinity.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have just been reading Dr. Gilbert W. Child's most excellent and interesting article on "Marriages of Consanguinity," which appeared in your Journal of April 25. I beg to convey to him, through your pages, a fact with regard to breeding in-and-in in an isolated neighbourhood which was brought to my notice by a friend. A farmer in Essex started with a most excellent and healthy breed of pigs, from which he continued to breed from one sire for some years, until at last one of his sons took his place, and did duty towards perpetuating his species through his sisters, and afterwards his daughters, until at last they became so deteriorated in quality and appearance as to convey to one's mind—had it not been known that not the slightest effort at selection had ever been made to improve the stock from their common parentage—the absurdity of breeding in-and-in. These pigs, about forty in number, were lame and rickety, and had a very foolish, idiotic-looking countenance; indeed, their conduct and appearance were more like drunken pigs than anything else. I do not know, Sir, if you have ever seen pigs in an inebriated state, but I have—produced by eating the pulp of the apples that had got into a state of fermentation, after the juice had been expressed from them for

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purpose of making cider—and very grotesque, stupid, though, at the same time, humorous and pot-valiant animals they are when under the influence of that which makes them tipsy. I think the case of these pigs shows, among many others, that when any one has recourse to breeding in-and-in, some, indeed great, attention should be paid in selecting the most healthy of the stock for the purpose, at the same time not disregarding their general good appearance, and that there should not be any deviation from any of the characteristics necessary to secure a healthy progeny for all time. I am, &c.

Piccadilly, May 12. H. Hodson Rugg, M.R.C.S.E.

Dr. C. Murchison's Work on Fever.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—My attention has been directed to a misprint in my work on Fever. At page 471, where the characters of the eruptions of typhus and enteric fever are contrasted in a tabular form, the distinguishing characters under the head of No. 8, have been accidentally printed in the wrong columns. It is the eruption of typhus which appears on the fourth or fifth day of the fever, and that of enteric fever which rarely appears before the seventh day. Although these facts are clearly indicated at pages 117, 131, 457, and 470 of the work, a casual reader might carry away an erroneous impression from merely referring to the table in question. As the point is of some importance, I beg those of your readers who possess the book to make the necessary correction. A note pointing out the error will be inserted in all copies of the book sold after this date.

May 18. I am, &c. Charles Murchison.

Junior Middle class and Preliminary Professional Examinations.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—May I ask through your columns the meaning intended to be put on the directions of the General Medical Council of Education on the following subject, viz. :—"From and after the 1st January, 1863, certificates of having passed any junior middle class examination will not be received, Latin not being made compulsory." Does this mean that junior middle-class examinations passed before January 1, 1863 will be received; but that such examinations passed after January 1, 1863, will not be received? This is an important question; for I am myself aware of many young men who have not yet commenced their London studies, but who have passed a junior middle-class examination, with a view that such an examination would clear them of all future preliminary examinations by the different examining bodies. In most cases these young men did pass in Latin. If the Secretary or Registrars of the different examining bodies would kindly explain this matter they would oblige many, and especially

Yours, &c. Medicus.

The Army Medical Examinations.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Your Correspondent, "Paterfamilias," advocates the system of holding examinations for degrees, etc., sessionally. He founds his argument on the fact of very few memories being retentive enough to allow of a satisfactory examination, at one time, upon such an extensive range of subjects as the Examining Boards require. If this be true regarding University and College of Surgeons Examiners, how much more so in the case of the Army Medical Examining Board. And, indeed, he adduces in support of the sessional system the non-proficiency of the candidates at the recent examinations of that Board.

The practical deduction from the above statements is this,—viz., that candidates are required to get up for examination a mass of knowledge which the memory no longer retains after the object has been gained for which the cramming was instituted; so that it is much better to go up for the public service examinations at once upon leaving the schools, with the crammed memory still retentive, but with very little knowledge of what constitutes the real practice of the Profession, than to go up with the wider views and the more enlarged experience gained by personal observation during a year or two spent in general practice.

In order to pass the Examiners, cramming is now the student's only resource; and very systematic that cramming must be to master such a range of subjects as was, in February last, presented to the candidates for admission into the Medical service of Her Majesty. There are but few Medical men who could have passed a satisfactory examination in all the branches, however much individuals might excel in particular subjects.

I am not one of those who believe in the ultra wretched condition of the Army Medical officers. No body of men exists without its grievances, real or fancied; but—and this is not egotism—I do object to a system of examination and Examiners by which those best crammed are admitted, and really good men are kept out of the service.

I am, &c.

Scotland, May 11. One of the Thirty-one Rejected.

The Effects of the Calabar Bean.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The perusual of Mr. Soelberg Wells' paper on "The Effects of the Calabar Bean on the Accommodation of the Eye and on the Pupil," has afforded me great gratification, as it fully corroborates all my views regarding the effects of the bean and its useful application. There is one effect noted by Mr Bowman as having been produced by it which I have not perceived. I refer to astigmatism, which, however, I think may possibly be due to the more powerful action of the solution on that part of the ciliary over which the drop is placed. This theory receives some confirmation from an irregularity in the contraction of the pupil (heart-shaped), reported by Mr Wells as occurring in the sound eye of his patient after the application of the bean.

As I believe many are at present experimenting with this new remedy, I take this opportunity of mentioning that I found the watery solutions, or, more strictly speaking, suspensions of the spirituous extract that I first employed, soon to become decomposed and turn foetid. In consequence, I have now substituted syrup as a suspensory medium, which I hope will prevent the occurrence of decomposition. I previously tried glycerine, which answered well, but its application appeared to cause considerable irritation, on which account I had recourse to syrup. Mr. Hugh Neill, of Liverpool, having perceived the tendency of the aqueous suspensions to undergo decomposition, has also been independently led to the employment of glycerine. I may here add that I have found the capsule of the bean quite inert as regards action on the eye.

I have entered more fully into the consideration of the foregoing points in a "Note on the Calabar Bean," which is to appear in the June Number of the *Edinburgh Medical Journal*. In the meantime, I may refer to an incident that occurred to me a few days ago, as illustrative of the beneficial action of the bean. One day last week, on returning home in the afternoon, and taking up a book to read, I found, to my alarm, that the type appeared very indistinct, to such an extent as to prevent my reading with any comfort. Upon further trial, I discovered that the defect lay in my right eye, and that with the other I could see perfectly distinctly. An explanation of the occurrence was at once obtained on an inspection of the eyes,—the right pupil being found widely dilated, which I readily ascribed to the accidental introduction of atropine, a solution of which I had had occasion shortly previously to apply to a patient's eyes; a little of this solution had, no doubt, remained on my fingers, and been conveyed by them to my right eye. I at once applied a drop of the syrup of the extract of the bean, with the effect, after a few minutes, of enabling me to proceed comfortably with my reading. One other application was necessary after the lapse of a few hours, as the effects of the first began to pass off. I am, &c.

4, Maitland-street, Edinburgh, May 19. D. Argyll Robertson.

COMMUNICATIONS have been received from—

Dr. Bateson; Dr. Gibbon; Mr. C. Carter Blake; Dr. S. W. D. Williams; Dr. Charles Kidd; Apothecaries' Hall; Dr. Fowler; Dr. N. J. Haydon; Dr. W. Murdoch; Mr. John Liddle; Mr. Orton; Inquirer; Dr. E. Hughes; Society for Relief of Widows and Orphans of Medical Men; Dr. Nicholas; Dr. John D. McGavin; Mr. H. Terry; Dr. C. Drysdale; An Old Gaol Surgeon; Mr. David Walker; Mr. H. Bird; Dr. Charles Murchison; Veritas; Mr. G. E. Nicholas; Dr. Thomas Ansell; Mr. C. F. J. Lord; Mr. D. Argyll Robertson; Royal Institution; Mr. J. W. Irving; Ethnological Society; Royal Medical and Chirurgical Society; Dr. Hillier; Dr. E. E. Day.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 16, 1863.

BIRTHS.

Births of Boys, 919; Girls, 956; Total, 1875.
Average of 10 corresponding weeks, 1853-62, 1710 0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	703	647	1350
Average of the ten years 1853-62	579 3	525·1	1104 4
Average corrected to increased population..	..	..	1214
Deaths of people above 90	..	..	5

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	7	21	6	1	6	6	2
North ..	618,210	15	12	23	7	13	8	4
Central ..	378,058	6	..	20	1	6	1	
East	571,158	22	5	21	3	5	1	
South ..	773,175	11	17	19	4	13	13	3
Total.. ..	2,803,989	61	55	89	16	42	45	16

APPOINTMENTS FOR THE WEEK.

May 23. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's 2 p.m.; Charing-cross, 1 p.m.
Royal Institution, 3 p.m. Professor Max Müller, "On the Science of Language."

25. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

26. *Tuesday.*

Operations at Guy's, 1 p m.; Westminster, 2 p.m.
Anthropological Society of London, 7½ p.m. Prof. Busk, F.R.S., "On Human Remains from Brick-earth near Chatham."
Royal Medical and Chirurgical Society, 8½ p.m. Mr. John Wood, "On Deformity of the Neck from a Burn—Taliacotian Operation." Mr. Spencer Wells, "On Ovariotomy twice performed on the same Patient." Dr. R. Lee, "On Induction of Premature Labour in Complicated Cases."
Royal Institution, 3 p.m. Professor Tyndall, "On Sound."

27. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

28. *Thursday.*

Operations at St. George's, 1 p.m; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.
Royal Institution, 3 p.m. Professor Ansted, "On Geology."

29. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.
Royal Institution, 8 p.m. Prof. Max Müller, "On the Vedas."

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ORIGINAL LECTURES.

PROFESSOR HUXLEY'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

Lecture VII.

(*Being the Sixth Lecture on Classification, and on the Characters of the Principal Groups of the Animal Kingdom.*)

The latest form of the "cerebral" classification of the Mammalia having thus been shown to be devoid of any sound foundation, I proceed to inquire whether the "placental" classification does, or does not, stand upon a more secure basis, if we take, not merely, with Milne-Edwards, the form of the placenta, but with Von Baer and Eschricht, its structure, into account. It is a well-established fact that two very distinct types of placenta are to be met with in the *Monodelphia*, and that, at the present moment, we have no knowledge of any transitional forms between these two types. The first of these types is that exhibited by the human placenta, the second by that of the pig or horse.

From the commencement of gestation, the superficial substance of the mucous membrane of the human uterus undergoes a rapid growth and textural modification, becoming converted into the so-called "*Decidua*." While the ovum is yet small, this *Decidua* is separable into three portions,—the *Decidua vera*, which lines the general cavity of the uterus; the *Decidua reflexa*, which immediately invests the ovum; and the *Decidua serotina*, a layer of especial thickness, developed in contiguity with those chorionic villi which persist and become converted into the fœtal placenta. The *Decidua reflexa* may be regarded as an outgrowth of the *Decidua vera*; the *Decidua serotina* as a special development of a part of the *Decidua vera*. At first, the villi of the chorion are loosely implanted into corresponding depressions of the *Decidua*, but, eventually, the chorionic part of the placenta becomes closely united with, and bound to, the uterine decidua, so that the fœtal and maternal structures form one inseparable mass.

In the meanwhile, the deeper substance of the uterine mucous membrane, in the region of the placenta, is traversed by numerous arterial and venous trunks, which carry the blood to and from the placenta; and the layer of decidua into which the chorionic villi do not penetrate acquires a cavernous, or cellular, structure from becoming burrowed, as it were, by the innumerable sinuses into which these arterial and venous trunks open. In the process of parturition, the *Decidua serotina* splits through this cellular layer, and the superficial part of it comes away with the umbilical cord, together with the fœtal membranes and the rest of the *Decidua*; while the deeper layer, undergoing fatty degeneration and resolution, is more or less completely brought away with the *lochia*, and gives place to a new mucous membrane, developed, during pregnancy, throughout the uterus.

Fig. 3.

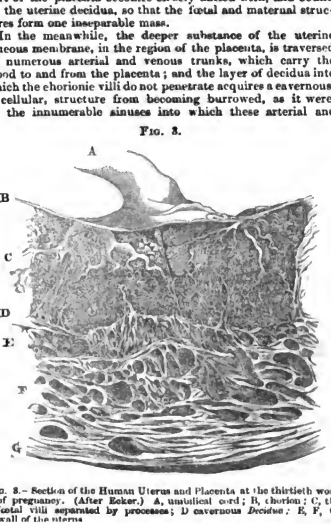

Fig. 3.—Section of the Human Uterus and Placenta at the thirtieth week of pregnancy. (After Ecker.) A, umbilical cord; B, chorion; C, the fœtal villi separated by processes; D cavernous *Decidua*; E, F, G, wall of the uterus.

In the Pig the placenta is an infinitely simpler structure. No "*Decidua*" is developed; the elevations and depressions of the unimpregnated uterus simply acquire a greater size and vascularity during pregnancy, and cohere closely with the chorionic villi, which do not become restricted to one spot, but are developed from all parts of the chorion, except its poles, and remain persistent in the broad zone thus formed throughout fœtal life. The cohesion of the fœtal and maternal placentæ, however, is overcome by slight maceration or post-mortem change; and, at parturition, the fœtal villi are simply drawn out, like fingers from a glove, no vascular substance of the mother being thrown off.

The process by which the mucous membrane of the uterus returns to its unimpregnated condition after parturition in the pig has not been traced.

The extreme cases of placentation exhibited by man and by the Pig may be termed, with Von Baer and Eschricht, from the character of the maternal placenta, "caducous" and "non-caducous," or, from the degree of cohesion of the two placentæ in parturition, "coherent" and "incoherent;" or, what perhaps would be better still, the two mammals may be spoken of as "deciduate" and "non-deciduate."(e) But, whatever terms be employed, the question for the classifier is to inquire what mammals correspond with Man and what with the Pig, and whether the groups of deciduate and non-deciduate Monodelphia thus formed are natural groups, *i.e.*, contain such orders as can be shown, on other grounds, to be affined.

With respect to the deciduate *Monodelphia*, it is certain that the apes agree, in the main, with man in placental as in other important characters, and, so far as has hitherto been observed (though our knowledge of the placentation of the Lemurs is very defective), their placentæ differ from those of Man only in presenting a more marked lobation—a character which occurs as a variety in Man.

The *Cheiroptera*, *Insectivora*, and *Rodentia* agree with Man in possessing a placenta which is not only as much "discoidal," allowance being made for the shorter curve of the uterine walls, as his, but also entirely resembles his in being developed in conjunction with a decidua. This *decidua* always corresponds to at least the *decidua serotina* of Man; frequently there is a well-developed *decidua reflexa*.(f) How far a *decidua vera* can be said to be developed is doubtful.

I am well aware that these statements are in direct opposition to some that have been very confidently put forward. Thus, Professor Owen, in arguing against the views entertained by Milne-Edwards and Gervais, makes the following assertions:—

"The degree of resemblance in outward form between the placents of the Rat or Hare, on the one hand, and the *Myoxes* and *Arvicolæ* on the other, seems to me to be more than counterbalanced by the difference of structure. *The pedunculate and cotyloid placenta of the Rat consists of fœtal parts exclusively; the maternal areolar portion is as distinct from it as it is in the cotyledon of the Ruminant, and is a persistent structure of the uterus.* The discoid placenta of the monkey includes a large proportion of maternal cellular structure, which comes away with the fœtal portion. The difference in the organic interblending of the circulatory organs of mother and offspring, between the *Rodentia* and *Quadrumana* is of much more real importance than the degree of superficial similarity."—(*L. c.*, p. 16, note).

Led by the extraordinary contradictions of some of the

(e) It is, of course, by no means intended to suggest by these terms, that the homologue of the *Decidua* does not exist in the "non-deciduate" Mammals. The mucous membrane of the uterus becomes hypertrophied during pregnancy in both the deciduate and the non-deciduate mammals; but it is thrown off, and so gives rise to a "*Decidua*" only in the one of these two groups.

(f) See upon this subject the recently-published valuable essay of Reichert: "Beitrage zur Entwickelungsgeschichte des Meerschweinchens." Reichert finds a complete, or almost complete, *Decidua reflexa* in Rats, Mice, Guinea-pigs, and Bats; while in Rabbits, Hares, and *Cavaroya*, the *Decidua reflexa* only partially surrounds the ovum.

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best known facts of embryology (g) contained in the passage I have *italicised* to look into the matter afresh, I have found that the assertions made therein respecting the placenta of the Rat are as completely contrary to fact as are those respecting the brain of the apes which I have already cited from the same author.

Fig. 4.

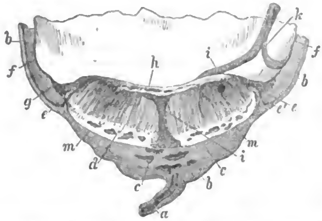

Fig. 4.—Magnified view of a section of the placenta and uterus of a pregnant Rat.

Figure 4 represents a section of the uterus, chorion, and partially-injected placenta of a fœtal Rat, one inch and a-quarter long, taken in a direction perpendicular to the long axis of the uterine cornu. (*a*) is the mesometrium traversed by a large uterine vein; (*b*) is the wall of the uterus becoming looser in texture and traversed by large venous channels in its inner substance (*c*); (*d*) is a decidual layer of the uterus of a cavernous structure, whence vascular processes are continued towards the chorionic surface of the placenta. A large vein (*i*) passes directly from the decidual layer (*d*), and the uterine sinuses beneath it, to near the chorionic surface of the placenta, beneath which it branches out horizontally. The chorion (*f*), rendered vascular over its non-placental part by the omphalomeseraic vessels (*k*), only begins to exhibit villous processes and folds at the point (*g*). These outermost villi appear to me to be free; but, more internally, they become closely connected with the upper surface of the placenta; and over the central third of the fœtal face of the placenta, the umbilical vessels (*i*), ramify in a radiating fashion, and send prolongations down between the decidual lamellæ. The slightest traction exerted upon the cord causes the placenta to separate along the line *e*, *m*, *m*, *e*, bringing with it, of course, the cup-shaped decidua *d*. (h)

It is obvious, from the above description, that the "pedunculate and cotyloid" placenta of the Rat does *not* "consist of fœtal parts exclusively," but that, on the contrary, as Eschricht has so well pointed out, "the organic interblending of the circulatory organs of mother and offspring" is as complete in the Rat, as in Man; and that, therefore, the concluding paragraph of the citation from Professor Owen's paper ought to be reversed.

The *Carnivora* develope a well marked *Decidua*, and their placenta in all genera which have been examined (except the Stoat, according to Von Baer), has the form of a complete zone, or broad girdle, surrounding the middle of the chorion and leaving the poles bare.

Fig. 5.

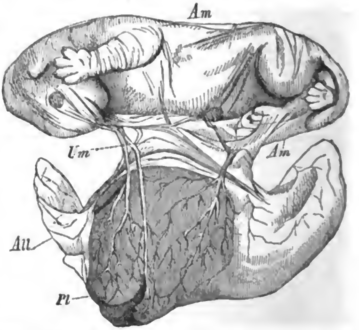

Fig. 5.—Fœtal kitten, with its membranes and placenta. The latter is seen from within, the chorion and allantois being opened and everted. *Am*, amnion; *Al'*, allantois; *Pl*, placenta; *Um*, umbilical vesicle. (From a preparation in the Museum of the Royal College of Surgeons.)

Thus Man; the Apes, or so-called *Quadrumana*; the *Insectivora*, the *Cheiroptera*, the *Rodentia*, to which the

(g) Eschricht described the placenta of the Rat with great precision, as the following extract will show, six-and-twenty years ago. Is it possible that a hasty perusal of a passage which I have italicised should have misled any of his successors into supposing that Rodents have persistent cotyledons like those of Ruminants? "Placenta fere circularis erat; diametrus longior sex lineas cum dimidia explebat, brevior sex lineas. Superficies ovo obversa nonnihil concava erat, externa autem sat convexa, ita ut a margine ad centrum sensim in tumulum surgeret et crassitudinem placentæ ad duas lineas augeret. In superficie ejus concava, ovo obversa, tres distingui potuerunt regiones; circum centrum, a vasis umbilicalibus perforatum, laminulâ illâ pertenui obtecta erat, quam vasa umbilicalia hic ei caudare jam observatum est. Circa peripheriam scabrosa apparuit, quasi ibi seu vasa abrupta fuissent, in media regione autem inter peripheriam et centralem levis erat tunicâ sat distinctâ vestita. Superficies placentæ externa convexa duas regiones obtulit. Peripheriæ propior inæqualis ad axem longitudinalem ovi latior erat, unam et quartam lineæ partem explens; ad latera angustior quartam modo lineæ partem explens. Sic media et lævis hujus superficiei regio ovoidea quidem erat ut tota placenta, sed cum axe majore transverse ei insidens. In cumulo hujus superficiei permagnum vas ab utero centrum placentæ perforavit. Haud procul a centro quinque vasa minora intervallis sat æqualibus uterum cum placenta jungebant. Superficiei uterinæ proxima placentæ pars in lamellas facile dividebatur, profundior autem pars eundem illum laminarum innumerabilium contextum exhibuit quem in placenta felina fusius supra descripsi. Laminulas a centro ad peripheriam sat regulariter ordinatas esse observare mihi visus sum. Inter laminulas illas eandem esse alternationem laminularum fœtalium et uterinarum vix dubitare potui, præsertim quum non modo vasa umbilicalia sed ab altera parte sex vasa majora ab utero placentam ingredi vidissem. At uterum examinans nova orta est dubitatio. Uteri cornua antequam ova excisa fuissent, moniliformia apparuerunt, et inter singula ova fortiter constricta Ita non modo numerus sed etiam forma ovorum extus apparuit quibi quod etiam placentæ facillime observari videbantur. Intumescentiæ, ova includentes, ipsæ quidem oviformes erant, sed ad marginem superiorem ad insertionem ligamentorum latorum et ante eadem singulæ tumuli speciem præbebant, placentam aperte indicantis. Itaque placentæ in utero muris ratti non modo quoad fœtum, sed etiam quoad uterum certum occupat locum, et embryones omnes in una serie in oppositis uteri cornibus symmetrice collocati sunt, utrum autem capitibus prævils abdominibusque abdomen matris respicientibus, an clunibus prævils dorsisque abdomini matris obversis inquirere neglexi. Verum tumuli placentas indicantes non ipsæ fuerunt placentæ. Ovis excisis iidem tumuli in utero remanebant ut tubercula fusca tres lineas crassa, diametrum quinque linearum exhibentia. Quod quum observassem, initio tota mea de structura placentæ mammalium unguiculatorum sententia labefacta est. *Gliribus si ut ruminantibus pars uterina placentæ in partu non abstruderetur, mirum sane fuisset*, etsi theoria de placentæ structura in universum eo nihil caperet detrimenti. Quum vero superficiem uterinam placentæ lævem observassem, et idem de superficie ipsius uteri ei obversa nunc observarem, tota theoria prave refelli mihi videbatur, secundum quam alternatio quædam utriusque systematis adsit necesse est. Attamen mox intellexi corpus illud uterinum non ipsam partem uterinam placentæ esse. Supra jam de vase majore centrali et quinque minoribus circumstantibus sermo erat, quæ placentæ superficiem uterinam transibant. Eadem vasa jam in ipsius uteri superficie observavam et in aperto erat ramificationem eorum in laminulis ipsius placentæ fieri. Corpus uterinum transcissum cellulas plurimas exhibuit, ni fallor, sanguinis coagulati nonnihil etiamtunc continentes. Sic constructum eidem functioni inservire mihi videtur ac similes uteri humani cellulæ vel sinus venosi; nec placentam murinam aliter a placenta felina discrepare video nisi quod vasa uterina pauciora sed sat magna partem uterinam intrant. Quibus observationibus ductus etiam GLIRIUM PLACENTAS EX PARTE FŒTALI ET UTERINA CADUCA HAC ET ILLA LAMINULIS INNUMERIS ALTERNANTIBUS COMPOSITAS ESSE putabo donec melioribus observationibus refutatus fuero."

(h) My friend, Prof. Rolleston, to whom I am indebted for much valuable assistance in working out this placental question, is of opinion that the cup shaped *decidua* of the Rat corresponds not only to that part of the *decidua serotina* which comes away, as a part of the afterbirth, in Man, but, in addition, to that part which is subsequently eliminated in the *lochia*; and that, therefore, the Rat's afterbirth, instead of "consisting of fœtal parts exclusively," absolutely contains more "maternal parts" than that of Man. In a recently-delivered Rat, Prof. Rolleston writes:—"The uterus possessed no structures in the least resembling a persistent cotyledon. Corresponding to the place of affixture of each fœtus, was a funnel-shaped depression of mucous membrane leading down to a hernial protrusion into the mesometrium of the deeper structures, viz., the muscular coat and the arteries and veins penetrating it. The mucous membrane was perfectly formed, and contained glandular follicles. It was no doubt the homologue of the fresh layer of mucous membrane which Dr. Priestley has figured from a human uterus in the ninth month of pregnancy (at p. 99 of his work on the 'Gravid Uterus,') as clothing the muscular stratum of the organ, and separating easily from the *decidua serotina*."

lowest apes present so many remarkable approximations; and the *Carnivora* (united into one group with the *Insectivora* by Cuvier) are all as closely connected by their placental structure as they are by their general affinities.

With the Pig, on the other hand, all the *Artiodactyla*, all the *Perissodactyla* (save one) and all the *Cetacea* which have

Fig. 6.

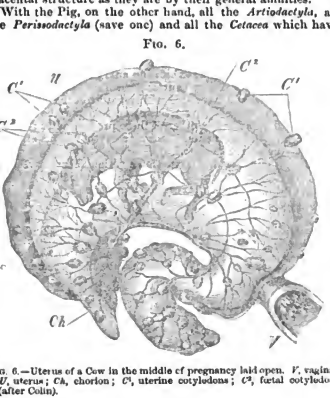

Fig. 6.—Uterus of a Cow in the middle of pregnancy laid open. *V*, vagina; *U*, uterus; *Ch*, chorion; C^1, uterine cotyledons; C^2, fœtal cotyledons (after Colin).

Fig. 7.

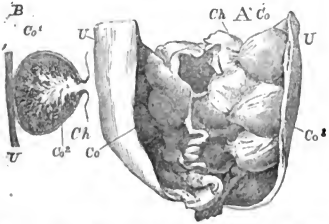

Fig. 7.—A. Horn of the Uterus of a pregnant Ewe, laid open to show, *Ch*, the chorion; with *Co*, the cotyledons.
B. Diagrammatic section of a Cotyledon. *U*, uterine wall; Co^1, uterine cup of the cotyledon; Co^2, chorionic villous tuft of the cotyledon.
(From a preparation in the Museum of the Royal College of Surgeons.)

Fig. 8.

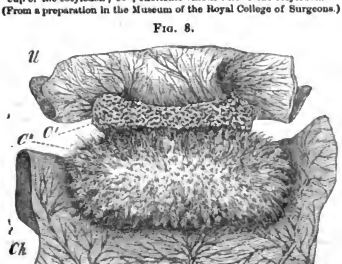

Fig. 8.—A fœtal cotyledon C^2, half separated from the maternal cotyledon C^1, of a Cow. *Ch*, chorion. *U*, uterus (after Colin).

been studied, agree in developing no decidua, or, in other words, in the fact that no vascular maternal part is thrown off during parturition. But considerable differences are observed in the details of the disposition of the fœtal villi, and of the parts of the uterus which receive them. Thus in the Horse, Camel, and *Cetacea* the villi are scattered, as in the Pig, and the placenta is said to be *diffuse;* while in almost all true Ruminants the fœtal villi are gathered into bunches, or cotyledons, which in the Sheep are convex, and are received into cups of the mucous membrane of the uterus; while in the Cow, on the contrary, they are concave, and fit upon corresponding convexities of the uterus.

No one, probably, would be inclined to object to the association of the orders just mentioned into one great division of the *Monodelphia*, characterised by its placental structure. But such grouping leaves several important points for discussion. (i) The Elephant, as Professor Owen has shown, has a zonary placenta, and the genus *Hyrax* has been known since the time of Home to be in like case. Hence, as the elephants are commonly supposed to be closely allied with the *Pachydermata*, which possess diffuse, non-deciduate placentæ, and as *Hyrax* is now generally, if not universally, admitted into the same order as the Horse, which has a diffuse, non-deciduate placenta, it is argued that placental characters do not indicate natural affinities. A question, indeed, arises, which has not been answered by those who have described the placentæ of *Elephas* and *Hyrax*. Is the placenta of these animals simply a zone-like arrangement of villi or cotyledons, in connexion with which no decidua is developed, or is it a true deciduate placenta, resembling that of the *Carnivora* in the essentials of its internal structure as in its external form? Recent investigation has convinced me, that, in both these animals, the placenta is as truly deciduate as that of a Rodent, so that most unquestionably, if the placental method of classification is to be adopted, both *Elephas* and *Hyrax* must go into the same primary division of the *Monodelphia* as the *Rodentia* and *Carnivora*.

But are these facts really difficulties in the way of the placental system of classification?

So far as the case of the Elephants is concerned, I must confess that I see no difficulty in the way of a classification which unites the *Proboscidea* more closely with the *Rodentia* than with the *Artiodactyla* and *Perissodactyla*, the singular ties which unite the Elephants with the Rodents having been a matter of common remark since the days of Cuvier.

In the absence of any definite knowledge of the placental structure of *Rhinoceros* and *Tapirus* it would, perhaps, be premature to discuss the position of *Hyrax*, as determined by its placenta; but if it should eventually appear, as is very probable, that *Rhinoceros* and *Tapirus* have diffuse, non-deciduate placentæ, I should have no hesitation in regarding *Hyrax* as the type of a distinct order of deciduate Monodelphous *Mammalia*. *Hyrax*, in fact, hangs by *Rhinoceros* mainly by the pattern of its molar teeth,—a character which affords anything but a safe guide to affinity in many cases.

Concerning the placentation of the *Sirenia* we have no information.

Among the *Edentata*, the Sloths have presented a cotyledonary placenta, and the Armadillos have been affirmed to possess a discoidal one. I am not aware that the minute structure of the placenta has been examined in either of these groups, but I am indebted to Dr. Sharpey for valuable information respecting the placental structure of *Manis*. The surface of the chorion is covered with fine reticulating ridges, interrupted here and there by round bald spots, giving it an alveolar aspect, something like the inside of the human gall-bladder, but finer. The inner surface of the uterus exhibits fine low ridges or villi, not reticulating quite so much. The chorion presents a band, free from villi, running longitudinally along its concavity, and there is a corresponding bald space on the surface of the uterus. The ridges of the chorion start from the margins of the bald stripe, and run round the ovum. The umbilical vesicle is fusiform. This is clearly a non-deciduate placenta, and the cotyledonary form of that of the Sloth leads me to entertain little doubt that it belongs to the same category.

Admitting all these difficulties and gaps in our information, it still appears to me that the nature of the placenta affords by far the best characters which have yet been proposed for classifying the Monodelphous *Mammalia*, especially

(i) "Description of the Fœtal Membranes and Placenta of the Elephant." —*Philosophical Transactions*, 1857.

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if the concomitant modifications of the other fœtal appendages, such as the allantois and yolk-sac, be taken into account. And it must be recollected that any difficulties offered by the placental method attach with equal force to the systems of classification based upon cerebral characters which have hitherto been propounded. If any objections, on the ground of general affinities, are offered to the association of *Elephas*, *Hyrax*, *Felis*, and *Cercopithecus* in the same primary mammalian division of deciduate *Monodelphia*, they are not removed by constructing that primary division upon other principles, and calling it *Gyrencephala*.

[The lecturer concluded his discourse with some remarks upon the propriety of restoring the Linnean order *Primates* as the equivalent of the orders *Bimana* and *Quadrumana* of authors—between which heargued that no structural distinction of ordinal value exists. As the arguments briefly indicated have been fully published in a separate work, it has not been thought necessary to repeat them here.]

LECTURES
ON
ECZEMA,
(INCLUDING ITS IMPETIGINOUS, LICHENOUS, AND PRURIGINOUS VARIETIES,)
DELIVERED AT THE
Dispensary for Skin Diseases, Glasgow.

By T. McCALL ANDERSON, M.D., F.F.P.S.
Physician to the Dispensary for Skin Diseases; Physician to the Deaf and Dumb Institution, etc., Glasgow.

LECTURE II.(a)

GENTLEMEN,—In my last lecture I described to you the most prominent symptoms of eczema, the infiltration of the skin, the exudation on the surface of the skin, the formation of crusts, and the itching. I then passed to the consideration of the elementary lesion, which I told you is either an erythematous state of the skin, a vesicle, a pustule, a papule, or a fissure. I had discussed in detail the first four of these, and the last only remains to be alluded to.

5. The Elementary Lesion a Fissure.—This lesion is met with very frequently as a complication of the varieties of eczema which I have previously described, and is oftenest seen on those situations where the skin is naturally thrown into folds, as at the anus, the angles of the mouth, and the joints. When the skin is in a healthy condition, it stretches with ease when the parts are moved; but, when an eczematous eruption is developed, its natural elasticity being gone, it gives way when put upon the stretch, thus giving rise to fissures, which are often deep and proportionately painful. Fissures, however, not unfrequently constitute the principal elementary lesion, though they usually form upon an erythematous ground, as in the vesicular and pustular varieties of eczema. While any part of the skin may be attacked, the most typical cases are to be met with on the hands, owing to the number of the joints, and the incessant and varied movements of the fingers. The number of the fissures varies much; there may be few, or, on the other hand, so many that they cross one another in all directions; and, although at first superficial, they have a tendency, as the disease becomes more chronic, to increase in depth, thereby causing excruciating pain and bleeding, especially on movement of the affected parts. When the eruption is fully established, infiltration of the skin is superadded, and itching, though pain usually predominates. The fissures, when deep, are red and raw-looking, and either serum or blood exudes from them at certain times, thus giving rise to the formation of small crusts, which partially fill them up. Here, then, we have, as in the vesicular variety of eczema, an infiltrated, exuding, and itching or painful eruption, and the only difference between the vesicular and the fissured variety of eczema is that the principal lesion is a vesicle instead of a fissure. This is the disease described in French works under the name of "Eczema Fendillé," and, as it is not portrayed in English dermatological works at all, I take the liberty, in conjunction with my colleague, of applying to it the term eczema rimosum (from rima, a fissure). A case of this form of eruption attacking the palm of the hand will be referred to when the treatment is discussed.

The nature of eczema rimosum may be more forcibly impressed upon your minds if I remind you of what occurs in cases of "chapped" hands, with which affection most of you must be personally acquainted. The skin is red and superficial fissures occur which take the direction of the natural grooves of the skin. If appropriate treatment is not now adopted, the skin gradually assumes all the characters of a typical eczema rimosum, exhibiting an infiltrated, exuding, itching, and painful fissured surface.

To sum up what I have said with regard to the elementary lesions, the five following varieties of eczema may be enumerated, according as one or other of these predominates:—

1. The principal elementary lesion an erythematous state of the skin (eczema erythematodes).
2. The principal elementary lesion a vesicle (eczema vesiculosum), the typical eczema of Willan and Bateman.
3. The principal elementary lesion a pustule (eczema pustulosum, or eczema impetiginodes), the typical impetigo of Willan and Batemen.
4. The principal elementary lesion a papule (eczema papulosum, including lichen or eczema lichenoides, and prurigo, or eczema pruriginosum.
5. The principal elementary lesion a fissure (eczema rimosum), the eczema fendillé of the French.

These names—Eczema erythematodes, vesiculosum, pustulosum, papulosum, and rimosum, are of use in describing cases of eczema, as each expresses in a word that which otherwise would take a long sentence to explain. But instances are seen, over and over again, of the predominance of one of these lesions on some patches and of another on other patches of eczema on the same person; and every one must have noticed cases in which, upon one patch, an erythematous state of the skin, vesicles, pustules, papules, and fissures are detected. To these the simple term eczema should be applied. What can the school of Willan make of such cases?

When a Willanist, deeply imbued with the belief that eczema must exhibit vesicles, has a case under his notice, it is quite painful to observe how he strains his eyes in quest of them, when, perhaps, none are to be found; or how pleased he is if, on a surface which we shall say is covered with innumerable papules, one small vesicle is at last detected, or even a papule, translucent on its summit, so as to give it the air of a vesicle!

You must understand that the symptoms of eczema which I have described have not been discussed in the precise order of their occurrence, as my endeavour has been to arrange them in such a way that the more prominent and least variable features of the disease may be more forcibly impressed upon your minds. Moreover, the symptoms vary much in the order of their manifestation. Most usually one or other of the elementary lesions is developed first of all which induces itching. To allay this, the patient scratches the part, it becomes more inflamed, the eruption breaks out more abundantly, infiltration of the affected part occurs, and this is followed by exudation on its surface, which finally concretes into crusts. In many instances, however, I believe the itching to be the first manifestation, to allay which the patient scratches himself, and thereby calls forth the elementary lesion, the infiltration, exudation, etc. For we know well that scratching the healthy skin is quite capable of producing an eczematous eruption. Of this we have abundant evidence in cases of scabies, where an artificial eczema is often called forth by the scratching induced by the peregrinations of the itch-insect. But the order of occurrence of the various symptoms is of no great moment, so that it is unnecessary to dwell further upon this point.

Ulcers are often met with in cases of eczema, though they are usually small and superficial. They occur most frequently on the legs, where, from the tendency to congestion of the parts,—owing to their distance from the centre of the circulation, their dependent position, and frequent association with varicose veins—they may become very large and deep, and may assume any appearance from the inflamed to the indolent. Eczematous ulcers occasionally assume alarming dimensions, as in the following case:—

"On May 11, 1861, I was sent for to the country for the purpose of seeing a little girl, aged about 10, who had been suffering for three months from a papulated eczematous eruption, principally affecting the back. When I saw her she was confined to the sofa, and, at that time, her whole back, from

(a) These Lectures have been carefully revised, and many alterations and additions made.

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the neck to the hips, presented an enormous ulcerated surface. The ulceration was quite superficial, and presented a slightly papulated aspect. It had all the appearance of an ulcer from a burn which was gradually contracting, and cicatrization was proceeding inwards from the edges. At the margin, also, papules and vesicles, containing opaque serum, were detected. Papules were likewise scattered thinly over the body, but especially on the brow. From the surface of the sore semi-purulent matter was exuding. The little girl had been able to run about till within a week of the above date, since which time she had been confined to the sofa. Her general health was, however, good, except that she had suffered a little from the confinement and irritation of the sore.

"Dr. Robert Stewart, of Coatbridge, saw the patient along with me, and we agreed that the sore should be dressed with cod-liver oil, and Fowler's solution administered in gradually increasing doses."

I am indebted to Dr. Stewart for acquainting me with the result of the treatment. In a letter, dated October 22, 1861, he wrote:—"After you saw her she commenced with two drops of Fowler's solution three times a-day. Each dose was increased by a drop each day, so that latterly she was taking thirteen drops of Fowler's solution three times a-day, which had the most charming effect, and produced a decided cure. Altogether she must have taken, in the course of six or seven weeks, two and a-half ounces of the solution. I saw her regularly, and there never was a bad symptom." Cases of this severity are, however, of very rare occurrence.

Eczema is occasionally accompanied by feverish symptoms, especially at the commencement of an attack, but it is very extraordinary to observe how frequently a severe and extensive eruption, even in an infant, is coincident with the most perfect general health and total absence of fever.

A number of names, many of them quite useless, have been coined to express various forms of eczema. Some of these have already been discussed; for example, eczema rubrum, impetiginodes, lichenoides, etc., and, with the exception of the local varieties, which I shall detail afterwards, there are very few others which it is necessary to allude to.

Eczema simplex refers to a mild case of eczema; eczema chronicum to an eruption of old standing, in contra-distinction to eczema acutum, in which it is of recent date, more inflamed, and accompanied by burning heat rather than by itching. Eczema nummulare is the name applied to the eruption when it forms small circular patches like pieces of money. They are usually about the size of a crown, and are oftenest situated upon the lower extremities. Devergie remarks that this is the most difficult of cure of all the forms of eczema—an observation which corresponds with one of Hebra's, to the effect that the more limited the eruption the more difficult is it of cure. My own experience confirms these statements in part only; for while I have found limited eruptions less under the influence of internal and of mild local treatment than those which are more generalised, I have also observed that they vanish with great rapidity under the use of more powerful agents, which can be applied with perfect safety.

Eczema marginatum is a variety well described both by Hebra and Devergie. The latter, however, notices it under the head of herpes. (b) It commences almost invariably on the inner aspect of the thigh, where it is in contact with the scrotum, and gradually extends circumferentially while it heals in the centre, so that when fully formed there is an elevated eczematous circle, or segment of a circle, sometimes extending from the lower part of the abdomen to the knee, and enclosing skin which is either healthy-looking or coloured by a deposit of pigment, the result of the previous inflammation of the part. It usually occurs on the inner aspects of both thighs simultaneously, in which case the eruptions on the two sides occasionally meet superiorly in the region of the pubis and inferiorly in the perineum. It is met with almost exclusively amongst shoemakers and dragoons (Hebra), a circumstance which is easily accounted for by the continued moisture and friction which these occupations entail in the situations referred to.

Lastly, there is a form of eczema first described by Liévain under the name of *Eczema uniguamosum*. I have never met with a case of it, and Devergie, who speaks of it, has only seen it once during a period of fourteen years. According to him, it has its seat at the root of the nose between the eyebrows, and has a diameter of rather more than one third of an inch. "After the acute stage has passed away," says Devergie, although he does not tell us what the acute stage consists of, "the secretion takes the form of a single epidermic lamella, which covers the whole of the affected surface. When it falls off it is replaced by another in about eight days, and so on." (c) Having no personal experience of this form of eruption I can add nothing to the above description.

(To be continued.)

(b) "Traité Pratique des Maladies de la Peau." Ed. II., p. 273.

(c) "Traité Pratique des Maladies de la Peau." Ed. II., p. 299.

ORIGINAL COMMUNICATIONS.

ON ANEURISMAL TUMOURS INVOLVING THE NECK.

By JOHN COCKLE, M.D.
Physician to the Royal Free Hospital.

(Continued from page 532.)

There is a condition of vessel which may embarrass diagnosis, namely, dilatation of the arch of the aorta and the trunk of the innominate artery, similar to the preparation I now exhibit. Such a condition, if combined with defective aortic valves, and modified by intercurrent anæmia—more particularly if the pressure has condensed the supra-clavicular portion of lung—may much resemble aneurismal tumour. I do not know how, at times, we can accurately discriminate between these affections, unless, in the former case, by its long unchanging nature, the intermitting prominence of the tumour, and the more or general collapse of the vessels. Pain is certainly not distinctive, as I have known it a distressing attendant on such affection.

One other occasional chance of error in diagnosis results from anomaly in the anatomical course of the innominate trunk. No vessel, perhaps, is more liable to variation, both as regards its length and exact position. It may rise higher than usual, and pulsate more strongly, either near the sterno-clavicular junction or at the right side of the episternal fossa. The same result would occur from undue elevation of the arch of the aorta. Unusual shortness of the first bone of the sternum permits the uncovered artery to pulsate with much greater force, and over a wider area than is normal. Professor Dubreuil, of Montpellier, in his valuable monograph upon the "Anomalies of the Arteries," gives a most instructive example, where, from this latter cause, combined with some nervous symptoms, aneurism of the trunk was for a time suspected. I have at present under my care a case in one or two points resembling it. The upper bone of the sternum is short; the arch of the aorta and the innominate artery are felt and seen most violently pulsating, with both carotids and subclavians. Neither thrill nor murmur exists. The chief symptoms are dyspnœa and cough. The radial arteries are even weaker than usual, and the second cardiac sound is particularly sharp and clear. I am not able to say whether the case be aneurismal or not; the woman has been suckling for twelve months. There is, doubtless, organic change, for, in addition to percussion dulness over the upper part of the sternum, is the fact that the symptoms commenced some little time previous to pregnancy.

Before quitting this portion of the subject, it would be a great omission to pass unnoticed the laborious Essay of Dr. Holland on "Aneurism of the Innominata," published in the *Dublin Quarterly Journal* for 1852. His collection of cases of aneurism of the ascending and transverse aorta, and of its tributary branches, is of the most complete and varied kind, and quite indispensable for the study of both Surgeon and Physician. When summing up the differential diagnosis, he thus expresses himself:—"The general symptoms and signs of innominate aneurism have a general tendency to occur at the right side of the body, and those of aneurism of the transverse portion of arch of the aorta on the left."

He, of course, infers therefore that from such distinctive peculiarities the differential diagnosis may be achieved. To the first proposition we may, from obvious anatomical reasons, at once assent. With the second proposition we may also easily agree, if, by transverse portion he implies the portion of the artery situate to the left. But he appears to me to have omitted from his diagnostic formulæ one all-important form of aneurism,—I allude to that either false or true which often arises from the upper part of the ascending and angle of the trans-

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verse portion of the aorta, often involving the innominate and other arteries. Such a specimen I now exhibit. These aneurisms have a decided inclination to the right. Indeed, it is almost exclusively this form which occasionally passes the first rib, and ascends the right cervical region, rendering the differential diagnosis between aortic, innominate, and other aneurisms of this region almost impossible, when the cervical tumour has attained any magnitude. This opinion is, I think, most fairly warranted, even from the clinical history of many of the cases he himself enumerates.

Treatment.—With regard to the treatment of an aneurismal tumour, I am fully aware how little new there is to impart; but I trust any attempt to place treatment on a rational basis will not be deemed inopportune. In every case it is mainly with the accidents—such as the pain, the pressure, or the inflammation—that art is directly concerned, so far as relates to therapeutic agents. Over simple, uncomplicate aneurism these agents exercise not even a retarding, much less a curative influence. Such of the class only are of course implied as would be administered internally, with the direct intention of promoting the formation of coagula within the sac; for, it is scarcely necessary to remark that, in no other conceivable sense is an aneurism Medically capable of either check or cure. No one, for example, would dream of attempting to mend by drugs the broken wall of the artery, or to restore its resiliency. He would only seek to supplement the breach by taking advantage of the tendency of the blood to clot within the sac, seeing that nature tries at times by such device to forestall the event of hæmorrhage. The rational aim of the Physician, then, is indirect. It consists simply in the attempt to place the patient under the most favourable conditions for the clot referred to to deposit. He may, by the utmost practicable amount of bodily and mental repose, both slacken the velocity of the blood-current, and break the impetus of the wave. And, provided the degenerative cachexia be not too strongly marked, he may, by solid, reparative diet, increase its plastic element; while, by the restricted use of fluids, and the occasional exhibition of saline aperients, he may lessen its serous element. By such means not only is a concentration of the blood favourable to deposit obtained, but the danger of rupture from fluid pressure on the weakened wall of the sac is lessened. Should saline aperients be contra-indicated, diuretics may be used to meet the requirement. From these iodide of potassium should be selected, more particularly as this agent has lately been invested with the power of inducing clot. This result, however, although from a limited experience, I am inclined to doubt. It must be borne in mind that clot to some amount exists in almost every ancient aneurismal sac. Such are the few and simple means at our disposal in the next to hopeless attempt to treat a simple aneurism. And, so far as bears on one part of the problem—the physical requirement of the blood—we may, at times, in part succeed; but there is one other indispensable pre-requisite, which is, probably, altogether beyond our control; namely, a certain shape and peculiar physical arrangement of the walls of the sac. It is not enough that the blood be surcharged with plastic element, unless the surface it traverses be fitting for the fibrin to settle. Supposing, then, as is most probable, that the attempt meets with insuccess, and that external rupture is imminent, there is yet one procedure which, doubtful though it be, is, in such a case, well deserving consideration, namely, electro-galvanism. This method, proposed by Petrequin in "Surgical Aneurism," has been supposed inapplicable to ordinary aneurism of the large trunks, on the grounds of proximity to the heart, and the fear of coagulating the mass of the blood. But, in a secondary and almost isolated sac, so nearly approaching ordinary Surgical aneurism as that described, the objections urged no longer hold. Here no chance exists of the mischief alleged to follow such a plan in a sac nearer the heart, immediately springing from the larger trunks. The result in the case brought forward though not satisfactory, is still encouraging. Had the proceeding been resorted to at an earlier period, or employed with greater scientific precision, results more favourable might possibly have been obtained. I would hazard one final observation, that it is not alone the mere coagulation of the intra-aneurismal blood that should be attempted, but it is possible that, by the irritative excitement of the current, exudation of plastic matter might also be induced through the remaining covering. If so, not only would an additional barrier be raised, but, with it, the chance of a more perfect and organically adherent coagulum within the sac. If foiled again, it appears to me that in every case, almost without exception, where an aneurismal tumour of the neck descends within the chest, there is genuine wisdom in the advice of Velpeau, to proscribe Surgical interference. In such cases, the general insuccess of operative Surgery, whether attempted below the sac, or on Brasdor's plan, is so notorious, that such operations must soon become matter rather of traditional than of current Surgery. Another most important point in the history of innominate aneurisms, is the unquestionable tendency to spontaneous cure. Indeed, with such comparative frequency does this occur, that, balancing the chance with that afforded by operation, it would appear safer, unless in most exceptional cases, to trust to nature rather than the knife. (a)

P.S.—See particularly "An Inquiry into the Action and Uses of Atropia," by Dr. Fleming, *Edinburgh Medical Journal*, March, 1863.

ON THE ACTION OF CERTAIN SUBSTANCES UPON PHTHISIS.

By RICHARD PAYNE COTTON, M.D.

Fellow of the Royal College of Physicians, London; Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

(Continued from page 82.)

No. XI.—Phosphoric Acid.

Phosphoric acid has been so long and successfully used as a tonic and antiseptic, especially in cases of depressed nervous power, that some good result might reasonably be expected from its administration in many cases of phthisis. With a view of testing its influence, I prescribed it, as in my previous experiments, in twenty-five cases of chronic and uncomplicated consumption, and carefully noted the results. Of these twenty-five cases, twelve were in the first stage, four in the second, and nine in the third stage of the disease. Fifteen were males and ten females.

Three patients experienced great improvement whilst taking the phosphoric acid, eight improved a little, and fourteen of the cases seemed either to derive no benefit or to become worse. None of them increased materially in weight, the greatest increase not exceeding two pounds, except in one instance, where seven pounds were gained, but in this case it was afterwards found that cod-liver oil had been taken in addition to the phosphoric acid.

Two of the greatly improved cases were in the third stage of the disease, and it was generally observed that most of the improved were either in an advanced condition of disease or belonged unmistakably to what is commonly understood as the cachectic class, leading to the conclusion that the phosphoric acid acted simply in virtue of its general tonic and upholding influences, and not from any specific action upon the tubercular disease.

It was prescribed in doses of fifteen minims of the Acidum Phosphoricum dilutum of the London Pharmacopœia, in a little water two or three times a day. As a general rule it agreed very well with the patients, improving the appetite and diminishing undue secretion, whether from the skin or mucous membranes. In four cases, however, it was discontinued, seeming to produce griping pains in the bowels, together with nausea and diminished appetite.

In estimating its effects, even in the most satisfactory cases, it appeared to me that the improvement was inconsiderable in comparison with what had previously been noticed in some other remedies; whilst several of the patients who either improved very slightly or doubtfully under the phosphoric acid, improved afterwards under other treatment. Four of the patients improved greatly in health when steel wine was taken in conjunction with the acid, the latter being given twice a-day, and the former immediately after dinner. It will be remembered that a combination of steel wine with quinine was formerly found to be productive of good in a considerable number of cases (*Medical Times and Gazette*, August 30, 1862).

Upon the whole, I confess to having been disappointed in the action of phosphoric acid taken singly. In some cases, however, where it has been prescribed either with other tonics or in chemical combination with iron, I have found it of great use in the treatment of phthisis.

From these observations I have arrived at the following conclusions:—1. That the dilute phosphoric acid acts bene-

(a) Read before the Medical Society of London, October 13, 1862.

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ficially as a tonic in certain consumptive cases; but that, as a general rule, it is inferior to some of the other mineral acids. 2. That when taken in conjunction with iron its good effects appear to be considerably enhanced.

46, Clarges-street, Piccadilly.

DIFFICULT PARTURITION IN CONNEXION WITH IDIOCY.

By ARTHUR MITCHELL, A.M. and M.D.,
Deputy Commissioner in Lunacy for Scotland, etc.

In the *Medical Times and Gazette* of July 12, 1862, I published a paper on the connexion between idiocy and difficult or anomalous parturition. In that paper I gave my reasons for concluding that the act of birth must be regarded as one of the causes of idiocy, or, in other words, that a certain proportion of the idiocy of this country is due to injuries sustained by the child in the process of parturition. After pointing out that the *à priori* argument for such a conclusion is exceedingly strong, I gave a summary of those facts which had come under my observation by which this conclusion could be proved or disproved. As there exists no corresponding information regarding the general community with which the facts alluded to could be compared, I was careful to point out that each reader must draw his own conclusions, while I did not hesitate to give those I had drawn myself. This I thought the fairest way of dealing with the materials I had collected.

It appeared to me, at the same time, that the facts I detailed were, in their aggregate, of so strong a character as probably to lead most readers to that general conclusion to which they had led me, and therefore that a minute comparison with similar facts regarding the general community was not so necessary as would have been the case had they been of a doubtful or less decided character.

Among other facts which I stated was one, to the effect that I had found that 22 out of 494 idiots had been delivered by forceps. This statement has given rise to some misconception as to my views regarding instrumental assistance in midwifery. It seems to be thought that in all these twenty-two cases I considered the idiocy to be referable to injury inflicted directly by the forceps, and inferentially that I thought they had been unwisely used in these cases, and that I had supplied an argument against their use in others. This feeling seems to have been strengthened by my having stated that in nine of the twenty-two cases the use of the forceps was attested by the presence of cicatrices. Now, I neither expressed nor hold such opinions. I was collecting all such facts in the history of idiots as would help us to determine whether the act of parturition might not occasionally injure the child in such a way as to cause idiocy, and whether the risk of this injury was not increased in proportion as parturition was difficult or anomalous; and it would have been clearly a grave omission had I not, in collecting and detailing such facts, ascertained and stated the number of times in which the labour had been so difficult or abnormal as to require instrumental assistance—of which difficulty this was an evidence, the general practice of the country being considered.

The cicatrices, again, were alluded to in proof, so far as they went, of the trustworthiness of my information rather than as evidence of a mechanical injury having been inflicted, of a character to account for the idiocy. That mechanical injury, serious enough to lead to such a result, is sometimes inflicted by the blades of the forceps, I think all will admit. But there was nothing in these twenty-two cases which would justify the conclusion that the pressure of the blades of the forceps, and not the severe or prolonged pressure in the passages, had produced the injury. It is quite possible, indeed, that the opportune use of the forceps may save the child from such injury. But further, neither the forceps nor pressure in the passages produced the idiocy of the whole of these twenty-two cases. This might have been expected, nay, assumed almost as a certainty. My notes, indeed, show that in several of them the idiocy is satisfactorily accounted for by causes altogether apart from the act of birth; but they could not be excluded on this account. I had to embrace every case without exception in a statement showing the frequency of forceps deliveries in a given number of idiots, and intended to show whether the proportion of such deliveries was greater in that class than in the general community. When we attempt to show the injurious effects of bad sanitary arrangements, we compare the mortality in a district where these exist with the mortality in a district more favourably circumstanced, and, if it be in excess, we accept it as proof of such injurious effects. But we never consider every death in the less healthy district as due to defective drainage; for some may be due to brick-bats and chimney-cans, and the common causes of death are at work there as elsewhere. All deaths, however, must be included on both sides, and it is the excess on the total which we use as a basis for our conclusions. For the same reason, exactly, every case without exception had to be included in a statement showing the frequency of forceps deliveries in a given number of idiots, and intended to be compared with corresponding data regarding other classes. And this was not the less necessary from the circumstance of my not possessing data of a character which would admit of exact comparisons. Other observers may obtain these (though I think the task will prove a difficult one), and I have recorded my results in a form which will permit of their being them used comparatively.

It must always be remembered that my general conclusion rests on the strength of the facts I adduce in their aggregate. I cannot believe that these can be fairly considered, and lead to any other inference than that the act of birth does occasionally cause idiocy, and that this result is in proportion to the difficulty or anomaly of the labour.

The mode of conducting such an investigation as that into the causes of idiocy, which I have pursued when possible, appears to me broader and more satisfactory than that which consists in the detail of a number of striking cases, by which at best we only learn the probable cause in those cases, but which would not establish the steady operation of the cause in question. Yet, though really more satisfactory, it does not perhaps so readily carry conviction. It occurs to me, therefore, that I may record with advantage a few of those cases in which I think that some connexion between the idiocy and the difficult labour is probable. I select them from my notes of forceps cases, but I repeat that I do not say even of these that the use of the forceps, and not the difficulty or length of the labour, accounts for the result.

1. M. J., an idiotic girl, eight years old, was born twelve months after her mother's marriage to a young man. Between the parents there was no blood relationship, and neither paternally nor maternally was any form of mental or bodily defect hereditary. Both parents were sober and respectable, and they lived in comfortable circumstances, though they were far from wealthy. Her mother, a handsome, healthy, and intelligent woman, was thirty-four years old when the idiot, her first child, was born, and afterwards gave birth to two other children, both sound in all respects. Her father, who was killed by a horse a few years ago, is said to have been a healthy and vigorous man.

The history of the idiot's birth is as follows:—On a Friday afternoon her mother felt occasional labour pains, but it was not considered necessary to send for the Doctor till early on Saturday morning. He arrived at 5 a.m., when he found his patient in such a state that he did not think it right to leave her. Towards midnight another Doctor was sent for, and on his arrival, or soon after, about 1 a.m. on Sunday, the child was delivered by forceps. Though not large, it was a plump and well-formed child, but it was in a very feeble condition at birth, and respiration was established with difficulty, the usual means being resorted to in order to accomplish this. It continued for some time in a weakly state, and its viability was thought doubtful. The mother, who made a good recovery, had abundance of milk, but the child never sucked; as the mother said, "Never could be got to try."

On the left side of the head the blades of the forceps have left two marks. The wounds, of which these are the traces, are said not to have healed readily, and to have "festered." Both cicatrices are quite distinct—one is almost on the cheek, and a little below the opening of the ear, and the other is on the side of the head above the ear. The left eye is distinctly smaller than the right, but there is no squinting and no impairment of vision. The child is partially paralysed on both sides, and walks with great difficulty. This paralysis existed at birth, and is said to be less marked now than it was. She attempts to speak, but cannot do so intelligibly. Her mental condition is that of complete idiocy, and this was evident in very early infancy. Her head is well-shaped, and of good size.

2. E. M., a female, 26 years old, is a complete idiot. She

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was born three months after the marriage of her parents, and was her mother's first child. Six were afterwards born, and were all sane. There is no relationship between her parents, and idiocy is not hereditary on either side. Her father is a strong man, but her mother has always been delicate, though labouring under no special disease. While pregnant with the idiot, she was not in robust health, but was always able to move about.

The idiot was born after a labour said to have lasted for four and a half days. This is probably an exaggeration, but it may be assumed that the labour was long and difficult. At the end delivery was effected by forceps. The blades have left no mark about the head.

The child is described as having been well-formed and plump at birth. She is said to have been still-born. She was neither washed nor dressed for many hours after birth. Respiration was established with difficulty. She did not attempt to suck for fourteen days or more. During the first five days of life she was at intervals, as her mother said, "drawn a wee wi' nerves;" but since that time she has never had anything like a fit. She was four years old before she attempted to walk, and she never walked well. She squints, but sees and hears. She has never spoken an intelligible word. Her head is small, but well shaped.

3. A. H., an idiot girl of 13, is illegitimate, and an only child. Her mother is lame, the result, it is said, of hip-joint disease in early life. The idiot was born after a labour said to have lasted for several days, and instrumental assistance was found necessary. The left eye was injured by one blade of the forceps, and there is a bald patch on the right parietal protuberance caused by the other. She squints. She was in a very feeble condition at birth, and was long of sucking. Idiocy was suspected when she was nine or ten months old. She is now an active, strong, full-fleshed girl, but very deficient in intelligence. She has a small but long head.

4. The mother of the idiot when a young girl received some injury about the hip joint or pelvis, which led to permanent lameness and which is believed to have affected the size or form of the pelvis. Her general appearance, nevertheless, is that of a well-made woman. She married and bore twelve children, all of whom were delivered by forceps. Of these, nine were dead at birth, one died when three weeks old, one lives, and is apparently sound, and one is the idiot who grew to manhood, but died recently. In his case convulsions occurred soon after birth. He was either the fifth or sixth child. All her labours were very long and difficult.

5. S. W., an idiot boy, 5 years old. He is the sixth of seven children. At the birth of all but three the forceps was used. Two were dead-born, the forceps being employed in both cases. All the seven children were born after labours more or less protracted.

The idiot, according to his mother, was "worked wi' nerves" for a fortnight after birth, and it was doubtful if he would survive. Slight convulsive seizures occurred occasionally till he was a year old. He squints. He walks well. His head is of good size and shape.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CASES OF HEMIPLEGIA FROM DISEASE OF THE CRUS CEREBRI.

In this Journal for February 28, p. 210, we published a case of hemiplegia in which there was paralysis of the whole of the portio dura, indicating, of course, disease of the pons Varolii. We now give the particulars of two cases of hemiplegia depending on disease of the crus cerebri, in which another cranial nerve was involved,—the third or motor oculi. In these cases the nerve is paralysed on the same side as the lesion, the limbs, on the opposite side. Just so in disease of one side of the pons the portio dura is paralysed on the injured side, the limbs on the opposite.

In our report of the Medico-Chirurgical Society, May 16, is recorded an interesting case of disease of the crus cerebri, by Dr. Hermann Weber. We refer our readers to this communication for valuable information on disease of this part of the brain.

The first case we relate occurred at the Middlesex Hospital, and is reported by Mr Dunnett Spanton, now Resident Medical Officer at the Sheffield Infirmary. In this case there was, before Mr. Spanton saw the patient, loss of sensation as well as of motion on the right side of the body. This is certainly rare in hemiplegia. Possibly it may have been due to the slight disease of the left side of the pons Varolii. The fact that the sight was not affected at first would seem to show that the whole of the third nerve was not then paralysed. As a rule, along with the paralysis of the external muscles of the eye, the pupil is dilated, the ciliary muscle paralysed, and the sight, for near objects, consequently impaired; but sometimes, though very rarely, the pupil is not affected, whilst the external muscles supplied by this nerve are paralysed. Again, just the reverse, there may be great dilatation of the pupil and paralysis of the ciliary muscle without any apparent affection of the external muscles. In such cases, however, the disease cannot be in the trunk of the nerve nor near its implantation in the crus. Of course, we sometimes have disease of the crus cerebri without paralysis of the third nerve in hemiplegia, as we sometimes have disease of the pons Varolii without paralysis of the portio dura; but when the disease is extensive, then the nerves are involved. When paralysis of these nerves is present, we may be certain as to the seat of the disease.

There is at present, under the care of Mr. Ernest Hart, at St. Mary's Hospital, a patient who has paralysis of the third nerve, and hemiplegia on the same side. Dr. Brown-Séquard saw this case, and believed that the paralysis of the third nerve and the hemiplegia depended on two distinct causes, for, as in the following cases, when there is lesion of one crus cerebri affecting the third nerve, the paralysis of the limbs is on the opposite side. Paralysis of the third nerve is sometimes the forerunner of hemiplegia, but it is rarely co-existent with it.

MIDDLESEX HOSPITAL.

PARALYSIS OF THE THIRD NERVE ON THE LEFT SIDE, AND OF THE RIGHT ARM AND LEG—DEATH—AUTOPSY—DISEASE OF THE CRUS CEREBRI ON THE LEFT SIDE.

(Under the care of Dr. GOODFELLOW.)

[Communicated by Mr. DUNNETT SPANTON.]

In connexion with Dr. H. Weber's paper on the "Pathology of the Crura Cerebri," read before the Medico-Chirurgical Society, the following brief notes of a case which occurred in the Middlesex Hospital will be interesting:—

A. H., a man aged 41, was admitted under the care of Dr. Goodfellow in August, 1860, with paralysis of motion and sensation of the whole of the right side of the body. In February, 1861, paralysis of the internal, superior and inferior recti and levator palpebræ muscles of the left eye came on. The sight remained good. Taste and smell were unaffected, the intellectual faculties also. The paralysis of sensation had at this time almost disappeared, but that of motion remained much the same in the right half of the body, including the face, soft palate, and tongue. The patient complained of dull, aching, frontal pain, and of occasional tinnitus aurium. The pulse was slow and weak; the bowels constipated.

About two months afterwards, the power of vision of the left eye had become much impaired, especially manifested in the deficient power of accommodation. Sensation was everywhere perfect, but the motor paralysis continued. Speech at this time became very indistinct, but the patient retained his intellectual powers. The ptosis of the left eye varied from time to time up to a short period before death, when it remained complete.

In June there was ptosis of the right eye for about a week. It then entirely disappeared.

The patient became gradually weaker, bed sores formed, and he died on October 30, 1861.

Post-mortem Examination.—Lungs both healthy, except that in the apex of the right there was a small nodule of cretified tubercle. Heart flabby and soft; no valvular disease. Liver fatty, weighing sixty-three ounces. Kidneys small, slightly granular. Left crus cerebri reduced in size, presenting a grey, semi-transparent appearance. At the upper and posterior part, for an extent of about three-fifths of an inch in length, and two-fifths in breadth and in thickness, the tissue was found on section to be hard and dense, like fibro-cartilage. The pons Varolii, at its anterior edge on the left side, was to a very slight extent

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similarly affected. Under the microscope the dense structure was found to consist of an imperfect fibrous tissue, with oil-globules, a few compound granular cells, and numerous nucleated cells of various sizes. The left third nerve was much smaller than its fellow, and of a pale bluish colour. Other parts of the brain were healthy.

GUY'S HOSPITAL.

PARALYSIS OF THE THIRD NERVE ON THE RIGHT SIDE—GENERAL PARALYSIS, CHIEFLY ON THE LEFT SIDE—CANCER OF THE RIGHT CRUS CEREBRI, AND OF THE RIGHT LOBE OF THE CEREBELLUM, AND IN VARIOUS ABDOMINAL VISCERA.

(Under the care of Dr. GULL.)

The following is another case of hemiplegia, with paralysis of the third nerve, depending also on disease of the crus cerebri, the paralysis of the third nerve being, of course, on the side of the lesion, *i.e.*, the side opposite the paralysis of the limbs. There was, however, cancerous disease in other parts of the brain, so that the case is not so valuable as the one reported by Mr. Spanton.

Eliz. B., aged 40, admitted October 19, 1860, into May Ward, under the care of Dr. Gull. She died October 20.

Dr. Wilks in his record of the post-mortem:—"This woman was admitted with tumours in the neck and breast, which appeared to be cancer. She also had a tumour in the abdomen, which turned out to be a fœtus, of which she was delivered. Soon after admission it was observed that her right eyelid began to droop, and soon perfect ptosis came on, and indeed complete paralysis of the right third nerve, and at the same time some difficulty of speech. Afterwards some loss of power of the limbs, especially the left side. She lay then quiet in bed, in a partially paralytic state, but her mind was perfect."

Autopsy.—Large cancerous tumour in both breasts and neck. On raising the dura mater from the surface of the brain, a cancerous tumour, the size of a large pea, was seen growing from the arachnoid surface of the dura mater, near the falx, and causing a corresponding depression in the brain. At the base of the brain, on attempting to remove the organ, another tumour was seen in the right lobe of the cerebellum, and which had some adhesions to the dura mater, so that the structure tore on removing it. This tumour was the size of a walnut, tolerably firm, and was almost entirely surrounded with cerebral structure, except at one spot. The right crus cerebri felt hard to the touch, and when cut through was found to contain a vascular, soft cancerous growth, about the size of a marble, or larger. The third nerve on this side was wasted—its trunk being only half the size of the left one. The ventricles contained excess of fluid. Hemispheres healthy. The liver contained one large cancerous nodule, the size of a billiard-ball. It was very firm and hard, and appeared to be composed of two substances—a border, resembling the white opaque cancer of other parts, and the interior translucent and reticulated, resembling very much the appearance of a boiled turnip, only harder. Spleen full of cancerous masses. The left supra-renal capsule contained a large cancerous mass, which had involved the tissue at one spot. The ovaries were much enlarged by cancer, so that no healthy tissue could be seen in them. A section showed a firm carcinomatous mass, vascular, and emitting the usual milky juice. Both mammæ destroyed by scirrhus cancer, and the pectoral muscles occupied by immense nodules.

The next case is also a complicated one, but here, too, there is hemiplegia, depending, no doubt, on the cancerous nodule implicating the corpus striatum and thalamus opticus. Of course, in disease so high up, not one of the cranial nerves would be involved, *i.e.*, not one in its entirety. As a rule in disease of this part of the brain, only a few muscles supplied by the portio dura about the angle of the mouth, on the same side as the paralysis of the limbs, and on the opposite side of the lesion, would be paralysed.

HEMIPLEGIA ON THE RIGHT SIDE, AND GENERAL CEREBRAL SYMPTOMS — DEATH — AUTOPSY— CANCER IN VARIOUS PARTS OF THE BRAIN, IN THE LUNGS, AND PANCREAS.

John L., aged 49, was admitted into Philip Ward under the care of Dr. Wilks, December 31. He died January 14. He was admitted with cerebral symptoms and hemiplegia of the right side. He was able to be about in the ward, although he walked with difficulty. He spoke huskily, and was hardly intelligent, so that no good history was procurable. He said that he had had a fit six weeks before admission, and had been paralysed ever since. It was evident that his brain was softened. His chest was not examined. He soon afterwards became worse, and sank into a half-conscious state. It was afterwards said that he had been ill for three or four months. He had lost one eye from an old injury.

Autopsy.—The brain contained a number of cancerous masses, at least a dozen, in various parts. It was soft and highly vascular. Some were surrounded by recently effused blood. They were mostly in the hemispheres, but there was one nodule at the under part of the junction of the left thalamus and corpus striatum. Most of these were the size of a marble; two were larger. In the left hemisphere there was also much yellow softening of the medullary substance. The cerebellum also contained two portions. Old pleural adhesions. There was a large mass of disease in the anterior mediastinum, and involving part of the right lung, to which it was inextricably adherent. This was the size of the two fists, and consisted of a mass of medullary cancer. It had penetrated the pericardium, and above had reached the vena cava. The tissue of the lung was in part involved, but the disease appeared to have commenced in the glands. The lungs were healthy, except that they were in part encroached on by the cancer. On opening the pericardial sac some protuberances were seen coming from the cancerous mass on the right side. The serous membrane had not given way. The superior cava was surrounded and penetrated by the cancer. On opening it a projection, an inch long, was seen on the posterior wall, thence reaching to the heart. The channel was obliterated only partially by this. The commencement of the brachio cephalic and right jugular was also somewhat contracted. The pulmonary artery and its branches were free. The heart was otherwise healthy. There was a mass of cancerous glands surrounding the pancreas, and affecting its smaller end. When the organ was cut through longitudinally, the right extremity or head was seen to be healthy, but this gradually merged into the cancer.

THE LONDON HOSPITAL.

A CASE OF DISLOCATION OF THE FEMUR FORWARDS.

(Under the care of Mr. ADAMS.)

WILLIAM A., aged 34, a drayman, was admitted into the London Hospital on April 17 with a dislocation of the right hip. The accident occurred in the following manner:—He was steadying a puncheon of beer let down by a pulley from a dray to the ground, when the barrel was overbalanced, so that he was obliged to support it by pressing it forwards to prevent it falling on him; his arms were extended and his legs were separated, the right being in advance of the left. He sprang backwards to avoid the barrel, as he found himself unequal to its support, and in so doing his body fell backwards to the ground, and he could not tell precisely how his legs were placed at the time of his fall.

He was unable to rise, and was brought at once to the Hospital, being unaware that any serious accident had occurred, as he suffered no pain at the time.

He was a strong, healthy man in appearance, differing from the ordinary type of brewers' servants. Mr. Appleyard, the House-Surgeon, recognised the nature of the accident, and sent to Mr. Adams to see the case, being one of comparative rarity. The patient lay on his back, unable to move his limb; it appeared somewhat short, but by measurement the shortening was by no means evident; the foot was turned out, and a distinct, firm, but irregular tumour could be seen just below the level of Poupart's ligament, and apparently resting on the iliacus muscle. The swelling was recognised at once as the head of the femur, and could be felt to move by rotating the limb outwards, the distance from it to the anterior superior spine of the ileum being about two inches. There was great depression in the situation of the great trochanter, and sinking of the nates. It was pronounced to be a dislocation forwards of the head of the femur, corresponding to what is frequently termed a dislocation on to the pubis; but it is quite clear that it was at some distance from this bone. Under the direction of Mr. Adams and Mr. Appleyard, one of the dressing pupils, Mr. Hawthorn, was directed to sit upon the edge of the sofa on which the man was placed, and

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to put his foot into the perineum, so that extension with adduction might be made in this manner from the knee; but no effect on the bone could be thus made. The method by flexion was next tried, the hand being firmly fixed on the head of the femur to prevent its gliding upwards. It also failed. The man was therefore put under the influence of chloroform, and, by the aid of pulleys, the limb was forcibly extended round a post, according to the method adopted in reducing the dislocation into the obturator foramen, and after ten minutes a snap, as if something had given way, was felt, and the head of the bone slipped into its natural position.

The man has made a satisfactory recovery, but there was a good deal of extravasation of blood about the injured parts.

THE SALISBURY INFIRMARY.

CASE OF DISLOCATION OF THE HUMERUS ON THE DORSUM SCAPULÆ.

(Under the care of Mr. WILKES.)

It was not until after reference to the following works that I became aware that dislocation of the humerus on the dorsum scapulæ was so rare an accident. Sir Astley Cooper in his work on "Dislocations," at page 392, Fifth Edition, states that only two cases occurred in Guy's Hospital during thirty-eight years, and, subsequently, he relates seven cases collected from his own and other Surgeons' private practice. Liston, in his "Practical Surgery," Fourth Edition, reports that he had only seen one such case. This is my reason for placing one on record.

About 11 p.m. on March 6 last a drunken soldier was admitted under my care into the Salisbury Infirmary. He had jumped from a second-class carriage running between Warminster and Westbury. He was missed at the latter station, but was soon found and brought in. He had a large scalp wound on the left side of the forehead and temple, a small fissured fracture of the skull in the front part of the temporal fossa, with other wounds of the scalp, face, elbows, and knees, and a dislocation of the left humerus on the dorsum scapulæ below its spine. The head of the bone formed a very marked prominence, and was easily moved and rotated in its new position; the elbow and arm lay by the side of the body, directed somewhat forward, and there was the usual flatness and deficiency below the acromion.

From his drunken state reduction was easily effected, the scapula being fixed by a round towel across the chest; the heel placed in the axilla, and extension made from the wrist. It was reduced before I was aware of it, without noise or jerk. For a week or more the track of the dislocation was distinctly marked by a bruise, which extended from the spine of the scapula, along the inner side of the arm to the elbow, and tenderness on pressure, requiring counter-irritation, subsisted for some time longer.

The man perfectly recovered the use of the arm; the wounds healed, and he left the Infirmary cured on April 15.

My partner, Mr. G. R. Tatum, a short time before attended an unusual form of dislocated shoulder, in which I assisted him, and he has kindly allowed me to publish the case with my own.

A gentleman, about 24 years of age, subject to epilepsy, fell during a fit, in the latter part of February. After consciousness had returned, he complained of severe pain on the inner side of the left arm, about its lower third. No reference was made to the shoulder.

On the second day after the accident he felt pain in the shoulder. On examination, Mr. Tatum found a dislocation of the humerus to the outer side of the coracoid process—described by Sir Astley Cooper as the "partial dislocation of the os humeri upwards." The shoulder was so swollen that there was some difficulty at first in detecting it. There was a protuberance, and more fulness in front than on the sound side. By pressure the head of the bone could be felt forward against the outer side of the coracoid process, whilst behind there was an absence of bony resistance below the acromion. The arm lay naturally by the side. It could be rotated and moved backwards and forwards, and all voluntary power below the elbow was lost. Reduction was easily effected by the same method as in the previous case, and was accompanied with a loud jerk. The injury the median, ulnar, and musculo-spiral nerves had received was considerable, for after reduction the want of power and sensation in the fore-arm and hand continued, and soon after he had acute pains in the course of the median and ulnar from the arm to the fingers. Leeches and blisters were applied with relief. At the end of a month he had drop-wrist, diminished sensibility of all parts below the middle of the fore-arm, and occasional shooting pains in the fingers. He could raise the arm from the side and flex the elbow, but no power of pronating or supinating the hand, extending or flexing the fingers.

Gentle and frequent friction with the hand over the weakened muscles was used. By the latter part of April the pains had left him, sensation and power were gradually returning in the fore-arm and hand, and he was enabled to leave England for change.

UNIVERSITY COLLEGE HOSPITAL.

CASE OF FATTY DEGENERATION OF THE HEART, IN A YOUNG FEMALE AGED TWENTY-EIGHT, TERMINATING IN SUDDEN DEATH.

(Under the care of Dr. HARLEY.)

Sarah M., aged 28,—very large and fat, florid-complexioned, and puffy-looking,—came to the Hospital as an out-patient on April 14, complaining of symptoms somewhat resembling hysteria. She described herself as being very nervous, and subject to sudden fits of gasping for want of breath, which lasted a few minutes, and then passed off. She said she felt at times as if her strength suddenly left her, and she was obliged to sit down for fear of falling. She frequently vomited after food. Although labouring under these symptoms, she was still able to do her household duties. A mixture containing quassia and iron was prescribed. On the 21st she returned to the Hospital, saying she felt no better, and that she had, in addition to her previous symptoms, pain between the shoulders. The tonic medicine was then changed to gentian and sulphuric acid, after taking which, for a few days, she felt much better and stronger, and continued so until April 28. However, while attending to her usual household duties, she was suddenly seized with a general loss of power and a choking sensation. She partially rallied from this attack twice, but the third time the attack was more severe, and she fell back in the chair, and expired in the course of a few minutes.

At Dr. Harley's request, Dr. Embling examined the body, and the following remarks are from his report:—

Post-mortem Examination Three Days after Death.—Decomposition far advanced; neck much discoloured; vessels evidently distended. Brain normal in appearance, rather pale if anything. Lungs healthy; a few traces of old adhesions in the pleuræ. Heart somewhat hypertrophied, pale, soft, and flabby, entirely enveloped in a thin layer of fat. Contained black fluid blood. When the muscular tissue of the heart was examined with the microscope, the striæ of the fibres were found to have almost entirely disappeared, and their position to be occupied by minute fat granules. The oil globules existed abundantly, and were very regularly distributed in muscular fibres. The abdominal organs were all healthy.

Paris Académie de Médecine.—The election into the section of Operative Medicine has been determined in favour of M. Michon, by forty-four out of seventy-eight voters present. By this choice the Academy departed from the list presented by the section, which placed MM. Broca and Richet before M. Michon. The election of the latter able and older Surgeon seems to have given general satisfaction, while much surprise has been felt that the names of MM. Maisonneuve and Demarquay were not placed at all on the list.

New Clinical Lunatic Asylum at Paris.—The commission appointed for examining into the subject has recommended the establishment at the Farm of St. Anne, near Paris, a new asylum capable of containing 600 beds, and composed of two entirely separate divisions for the respective sexes. In this asylum are to be assembled all the cases of most interest for Medical study, illustrating the modes of curing insanity which may be sanctioned by experience. To this asylum is to be adjoined, but entirely separate from it, a depôt capable of accommodating forty persons, and to this are to be consigned persons deemed insane by their friends or by the authorities, where these cases will undergo that careful examination necessary to determine their ultimate destination.

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Medical Times and Gazette.

SATURDAY, MAY 30.

LIFE ASSURANCE AND THE MEDICAL PROFESSION.

The practice of life assurance is, for good or for evil, rapidly and steadily extending itself. The majority of the companies have, during the past year, issued more policies than in any previous single year. According to those interested in the "profession" of assurance, we have here the most conclusive of all signs, that, notwithstanding the loss of American cotton and American commerce, the wealth of the country is increasing, and habits of prudence developing themselves amongst the people. Others are heretical enough to hint that the augmented number of life policies indicates in part that the practice of borrowing money upon personal security is becoming more rife. The *Insurance Record*, a paper which a few weeks ago came into existence, poetically speaks of insurance societies "like gems of purest ray serene' shedding their light upon the social system," and "looks prospectively upon a time when life assurance will in all quarters of the globe be regarded as a necessary of existence, and when every man according to his means will be enrolled on this glorious Magna Charta of his country's greatness." But, apart from such notions as these, life assurance is often spoken of as if it were merely the sheet anchor of a number of families liable otherwise to be thrown into sudden destitution; and it would be interesting to know how far we are justified in viewing the subject in this light, in order to see in what degree an estimate of the position of the country, founded on the prevalence of life assurance, is valuable. We would ask the penner of the ecstatic effusion above quoted how many of the policies effected fulfil that destiny which is so often dwelt upon as if it were the only function of life assurance, and actually become a provision for the wives and children of the assured. We should like to learn whether the greater number are not promptly consigned to the strong box of the mortgagee, or deposited with the office to secure advances, and abandoned after fulfilling their temporary purpose, the company thus pocketing the premiums in addition to the legitimate interest on the loan. The practice is very frequent with some companies of making advances upon the security of the bond of the borrower and two or three sureties, upon condition that he shall effect an insurance upon his life for double the amount advanced, depositing the policy as a collateral security. Not only these policies, but also the vast number effected as parts of mortgage securities made upon estates for life or other limited period subject to any of the contingencies usually insured against, must be eliminated from our consideration before we point to the increase of life assurance as a proof of the extension of universal prosperity. Such transactions, indeed, form a profitable investment for the funds of insurance companies, and are a means of extending their business; but cannot, we apprehend, be said to confer any benefit upon society at large.

We do not, however, now propose to discuss the general advantages of life assurance, nor the question whether its extension be a legitimate subject of congratulation. We are interested neither in the advance nor the retrogression of insurance. We accept, for better or for worse, the fact of its great increase; and whilst we have no wish to change the direction of the wind, we are anxious to warn our professional brethren to trim their sails to the gale, so as not to sustain damage from its force.

The position of the Medical man who is called upon to give information to an Assurance Company touching the hygienic antecedents of his patient is seldom a particularly enviable one. It is, indeed, in many cases, eminently unpleasant and perplexing. The honourable Practitioner will, of course, in reply to the very categorical questions placed before him, either state the truth, and the whole truth, or, as he is perfectly at liberty to do if he pleases, decline altogether to furnish the desired information. Whichever plan he may adopt, it is probable that the relation between him and his patient will by no means be improved should the policy for which the latter is anxious not be granted by the office. We are, it is true, told that the communications between the insurers and the referees are of a strictly confidential character; and that when the office applies directly to the Medical attendant, the intending assured need not be aware of his having been consulted; but cases must occur to every one of our readers in which the patient must be able to make a shrewd guess as to the quarter whence the information which led to the refusal of the policy was derived. And it is not always, as we shall see, that the direct system of communication is adopted.

The service under consideration is one which the Medical Profession are under no contract whatever with society to perform, and which, in this respect, stands on the same footing with the giving of evidence in criminal cases, and the proposed compulsory certificate of the cause of death—a service of a nature most responsible, of vast importance to the interests of the offices, and frequently very repugnant to the Practitioner—a service, in fact, combining all the requisites for entitling the performer to an ample and exceptional remuneration at the hands of those to whom it is rendered. Most of the first-rate offices, indeed, now recognise these principles, to the extent, at least, of communicating directly with the Medical attendant of the "life," and paying him more or less adequately for the required information. But, strange to say, there are some companies which, as our readers are probably aware, are not ashamed to adopt a mode of proceeding by which they virtually tell the Medical man, "We refuse to grant the proposed policy on your patient's life unless we have a satisfactory report from you. At the same time, we will not pay you for that report, and moreover we will not place the slightest confidence in your information when we have got it." Such is, in fact, the ground taken by those offices which enclose the queries to the intending assured, directing him to forward them to the Medical attendant of the "life," and to obtain an answer. The object of this is twofold: first, to avoid becoming liable to the Medical adviser for his fee; and secondly, that the assured may, if possible, be held answerable for any misrepresentation by the referee. Sometimes the proposer is even warned that the validity of the policy will depend on the correctness of the Medical man's report. The system thus indicated embodies an amount of meanness the like of which is not often met with in the business world, and is an insult to the known honour and integrity of our Profession. These proceedings generally result in the certificate being furnished without charge either to the office or the patient—a practice which, as the spread of assurance goes on, is in danger of becoming an intolerable burden to Medical men. The er

solation often deemed sufficient for the Doctor who does not get paid, that his services being for the good of society are their own reward, does not, as we have seen, always apply in these cases. Assurance transactions are not, as a whole, so universally beneficial to humanity as to render it incumbent on, or laudable in, a Medical man to act in these matters without proper payment, or without his position being rightly defined. The course we propose is very simple; it is merely that the Profession should come to a common understanding to refuse information in any case in which the office does not undertake to give an adequate remuneration for the service. If the Medical men mutually agree that unless the fee is paid by the office they will not reply to the inquiries, those companies which still adhere to the plan of non-payment and distrust will be compelled to follow the example of their more liberal and well-conducted competitors.

It is impossible not to contrast the footing on which Medical men are dealt with by insurance companies with the relations between those bodies and the solicitors. Take a passage from the speech of the chairman at the last annual general meeting of the Law Life Assurance Society: "Gentlemen, you see that the commissions are placed at a sum of 12,000*l.* and odd. Now that is a large sum to be paid for commission; but it is paid in every office, and it has a tendency to bring business to the society, affording as it does compensation to those who take the trouble of paying the premiums and of bringing policies to us." Turn to the report of the meeting of the Mutual, and we find that "Mr. Bolton urged that if they doubled their business by paying 10 per cent. commission it would be beneficial. Other offices paid 10 per cent., and some paid 15 per cent., so that surely the Mutual could do the same." We do not quarrel with the remuneration the attorneys receive for paying premiums. The money employed to render the interests of that profession identical with those of an insurance company is doubtless well spent. But the solicitor is not the only man who fills the position of confidential adviser in many families. Medical men are frequently consulted on the subject of life assurance. We are satisfied that a few miserable savings accomplished by dint of shabby treatment of the Medical Profession will not in the long run be found profitable to any office.

THE WEEK.

VACCINATION NO PLAYTHING.

Far be it from us to say one word to disparage or to limit the employment of one of the greatest boons which Medical science has conferred on the present and past generations. Vaccination needs no eulogy. Its power of limiting the operation of the most loathsome pest which has decimated the human race has now been tested for more than half a century, and new evidence is afforded by every fresh epidemic of variola. But there cannot be a greater error than to suppose that the "pearl on the rose leaf," as Jenner poetically described the vaccine vesicle, is in every case a mere local manifestation, incapable of anything but a benign influence. True it is that, in the enormous majority, it appears to be nothing more; but facts now and then crop up which remind us of the truth that the matter of vaccinia belongs to the class of morbid poisons, and is potent enough in some rare cases to produce grave constitutional disturbance, and even, in peculiar unhealthy conditions, death itself. This, after all, is no more than might have been expected from the first. The most useful therapeutic agents are subject to the same limitation. Every Practitioner knows that idiosyncrasies ever and anon present themselves, in which the smallest medicinal doses of opium, mercury, and many other of the most useful drugs can only be administered with extreme peril. But an acknowledgment of the truth does not invalidate their general usefulness. Vaccine lymph is a *virus* in the true sense of the term. The vesicle is only the local manifestation of the change to which the whole mass of the blood has been subjected, and can we wonder that occasionally such a transmutation passes the boundary line of perfect safety to the individual? It is needless to say that these remarks have been suggested by the occurrences of the present epidemic. In another part of the Journal we publish a letter giving an account of a case in which death from phlegmonous erysipelas actually occurred after re-vaccination,—a previous attempt to induce the vaccine disease having produced the most serious constitutional disturbance. The death of Sir Culling Eardley has been noticed in most of the daily papers as a consequence of vaccination in an individual who had been previously in bad health, and in whom the operation failed to produce the usual local results. We would not draw too grave an inference from these cases; it is highly probable that they may be explained by accidental circumstances which do not appear; but every Medical Practitioner must have seen instances in which the constitutional affection has passed the usual limits, and where considerable inflammation of the arm has occurred, attended with sympathetic enlargement of the axillary glands. At present, when the doors of London Physicians and Surgeons are besieged by crowds of young ladies and gentlemen applicants for vaccination, who seem to think the operation of no more consequence than a submission to the manipulations of the *coiffeur*, it is necessary that these things should be borne in mind by Professional men. It is even stated that chemists and druggists are driving a good trade in vaccination. If so, we think the fact calls for the direct and immediate interference of the Medical Council, who, if at present they have not powers to stop such practices, should leave no stone unturned to obtain them from the Legislature. To our Medical brethren we say,—Tell your patients when vaccinated that they have to go through the stages of a disease, and that it will not do for them to live as carelessly as they are wont. Tell young men in particular that they must not dine out and indulge in the pleasures of the table or the excitements of fast society during the incubation and maturation of the vaccine vesicle. In a word, that if it be not necessary for them to "purge," it will be at least prudent for them to "live cleanly," whilst an agent, whose protective influence is only a measure of its activity, is leavening the entire organism.

THE ETHNOLOGICAL AND GEOGRAPHICAL DISCOVERIES OF CAPTAINS SPEKE AND GRANT.

The great scientific event of the week has been the annual general meeting of the Royal Geographical Society, at which the President, Sir Roderick Murchison, gave a narrative compiled from the journals of the African travellers, Captains Speke and Grant. The discovery of the origin of the White Nile from the middle of the northern boundary of the great inland fresh-water lake, Victoria Nyanza—the stream at its exit from the lake no insignificant rivulet, but a broad cascade, 150 yards in width, leaping over a fall twelve feet in height—might satisfy the craving for adventure of a century. Sir Roderick Murchison has reason to congratulate himself on the verification of a proposition he advanced as an hypothesis eleven years ago, when he suggested that "the true centre of Africa, instead of being a sandy desert, is a great elevated watery basin, often abounding in rich lands, its large lakes being fed by numerous streams from adjacent ridges, and its waters escaping to the sea by fissures and depressions in the higher surrounding lands." Such is the origin of the Zambesi, of the Niger, and it may now be added of the Nile itself. The Victoria Nyanza lake, the north shore of which is nearly coincident with the equator, is 3500 feet above the level of the sea, and about 150 miles in length and breadth. Its chief feeder arises in the famous Mountains of the Moon, now announced to be detached conical hills, the highest of which attains the height of 10,000 feet. Its great outlet is

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the Nile itself, but it has numerous others, which converge on the river, and feed it for a course of 150 miles. The river also passes through another lake, the Luta Nzige, which is fed by a stream arising in the same highland district as the feeder of the Victoria Nyanza. But our space will not allow us to follow the travellers through all their geographical discoveries. Their ethnological facts are scarcely second to their geographical in interest. They have traversed three kingdoms never before visited by European. First, the kingdom of Karagwè, a district containing the Mountains of the Moon, which abuts by one of its corners against the west shore of Nyanza at its southern end. Here Speke found a very superior negro race, advanced to some degree in civilisation, having an intelligent king, who befriended him, franking his expenses, and forwarded him with recommendations to the king of Uganda. Uganda is bounded on the east by the Nile at its origin. Its people are described as the French of those parts, sprightly in demeanour, and displaying good taste in behaviour, dress, and houses. Their ruler, Mtesa by name, is absolute in his power; fortunately he showed great kindness and even affection for Speke. He knew well of the navigation of the White Nile by whites, and had occasionally received their bartered goods. This "amiable youth" is described as surrounded by his wives, and delighting in field sports, while one of the rules of his court seems to require the execution of one man per diem for the good of the State. By him Speke was detained as a kind of state prisoner for five months. The northernmost of the three kingdoms is the kingdom of Ungoro. It is inhabited by the same Wahuma race as Karagwè and Uganda, but they are far less advanced in civilisation. Their king is said to be morose, suspicious, and churlish; his chief occupation is the fattening of his wives and children till they cannot stand, and the practice of witchcraft. Hitherto the travellers had no difficulty about interpreters, for one language was common to the three kingdoms, but beyond Ungoro, on to the north, the people spoke an entirely different tongue, and were literally naked barbarians. Those of them who visited Ungoro adopted a scanty dress out of deference to the feelings of the inhabitants, but at home perfect nudity is their normal condition. These in all probability are the Anthropophagi of Herodotus, the true obstacles in every age to the discovery of the source of the Nile. We offer no apology for giving our readers this slight sketch of Sir Roderick's narration, for, not to speak of its intrinsic interest and its scientific importance, the discovery of the origin of the Nile by Englishmen confers an honour on our generation to which no profession or class can be indifferent.

MEDICINE IN CHINA.

Hospital reports are generally somewhat dreary productions, but the Sixteenth Annual Report of the Chinese Hospital, Shanghai, is a marked exception to the rule. Dr. Henderson, the Medical Officer to the Hospital, and the author of the Report, has made his little pamphlet an interesting annotated catalogue of remarkable cases, a means of conveying to the Profession at large the results of an experience new and peculiar, and an appeal to the outside world enforced by an unvarnished account of what his art is accomplishing amongst the extraordinary people to whom he devotes his skill and energies. One of the Medical facts he records is the occurrence of pure typhoid fever amongst the natives at Shanghai during the months of November and December, 1862, and the success which has attended in his hands its treatment by hydrochloric acid. He has already in our pages called the attention of the Profession to the value he is disposed to attribute to this remedy. He believes that in typhoid fever the effect of hydrochloric acid is as decidedly beneficial and specific as that of quinine in ague. He explains the good effect of the acid by reference to the excess of ammonia given off from the body during destructive metamorphosis of the tissues, and argues from the fact that ammonia injected into the veins of animals is capable of producing symptoms of a typhoid character. The same line of reasoning, we may observe, was several years ago taken by Dr. Richardson. A form of dysentery, also of a typhoid character, occurs at Shanghai. In this disease Dr. Henderson found the blood to be more alkaline than in health, and again the acid treatment was followed by the very best results. The prevalence of catarrhal ophthalmia amongst the Chinese is well known. Neglected cases, in which chemosis is so great as to overlap the eyelids and the greater part of the cornea, leaving merely a transparent round spot in the centre like an ordinary pupil, are of constant occurrence. After vainly trying to cure them by the simple application of nitrate of silver, Dr. Henderson adopted the plan of dissecting off all the infiltrated mass of conjunctiva round the whole margin of the cornea, and after allowing it to bleed freely, applying lightly solid nitrate of silver to the raw surface, then soaking a little cotton in a solution of belladonna, and applying it to the eyelids. Perfect rest completed the treatment, which was found never to fail.

The following story is characteristic:—A master of an opium shop was accidentally shot by a Chinese soldier. The ball shattered the knee-joint, and amputation afforded the only chance of recovery. The patient was told this, and efforts were made to induce him to submit to the operation. They were, however, unavailing. The true Chinaman showed his usual philosophy —*i.e.*, he was willing to die, but what could he do with only one leg? His friends were of the same opinion as himself, and entirely refused to sanction the operation. The man began to sink on the fourth day, and died on the sixth. The evening before he died he was asked whether he would now have the leg amputated were it practicable, but no change had come over him. The old excuse was ready. "What would be the use of me without a leg? To have performed the operation against the patient's will would, in case of his death, have placed the operator in an awkward position in relation to the legal authorities. Dr. Henderson frankly acknowledges that, as a rule, the Chinese are not grateful for what is done for them. He writes:—

"Individuals occasionally express their gratitude; but this is nothing to the purpose. I never came to China to gain the people's gratitude, but to try and do them good; and the man who expects gratitude from the Chinese will be wofully disappointed; but though they do not show their thankfulness, they cannot fail to see that the aims and objects of the Hospital are for their good; and though the influence is silent, it is steady and strong in the right direction, and they certainly have great confidence in the Institution and the work carried on in it."

We suspect that the same estimate of gratitude would do no injustice to the mental state of crowds who throng the out-patient rooms of London Hospitals. Human nature is not very different in China and Cheapside; but good work bears its own fruit in every soil, and we heartily wish the author of this Report an overflowing garner.

INDECENT ATTACK ON THE MEDICAL OFFICERS OF HEALTH AND VACCINATORS BY A MEDICAL MEMBER OF A VESTRY.

We will not venture to compare the Medical Council to a London Vestry or Board of Guardians, but if any of the members of that Council behave like the members—we blush to say *Medical* members—of some vestries, we need not wonder that they should dislike the presence of reporters. The following curious bit has been sent to us, duly authenticated, as a report of part of the proceedings of the "St. George's" Board of Guardians. The report does not state whether it was St. George's, Hanover-square, or St. George's-in-the-East, and although the presence of a lord would countenance the supposition that it may have been the former, the conduct of the chairman most decidedly smacks of the East-end type. We do not profess to know the

peculiar qualifications of Dr. Brewer to sit in judgment on his Professional brethren, nor on what grounds he ventures to brand them with the basest and most mercenary conduct. He seems, from the speech of Mr. Walton, to have retired from practice, and is not connected, so far as appears in the "Medical Directory," with any Hospital, and is never seen at any Medical society. The name of Brewer shines not on the list of the Pathological, Medico-Chirurgical, Obstetrical, or any other active Society that we know of. He seems to like better the presiding over a Board of Guardians; but, if we may judge from the quiet sarcastic speech of Mr. Walton, they seem capable of taking a pretty accurate measure of the worthy Doctor's pretensions.

"*Dr. Brewer pronounces the* MEDICAL OFFICERS OF HEALTH TO BE 'UTTER FOOLS' *and a* 'SET OF IDIOTS.'

"At the fortnightly meeting of the St George's Guardians on Wednesday, Dr. Brewer (churchwarden) in the chair, a letter on the subject of small-pox was read from the Metropolitan Association of Medical Officers of Health, containing suggestions and hints as to the course to be pursued in endeavouring to check the epidemic.

"On the conclusion of the reading, Dr. Brewer said: 'A most contemptible paper! Most contemptible!'

"Lord Calthorpe asked if the Association was one recognised by Government?

"Dr. Brewer: No, my Lord; this is a combination of these men to cling together to magnify their parochial offices, to the utter degradation of the whole Profession.

"The Clerk to the Board complained 'that these people were getting a serious annoyance.'

"Mr. Walton said there was great difficulty about the matter. If the Medical Officers of Health suggested nothing, there was a cry of 'Oh! there's nothing done,' and if they did anything they were told they should have gone much farther than they had done. How contemptible soever this circular might be considered, they had as yet heard nothing better from the Profession on the subject. If gentlemen in the position of their chairman were to recall what their experience had been when engaged in the Medical Profession, and produce something really valuable, which would supersede productions of this kind, which were now the only information available, they might then better pronounce such suggestions to be contemptible; but it appeared to him that the Officers of Health were in the present instance doing all they could. They had combined their wisdom in a committee, and if the opinions of that combination were not satisfactory, what were they to do?

"A Member asked who paid the fees for the vaccinations which were now taking place, to which the Clerk replied that the parish did so.

"A Member: This accounts for the panic that has been produced in the parish.

"Dr. Brewer: No doubt, no doubt.

"Mr. Walton thought that as members of gentlemen's families and others paid for vaccination, the vaccinators should distinguish in their returns between such persons and those for whom the parish had to pay.

"Mr. Chappell explained that such persons were not charged for by the vaccinators, although the notices advised re-vaccination at the public expense.

"Dr. Brewer: I think you will see, Mr. Walton, at once that those gentlemen you have been lauding so much for doing all they possibly can, have left the matter in a most admirable state of confusion. This is a 'combination of their wisdom.' There is a fire taking place, and they are holding up their hands, and crying 'Fire! fire!' when they are ordered to put it out.

"The meeting then adjourned, this being the last business; Dr. Brewer remarking as he left the Chair,—'They are making utter fools of themselves; I never saw such a set of idiots in my life.'"

LOCAL REPORTS ON SMALL-POX.

(Continued from page 542.)

XVI. *Hampstead.* By C. F. LORD, Esq., M.R.C.S., Medical Officer of Health.

THE epidemic of small-pox, which has created lately so much alarm in other parts of the metropolis, has hitherto been unknown in Hampstead. Not a single death has arisen from it. There was not one in the parish from it from June, 1861, to June, 1862, nor has there been one since. Our population is 19,106. The boundary of our parish by Gospel Oak Fields, Kentish-town, is near to the Small-pox Hospital. I hear at present of but one or two cases, which were brought into the parish near Haverstock-hill.

Our school committees have always enforced vaccination of the children. The Hampstead Board of Guardians have always liberally encouraged vaccination, by allowing 3s. per case to the public vaccinator. His vigilance for many years in that relation, coupled with his duties of Medical Officer of Health, have caused him to be very successful in the matter of keeping away all severe or spreading small pox from the parish. Still, it is to be feared that there are many persons existing here who, through carelessness, ignorance, or prejudice, have totally neglected vaccination.

During my public and private experience of over thirty years in this parish, from time to time a slight outbreak of the complaint has arisen. More than once this was traced to lodging-houses, not then under regulation or "licence." Once the origin proceeded from foul linen carried by a laundress in an omnibus; another time from sewage matter which escaped in an open court at a low level in this parish. Children from various parts frequented the same school, but escaped, while adult occupants of the special court suffered with the mitigated form of small-pox, caught through drainage from infected higher-lying ground.

Not long ago the disease was brought into a healthy part of the village from Clerkenwell, through a dress being sent to be "pinked" at an undertaker's who had been furnishing the funeral of a small-pox case. The disease spread to the family next door. A young woman died of the complaint. Her mother came to nurse her from Leicester, and on returning carried the disease into that town.

The following is an extreme illustration of the subtle mode in which small pox may be transmitted by the ordinary exposures of social life. A young woman was going by Downshire-hill, and recognised a former fellow-servant. The latter said her mistress had sent her "out for a blow of fresh air," as they "in St. Pancras had had small-pox, and little Polly had died of it, but the funeral was all over," etc. The girls parted, but about eight or ten days afterwards I was called to see the former, who had general fever. The following day I predicted small-pox, and the mother told me the above anecdote, adding, "The foolish girl must have frightened herself into the disease; she has done nothing but talk of it since the meeting, and said she felt all over sick at the time." The daughter was removed to the Small-pox Hospital, and died there. She had been previously vaccinated.

It is very important to bear in mind the subtle and latent, or lasting character of this contagion, as shown by these cases, the facility of its transit by clothing and other agents. In this way, perhaps, we may better account for what is called an epidemic of small-pox than by the idea of "hoarding up the germs" of the disease by a dirty population "till a supposed favourable season calls it into activity."

Vaccination and re-vaccination were generally adopted in this place during the epidemic of 1858, under the inspection of Dr. Seaton. Stray cases have since occurred, but they have not spread. One, last autumn, in an outlying hamlet, occurred in a gardener of middle age, who had been "nowhere out of his usual beat, except to remove and turn over a dung-heap," over which "job he felt unusual faint and sick," about a week before his illness. The complaint did not spread in the village, though the man refused to go to the Small-pox Hospital.

It is a serious matter to urge or force the removal of a patient from an airy room or locality to the wards of a Hospital, and thus materially lessen his chances of recovery. Crowding these patients in a densely populated district on any plea whatever is most reprehensible, dangerous in principle, fatal in practice. With this view the Association of Medical Officers of Health have advised temporary buildings or wards "to be opened on the double ground of distance from inhabited houses and facility of approach." It is to be hoped that nothing like or near to the late Queen's Bench Prison, which has been suggested, will ever be sought after or adopted as a temporary small-pox Hospital.

The practice of re-vaccination, which has lately been so much in vogue, is surely a slur on the previous operation. Its performance can only be warranted under the idea that some fault in the character of the lymph used, or the system of the

child vaccinated, existed at the time of the original operation. Idiosyncrasy of constitution, or the wearing out of protective power by change in molecular growth, can have no more weight against vaccination than they have against the whole class of exanthemata, which by one attack are admitted to yield a protective influence through life. It appears to me that it is only when a house or school is specially attacked, that it is expedient to urge that wholesale re-vaccination which in some neighbourhoods in the metropolis, under the present panic, the Doctors and their patients are rushing to accomplish. In nearly every case I have seen of re-vaccination the cow-pock pustule and regular areola and inflammation have never been produced. (a) I presume this to be universally so. On this fact we may base the argument that it is so because the blood or system has been so changed or influenced by the cow-pock, that it cannot admit its second development, and would defy small-pox as much as it did at the time of the first perfect or successful vaccination. When the greatest vigilance has been taken to secure the early perfect vaccination of all, and re-vaccination in every doubtful case, the Profession may surely safely leave the result to fixed and general laws, while a meddlesome interference is to be shunned as useless and dangerous.

XVII. *Wandsworth.* By G. E. Nicholas, M.D., Medical Officer of Health for Wandsworth.

I send a statement of the prevalence of small-pox in this sub-district during the period I have held the office of Medical Officer of Health. I submit it in a tabular form, and would beg to suggest the propriety of using this or some similar and perhaps more comprehensive form of table in procuring information from every district in the metropolis, from which could be collected a general table of considerable statistical value.

Table showing the total Deaths which have taken place from Small-pox in the Sub-district of Wandsworth during the Seven Years, 1856-62; *also the Number of Attacks from that Disease, with the Resulting Deaths which have occurred amongst the Parochial Poor during the same period:—*

SUB-DISTRICT OF WANDSWORTH.

Area in acres, 2,478. Population in 1861, 13,346.

Years.	Number of deaths from Small-pox amongst all classes.	Amongst the Parochial Poor. Attacks.	Deaths.
1856	9	61	2
1857	0	0	0
1858	0	1	0
1859	2	16	2
1860	0	26	0
1861	1	23	1
1862	0	3	0

During the present year up to this date there have occurred two deaths and seven cases, two of which were modified from vaccination. The deaths were of persons unvaccinated. From the foregoing table it is seen that this sub-district has enjoyed comparative immunity from the disease. Here, as in other parts of the metropolis, vaccination is being extensively adopted, and amongst the poor there is an increasing desire to avail themselves of its protective influence; which influence, I may add, they regard as a protection against death, rather than as a preventive to small-pox. They believe the former; as a rule, they disbelieve the latter. Whether this be the result of correct observation or not, small-pox after vaccination would appear to be a thing of by no means uncommon occurrence. Hence it becomes a most important question to determine whether more small-pox after vaccination occurs now than formerly, and if so, whether the diminution of its protective influence is due to the present milder character of cow-pox, or to what other cause. I trust your columns will become the exponent of some facts bearing upon this subject.

XVIII. *Small-Pox in St. Pancras.* By Dr. Hillier, Medical Officer of Health.

With a population of 200,000, many of whom are in constant communication with all parts of London and all parts of the country, it might reasonably be expected that, so long as there is much small-pox in England, St. Pancras would, from time to time, come in for its share. In the year 1862, there were 19 deaths from this disease, 11 of which occurred in the fourth quarter of that year. In January of the present year there were 4 deaths; in February 6, in March 2, and in seven weeks ending on the 16th instant, there were as many as 16 deaths. As might have been anticipated, most of the deaths have been in persons not protected by vaccination. So far as I have been able to ascertain, for every death there have been from 10 to 15 cases of the disease. Assuming 12 to be the number (and I believe this has been not far from the truth), we should have had, since the beginning of the year, about 336 cases in the parish. There has been a very large proportion of cases of small-pox modified by vaccination in this epidemic. During the past week there were, amongst the out-door poor, attended by the parish Surgeons, 34 cases, and in the previous week, 37 cases. Of these, nearly half were sent into the workhouse, and are there being treated in special wards set apart for the purpose; the others have been treated at their own houses, and are, it is to be feared, propagating the disease to their neighbours. In many instances, parties object to being sent away from their homes, and there is no power by which they can be removed against their will. For some time after the Small-Pox Hospital was unable to receive more patients, the directors of the poor in this parish objected to having the cases sent away from their homes to be treated, except those cases which most urgently required to be removed. Their reason for this was, that they had no place suited for the reception of the number of cases which presented themselves. At first wards were fitted up to accommodate six patients; since then room has been found for fourteen more, and at the present time provision is being made for thirty more. The allowance of space for each patient is 1000 cubic feet. The wards are tolerably well adapted for the purpose, were it not for their proximity to the rest of the building, and to a low class of dwellings in Agar Town immediately at their rear. They are not entirely detached, but there are no patients above or below them, and communication is cut off from the rest of the establishment as completely as possible.

The disease has spread to some extent amongst the inmates of the house, about six persons having contracted it there, besides several persons who have come in during the period of incubation of the disease. There has also been an outbreak of the disease in the streets of Agar Town immediately adjoining the special wards, upwards of twenty cases having occurred within a stone's throw of these wards in a period of eight or ten days. Re-vaccination has been carried out in the workhouse and in districts where small-pox has prevailed, so far as persons would allow it. All the public schools are being visited, and steps have been taken to enforce vaccination where it has been neglected, and to have it repeated where that appears desirable. It is the intention of the directors of the poor to take legal proceedings in cases where parties obstinately refuse to get their children vaccinated. So far as I can ascertain, the disease is on the decrease within the last week or ten days.

XIX. *Fulham District.*

Mr. Burge, Medical Officer of Health, writes:—"I am happy to say that no deaths from small-pox have been as yet registered in the Fulham district, though three or four cases of the disease have come under my cognisance. I will report further if necessary."

The Abbeville Jaw-bone Again.—Our readers are already aware that, after an elaborate discussion, the authenticity of this bone has been completely affirmed, and M. Milne-Edwards announced the fact to the Academy of Sciences, M. Quatrefages taking the opportunity of complimenting his English adversaries for the courtesy with which they had abandoned their erroneous prejudices. All seemed terminating in a state of happy harmony, when Elie de Beaumont emphatically declared to the astonished Academy that, whether the jaw-bone and flint implements found were authentic or not, mattered not, for the soil in which they were found was not the *diluvium*, but a formation within historic period. Such a statement from so high an authority has caused much surprise, seeing that it was never made during the period of the discovery, but only when all had agreed as to the results. Detailed proof is naturally demanded at his hands.

(a) The puncture or "scratch" inflames after the second day; then assumes speedily the look of a shabby, festering sore, with jagged, irregular inflammation, and hardened base, which soon die quite away. Sometimes the virus appears to make a blunder, and rushes on to create a good deal of cellular effusion, with sympatetic inflammation around the arm. I ascribe these deviations to natural or acquired irritability of skin or system, and not to any latent propensity to small-pox, as some do.

GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

MINUTES OF MEETING, MONDAY, MAY 25, 1863.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

MR. GREEN, *President*, took the chair at Two o'clock, p.m.

Present—

Dr. Burrows.	Dr. Alexander Wood.	Dr. Apjohn.
Mr. Arnott.	Dr. Andrew Wood.	Dr. Corrigan.
Mr. Cooper.	Mr. Syme.	Sir Charles Hastings.
Dr. Acland.	Dr. Thomson.	Dr. Sharpey.
Dr. Bond.	Dr. A. Smith.	Mr. Teale.
Dr. Embleton.	Mr. Hargrave.	Dr. Christison.
Dr. Storrar.	Dr. Leet.	Dr. Stokes.

Dr. FRANCIS HAWKINS, *Registrar*.

The Minutes of the last meeting were read and confirmed.

Read the following letter from Mr. Watt:—

"7, Blythswood-square, Glasgow, May 21, 1863.

"Dear Sir,—Feeling myself, from long-continued indisposition, unable to attend the meeting of the General Council of Medical Education and Registration of the United Kingdom, I beg to intimate to you my resignation as a member thereof.

"I am, dear Sir, yours very sincerely,

"J. H. Green, Esq., President of the Council of Medical Education, etc." "GEORGE WATT.

Read the following official notice:—

At a duly constituted meeting of the Faculty of Physicians and Surgeons of Glasgow, held within the Faculty Hall, Glasgow, of date the twenty-third May, eighteen hundred and sixty-three, the Faculty, *inter alia*, elected John Gibson Fleming, M.D. Glasgow, a member of the General Council of Medical Education and Registration, and committed to him full power, warrant, and commission to represent the Faculty in the said General Council, to attend all meetings of the said Council wherever the same may be held, and to act and to do for and on behalf of the said Faculty, in all matters and things which may be brought before said Council, as should appear to him fit and proper; and the said Faculty did thereby vest the said John Gibson Fleming with the whole powers and faculties which the Medical Act contemplates to be vested in a member of said Council.

In faith and testimony whereof, I, Charles Ritchie, M.D., President of the said Faculty, have hereunto set my hand and signature, and the seal of the said Faculty is hereto affixed at Glasgow, the twenty-third day of May, in the year one thousand eight hundred and sixty-three. CHARLES RITCHIE, M.D., *President*.

Dr. Fleming was then introduced to the Council by Dr. Thomson.

The "Business Committee" of the Meeting of the General Council held on May, 1862, was re-appointed, viz.:—

Dr. Andrew Wood, Chairman.	Dr. Thomson.
Mr. Teale.	Dr. Corrigan.
Dr. Embleton.	

The "Finance Committee" of the Meeting of the General Council in May, 1862, was re-appointed, viz.:—

Dr. Burrows, Chairman.	Dr. Andrew Wood.
Dr. Sharpey.	Mr. Arnott.
Dr. A. Smith.	

The "Committee appointed to consider Special Claims for Registration" in 1862 was re-appointed, viz.:—

Dr. Alexander Wood, Chairman.	Dr. Leet.
Sir Charles Hastings.	Dr. Embleton.
Dr. Bond.	Dr. A. Smith.
Mr. Syme.	

The "Committee on Amendments of the Medical Act," appointed at the Meeting of the General Council in May, 1862, was re-appointed, with the addition of Dr. Leet, viz.:—

Dr. Corrigan, Chairman.	Dr. Acland.
Dr. Thomson.	Dr. Andrew Wood.
Dr. Storrar.	Dr. Sharpey.
Dr. Apjohn.	Mr. Hargrave.
Dr. Burrows.	Dr. Leet.

The Committee appointed to "revise the Standing Orders of the Council" in 1861, was re-appointed, viz.:—

Mr. Teale, Chairman.	Dr. Stokes.
Dr. Embleton.	

The Committee appointed at the Meeting in 1862, to consider and report upon "The Returns of the Number and Names of Candidates who have passed their respective final Examinations, and the Number of those who have been Rejected, which have been received in compliance with the Twenty-third Recommendation of the Medical Council, and also the Returns received in compliance with the Sixteenth Recommendation," was re-appointed, viz.:—

Dr. Embleton, Chairman.	Dr. Leet.
Mr. Cooper.	Dr. Apjohn.
Dr. Thomson.	Dr. Stokes.

1. Moved by Dr. ANDREW WOOD, seconded by Dr. ALEXANDER WOOD—"That reporters be admitted to the meetings of the General Medical Council.

(First Amendment.)

Moved by Dr. THOMSON, second led by Dr. STOKES—"That a Committee be appointed, to draw up and lay before the Council, for its consideration, a plan for the publication of such an authorised report of the proceedings of the Council as may appear desirable."

(Second Amendment.)

Moved by Sir CHARLES HASTINGS, seconded by Mr. SYME—"That in all cases in which the General Council have to exercise their functions as a Court of Judicature, relative to the admission of persons on, or rejection of them from the Register, reporters from the press be admitted."

Question put to the vote—"That the original motion be amended."—Negatived.

Dr. ANDREW WOOD required that the names of the majority and minority should be entered on the Minutes.

Majority—	*Minority*—
The President.	Dr. Burrows.
Mr. Arnott	Dr. Acland.
Mr. Cooper.	Dr. Bond.
Dr Alexander Wood.	Dr. Embleton.
Dr. Andrew Wood.	Dr. Storrar.
Dr. Fleming.	Dr. Thomson.
Mr. Syme.	Dr. A. Smith.
Mr. Hargrave.	Sir Charles Hastings.
Dr. Leet.	Dr. Sharpey.
Dr. Apjohn.	Dr. Christison.
Dr. Corrigan.	Dr. Stokes.
Mr. Teale.	

The original motion, "That reporters for the press be admitted to the meetings of the General Council," was then put, and negatived.

Dr. ANDREW WOOD required that the names of the majority and minority should be entered on the Minutes.

Majority—	*Minority*—
The President.	Mr. Cooper.
Dr. Burrows.	Dr. Alexander Wood.
Mr. Arnott	Dr. Andrew Wood.
Dr. Acland.	Dr. Fleming.
Dr. Bond.	Mr. Syme.
Dr. Embleton.	Mr. Hargrave.
Dr. Storrar.	Dr. Leet.
Dr. Thomson.	Dr. Apjohn.
Dr. A. Smith.	Dr. Corrigan.
Dr. Sharpey.	Sir Charles Hastings.
Mr Teale.	Dr. Stokes.
Dr. Christison.	

Read, the following letter from the Home Office:—

"Whitehall, May 19, 1863.

"Sir,—With reference to your letter of the 6th instant, I am directed by Secretary Sir George Grey to inform you that the Lords Commissioners of the Treasury approve of the distribution of 200 copies of the *Medical Register*, published by the Council of Medical Education and Registration, to certain public offices, at a cost not exceeding £300 per annum.

"I am, Sir, your obedient servant,

"H. WADDINGTON.

"Joseph Henry Green, Esq., President of the Council of Medical Education and Registration, 32, Soho-square."

2. Moved by Dr. A. SMITH, seconded by Dr. SIR ARMY—"That a Committee be appointed to consider the publication and distribution of the Register.

"Dr. A. Smith, Chairman.	"Dr. Fleming.
"Dr. Sharpey."	

—Agreed to.

3. Moved by Dr. ALEXANDER WOOD, seconded by Dr. APJOHN—"That a Committee be appointed to consider and report on the applications from foreign or colonial Colleges and Universities for the recognition of their degrees or examinations.

"Dr. Alexander Wood, Chairman.	Dr. Fleming.
Dr. Storrar.	Dr. Apjohn.
Sir Charles Hastings.	Dr. Leet."

—Agreed to.

4. Moved by Dr. CORRIGAN, seconded by Dr. STORRAR—"That the memorial of the Manchester Medico-Ethical Association, respecting amendment of the Medical Acts, be referred to the Medical Acts' Amendment Committee."—Agreed to.

5. Moved by Dr. ACLAND, seconded by Dr. A. SMITH—"That the President be requested to propose to the Council, during its present session, a design for the common seal."—Agreed to.

Confirmed—JOSEPH HENRY GREEN.

MINUTES OF MEETING, TUESDAY, MAY 26, 1863.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

MR. GREEN, *President*, took the chair at Two o'clock p.m.

Present—

Dr. Burrows.	Dr. Andrew Wood.	Dr. Corrigan.
Mr. Arnott.	Dr. Fleming.	Sir Charles Hastings.
Mr. Cooper.	Mr. Syme.	Dr. Sharpey.
Dr. Acland	Dr. Thomson.	Mr Lawrence.
Dr. Bond.	Dr. A. Smith.	Mr. Teale.
Dr. Embleton.	Mr. Hargrave.	Dr. Christison.
Dr. Storrar.	Dr. Leet.	Dr. Stokes.
Dr. Alexander Wood.	Dr. Apjohn.	

Dr. FRANCIS HAWKINS, *Registrar*.

The Minutes of the last meeting were read and confirmed.

The Solicitor, Mr. OLIVER, stated the case of John Lacey (referred to the General Council by the Branch Council for England), who has applied to be registered as a Licentiate of the Society of Apothecaries of London.

1. Moved by Sir CHARLES HASTINGS, and seconded by Dr. BURROWS—"It appearing to the Council that John Lacey has obtained the licence of the Society of Apothecaries, London, on statements similar to those on which he was originally registered, and in respect of which his name was erased from the Register, on the ground that the entry had been fraudulently or incorrectly made, the Council decline to register the said John Lacey on a qualification thus obtained; but, inasmuch as the said John Lacey has not been heard, the question is remitted to the Branch Council for England, with power to reconsider and decide the same, after hearing the said John Lacey, if he shall desire to be heard."

Amendment moved by Dr. CORRIGAN, and seconded by Dr. A. SMITH—"That the Registrar be directed and authorised not to insert Mr. John Lacey on the Register."—The amendment was put to the vote and negatived. The original motion was then put and carried.

2. Moved by Dr. SHARPEY, seconded by Mr. HARGRAVE—"That a copy of the above resolution be forwarded to the Society of Apothecaries of London."—Agreed to.

An application made by Mr. RICHARD ORGAN to the Society of Apothecaries to be examined for their licence, having been referred by that body to the General Council,

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3. Moved by Dr. Alexander Wood, seconded by Mr. Teale—"That the Court of Apothecaries be informed that the name of Richard Organ was erased from the 'Medical Register' on the ground that he had endeavoured to procure a Licence from Edinburgh by personation. The Council therefore recommend that the Society of Apothecaries should not admit Mr Organ to be examined."—Agreed to.

Read, a petition from Mr. John Kearney, of Clonmany, County Derry, for the re-insertion in the Register of his name, and of his qualification from the Faculty of the Physicians and Surgeons of Glasgow, which had been erased in 1861, by order of the General Council, under the 29th Section of the Medical Act (see Minutes General Council, No. 29, p. 2).

4. Moved by Dr. A. Smith, seconded by Dr. A. Thomson—"That the Council cannot comply with the prayer of Mr. Kearney's petition."—Agreed to.

Read, an application from Mr. John Potter Sargeant, for the restoration to the Register of his name, which had been omitted from it, under the 14th Section of the Medical Act.

5. Moved by Sir Charles Hastings, seconded by Mr. Lawrence—"That the Council having considered the application of Mr. John Potter Sargeant, to have his name restored to the *Medical Register*, decline to accede to it, unless Mr. Sargeant shall furnish to the Executive Committee satisfactory evidence of character. That the Council delegate to the Executive Committee the duty of inquiring into and deciding on the case, having regard to the requirement of the Council."—Agreed to.

Read the following letter from the Royal College of Surgeons of England:—

"Royal College of Surgeons of England, London, W.C., May 8, 1863.

"Sir,—I am desired to acquaint you that the Council of this College have removed Mr. Robert Jacob Jordan, of George-street, Hanover-square, from being a Member of this College.

"I am Sir, your obedient Servant,

"Edmund Belfour, Secretary.

"Dr. Francis Hawkins, Registrar General Medical Council."

6. Moved by Mr. Arnott, seconded by Mr. Lawrence—"That the Registrar be directed to erase from the Register the qualification of Mr. Robert Jacob Jordan, as a Member of the Royal College of Surgeons of England."

The Council then took up the case of Samuel La'Mert, referred to them by the Branch Council for England, on April 17, 1863.

Mr. Ouvry read a petition, and a statement with the evidence in support of it, from the Royal College of Physicians of Edinburgh, praying that the name of Samuel La'Mert, a registered Medical Practitioner, be removed from the Register. Mr. Ouvry read, also, the notice served personally on Samuel La'Mert, summoning him to attend the Council. Mr. Ouvry read, also, a written statement submitted by Samuel La'Mert in answer to the statement.

7. Moved by Dr. Alexander Wood, seconded by Dr. Acland—"That it has been proved to the satisfaction of the Council, that Samuel La'Mert, a Registered Medical Practitioner, has been guilty of infamous conduct in a professional respect: 1st. In publishing, or causing to be published, an indecent and unprofessional treatise entitled 'Self-Preservation: a Popular Treatise on the cure of Nervous and Physical Debility, Spermatorrhœa, Impotence, and Sterility, resulting from the Secret Habits of Youth, the excesses of Mature Age, and the Debilitating Effects of Tropical Climates.' 2nd. In having falsely pretended, both on the title-page of the said treatise, and by advertisements in the public newspapers, that his son, Lima Abraham La'Mert, a Licentiate of the Royal College of Physicians of Edinburgh, was a joint author and publisher of the said treatise. That the name of the said Samuel La'Mert be erased from the *Medical Register*, and the Council hereby direct the Registrar to erase the same accordingly."—Agreed to

8 Moved by Dr. Storrar, seconded by Dr. Sharpey—"That it be referred to a Committee to consider and report whether any, and what, steps should be taken by the Council in relation to the retirement and election of its members, in view of the expiration of the term of five years from its constitution. The Committee to consist of—

"Dr. Storrar, Chairman. Dr. Andrew Wood.

"Dr. Apjohn."

—Agreed to.

Dr. Christison read a report from Dr. Garrod, the Secretary of the Pharmacopœia Committee.

9. Moved by Dr. Sharpey, seconded by Dr. Storrar—"That the report of the Pharmacopœia Committee be received and printed in the Minutes."—Agreed to.

Report of the British Pharmacopœia Committee.

May 25, 1863.

The Pharmacopœia Committee begs to submit the following report of the progress made towards the publication of the "British Pharmacopœia" since the meeting of the General Medical Council in May, 1862.

It will be remembered that, at the above meeting, the manuscript of the "British Pharmacopœia" was laid before the Council almost complete, and was then approved of by that body; but it was found that the printing of the work could not at once be proceeded with, from the fact that the Council did not at that time possess the necessary qualification for holding a copyright, and, moreover, from the wording of the Medical Act of 1858 not giving the legal power of superseding by the forthcoming Pharmacopœia the existing Pharmacopœias of the London, Edinburgh, and Dublin Colleges of Physicians, the General Council deputed to its Executive Committee the task of endeavouring to obtain a Supplementary Act granting the necessary powers, which was accomplished at the end of the last Parliamentary Session.

Shortly before this period, when it became publicly known that the Pharmacopœia Committee had, in the manuscript of the "British Pharmacopœia," made a considerable alteration in the weights to be employed in Pharmacy; and, among other changes, that the Troy grain was proposed to be discarded, and a new grain substituted for it—a grain which would bear the same relation to the Avoirdupois ounce as the Troy grain does to the Apothecaries' or Troy ounce, many objections were raised and remonstrances made to the Executive Committee—amongst others, one by the Royal College of Physicians of London, protesting strongly against such a change of weights, and it was thought advisable by the Executive Committee that a special meeting of the Medical Council should be summoned, that the matter might be definitively and satisfactorily dealt with;—this meeting was held in October last.

After this, the Pharmacopœia Committee made the alterations in the manuscript, rendered necessary by the changes in the weights. The Executive Committee at once commenced arrangements for the printing of the work; making contracts with the printers, previously selected by the Pharmacopœia Committee, and approving the specimen pages of typography fixed on by the same Committee at its Conference at Edinburgh.

The three Editors, one chosen by each branch Pharmacopœia Committee, also commenced their task; but some little delay occurred at the outset, from the discovery that the approved specimen pages, although well adapted for portions of the work, were not in all respects suited for the whole, and with the consent of the Executive Committee, certain alterations were made in the typography of the first part of the Pharmacopœia; since this time the printing of the volume has steadily progressed, and the Committee has now the satisfaction of laying before the Council proof sheets of the whole Pharmacopœia, with the exception of the preface and appendix.

The manuscript of the former is complete, while the latter only awaits the corrections in the body of the work, before being put into type, which could be readily accomplished in a few days. As this may be the last report which the Pharmacopœia Committee will have to make, it may be advisable to point out to the Medical Council the amount of time and labour which has been devoted to the accomplishment of the work.

The Pharmacopœia Committee naturally seperated into three Branch Committees, one in London, a second in Edinburgh, and a third in Dublin, and each commenced its sittings in December, 1858; from that period to the present, the number of sittings and attendances of each branch has been as follows:—

The London Committee has held 158 meetings, and the number of attendances of its members has been 567.

The Edinburgh Committee has held 108 meetings, and the number of attendances has been 657.

The Dublin Committee has held 141 meetings, and the number of attendances has been 627: making a total of 407 meetings and 1851 attendances. These numbers are exclusive of the two Conferences of Delegates, held in London and Edinburgh.

The financial statement of the Pharmacopœia Committee, since the accounts were audited in May, 1862, is contained in the following table:—

Financial Statement of the Pharmacopœia Committee.

Dr.	£	s.	d.	Cr.	£	s.	d.
To Balance in hand on Audit of Accounts, May 19, 1862	128	13	9	London Delegates at Edinburgh	195	6	0
To amount voted by the General Medical Council, May 21, 1862 ..	600	0	0	Dublin Delegates at Edinburgh	192	3	0
				Edinburgh Delegates at Edinburgh	110	5	0
				Mr. Warrington, Chemist to London & Edinburgh Committees	105	0	0
				Edinburgh Secretary, for postage	0	13	4
				Dublin Secretary, do. ..	2	0	7
				London Secretary and General Secretary, do..	2	15	0
				Mr. Glover, for attendance on Pharmacopœia Committee at Soho-square..	10	10	0
	£728	13	9		£618	12	11

Leaving a balance of £110 0s. 10d. in the hands of the General Secretary.

The number of meetings and attendances given in the present Report may probably appear very large; but it must be remembered that in accomplishing the task of publishing a National Pharmacopœia, the Medical Council will have accomplished what has been long looked upon as a great desideratum, but which has hitherto frustrated the efforts of the three Colleges of Physicians of the United Kingdom; and in order to effect this, it was necessary to have a Committee composed of several members of Council from each division of the kingdom, and also to associate with them gentlemen from different learned bodies specially conversant with the subjects.

As but little is now required before going to press, besides the correction of the proofs and the completion of the Appendix, the Pharmacopœia Committee can confidently predict that the National Pharmacopœia will be published not later than October next.

A. B. Garrod, M.D., F.R.S.,
Secretary to the Pharmacopœia Committee.

May 26, 1863. *Confirmed*—Joseph Henry Green.

REVIEWS.

The Spas of Europe. By Julius Althaus, M.D., Member of the Royal College of Physicians, London, etc., etc. Demy 8vo. Pp. 494. Price 12s. London: Trübner and Co. 1862.

A handy, practical, and at the same time thoroughly scientific work, well written, well arranged, and furnished with every convenience for immediate reference. Such a book, from a highly competent authority on the subject, and on a level with the most recent advances in Medical science, fills up an universally acknowledged gap in British Medical literature. It has, moreover, the advantage of being written by one who is no "Water Doctor." There is no tendency in Dr. Althaus' book unduly to extol the virtues of mineral waters in general or of certain spas in particular. As remedial agents of more or less value in properly selected cases, he simply claims for and gives them that amount of study and consideration which they undoubtedly deserve, but which in this country, for various reasons, they have hardly received, Commencing with an account of the origin of mineral springs, he proceeds to consider 2ndly, their physical properties; 3rdly, their chemical composition; 4thly, their geographical distribution; 5thly, their physiological action; 6thly, their therapeutical use. We feel sure that this volume will long be appreciated

as a complete and trustworthy book of reference on the mineral waters of Europe.

Mentone, the Riviera, Corsica, and Biarritz as Winter Climates. By J. Henry Bennett, M.D., Member of the Royal College of Physicians, London, etc., etc. Second Edition. Post 8vo. Pp. 288. Price 5s. London: Churchill and Sons. 1862.

This pleasantly written, useful little book embodies the experience of three consecutive winters which the author spent at Mentone for the sake of his health since 1859. It contains many hints and pieces of information which render it worthy of the notice of the Profession as well as of the public. In the present edition he has enlarged the description of Mentone and its neighbourhood. He has also added, in the last hundred pages, an account of Corsica and Biarritz as places of winter residence.

After making trial of most of the reputed health-towns of Southern Europe as winter residences for invalids, Dr. Bennett continues to give decided preference to Mentone on the score both of climate and hygiene.

Who to Consult; or, a Book of Reference for Invalids. London: Aylott and Son. 1863.

The author of this book has such an extremely low opinion of the intellect and the morality of the Medical Profession, that it is very difficult to believe the assertion of the publisher that he is a member of that Profession. That he is "highly distinguished" as a Medical man we certainly do not believe, though it is indisputable that he is "highly distinguished" by some not very enviable qualities, for a more flagrant specimen of bad taste, presumption, and ignorance than is his work, we have never met with. He assumes that each Physician or Surgeon, no matter how eminent, is qualified to treat only a few diseases, and that, when he has under his care any unlucky patient suffering from other than those diseases, he never has the honesty to recommend further advice, but goes blundering on, hoping to hit on a cure haphazard; and the author proposes to amend this sad evil in a beautifully simple manner. The patient is to be taught to diagnose his own malady, and then selecting, under the author's advice, his Medical man, to go to him, saying, "I have such or such a disease, cure me." A dim idea crosses the writer's brain, however, that perhaps people will be slow to believe that the diagnosis of disease is such an easy matter, to be learnt off-hand, from a few simple directions in his book; or, at least, that it is hardly advisable to make so light of it, so he kindly intimates that he has had serious thought of making diagnosis a new specialty for himself, leaving the treatment of the disease to the inferior minds, the men to whom he would graciously recommend the patient; and, he tells us, he should then be practising in the same way as a barrister does! An astounding piece of information, for which we hope we feel duly grateful, for we, in our ignorance, had imagined that the barrister advised how to proceed in legal difficulties, not merely "Who to consult." But we learn many new things from this book, as, that the Apothecaries' Company, to which we fancied we owed very largely the advance in Medical education in the present century, "confines itself chiefly to Chemistry, Materia Medica, and Pharmacy." It naturally follows that the "mere Apothecary" and the General Practitioner are altogether put aside; nobody would, or at least should, think of applying to them for advice.

Patients consulting the book will often reap despair instead of comfort; the sufferer from headache will find it mentioned only as a disease of the brain; the hapless wretch who has diagnosed that he labours under "leucocythæmia" will learn that his case is hopeless unless he has money and leisure for a visit to Edinburgh.

As we do not at all pretend to even approach our author in knowledge of our Professional brethren, or in judicial appreciation of their merits, so we may not criticise his roll-call of the eminent; yet reverently as we look on it, we cannot help observing that some well-known names, as Dr. Gibb and William Adams, are conspicuous by their absence, that some who are known chiefly to devote themselves to science, and some who have left the Profession, are enumerated among the eminent Practitioners; that Physicians are enrolled as Surgeons; that there are only twenty able Dentists in all London; but we will not waste time and space over the book; we should not notice it at all but for the publisher's assertion that it is by "a highly distinguished member of the Medical Profession."

Almanach Général d'Acachon, A Paris et Bourdeaux. 1863.

"Health is at best a vain, precarious thing." So sang Gilbert West, the friend of Gray, in the early part of last century. Alas! the truth is as striking now as then; and our countrymen and countrywomen are driven to seek in foreign lands that health which our uncertain climate renders so precarious. In the present day, when all the borders of the Mediterranean are being studded with hotels to ensure something of the comforts of an English home, it seems right to direct attention to a place which presents some peculiar advantages. Cannes, Nice, Mentone, and other places of resort have their respective attractions; but none have as yet the great peculiarity of Acachon, where, in addition to all the natural physical advantages, such as climate, facilities for bathing of an especial kind, there have been created by the enterprise of the Compagnie des Chemins de Fer du Midi, "Les Villas d'Hiver," in the Forêt d'Acachon. These are just suited to attract the invalid, and have already drawn to them the natives of many countries. The chief number of those resorting thither come from Bourdeaux, from which Acachon is distant about forty miles. Fewer English than usual were there last year, owing to the attractions of the International Exhibition. We commend the place and this almanack to the attention of invalids.

GENERAL CORRESPONDENCE.

VACCINATION AND RE-VACCINATION—DEATH.

Letter from Mr. J. W. Wells.

[To the Editor of the Medical Times and Gazette.]

Sir,—With a view of affording some information to the Profession of a remarkable case, and also for the purpose of eliciting some opinions from the faculty upon this subject, I have to ask the favour of your insertion of the following details:—

Some members of a family of great respectability being patients suffering from the prevailing epidemic, the mother, aged 55, thought it would be as well to exercise the usual precaution in such cases by herself undergoing the operation of vaccination. I performed that operation on Thursday morning, the 14th, taking good matter from the vesicle of a healthy child; immediately upon making the punctures the patient swooned, for which I ordered the necessary stimulants, and after seeing that she would soon be brought round again, I left.

A visit on the following morning, however, disclosed the fact of very singular symptoms having set in; the arm was much swollen, and had a dark purplish hue, much resembling the colour of bullock's liver, the punctures nearly invisible, and the whole region of the operation presenting the appearance of having been bitten by some venomous reptile. Remedies were applied, but the patient rapidly grew worse; other Professional advice was necessary, and Dr. Bridge, of Argyll-place, Mr. Tatum, of St. George's Hospital, and Dr. MacKenna, of Great Marlborough-street, attended; but the symptoms entirely baffled their skill and experience, and the patient died at midnight of the 18th, of (as agreed by the gentlemen named) phlegmonous erysipelas. It should also be mentioned that I discovered afterwards that the patient had been vaccinated in or about 1833, and prostration almost bordering upon death was the consequence.

From this, the difficult question arises as to the prudence and necessity of re vaccination in adults: many conflicting opinions have been and will doubtless continue to be, expressed upon this subject, it is with a view of strengthening the matter for argument either way that I have been induced to forward you the particulars of so remarkable a case.

I am, &c. J. W. Wells,
Assistant-Surgeon of many years' Practice.
32, Great Marlborough-street.

A meeting of the Fellows of the College of Surgeons will be held in Lincoln's-Inn-Fields, on Thursday, the 2nd day of July next, at two o'clock in the afternoon precisely, for the election of three Fellows into the Council of the College, in the room of Mr. Cæsar Henry Hawkins and Mr. Thomas Tatum, going out in rotation, and of Mr. William Coulson, resigned.

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REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 12, 1863.

Mr. PARTRIDGE, President, in the Chair.

A PAPER, by J. NEWTON HEALE, M.D., was read on

THE PHYSIOLOGICAL ANATOMY OF THE LUNGS.

The following points in connexion with the physiological anatomy of the lungs have been elicited as the result of investigations made by the author:—First. As regards the pleura. Certain longitudinal channels are to be found in it. These are pervious to air, and are connected with the minutest air-passages in the substance of the lungs by means of tubular passages in the subpleural cellular tissue. They are surrounded by a vascular plexus, derived from the pulmonary system of blood-vessels. Second. As relates to the manner in which the air is distributed throughout the lungs. A remarkable difference is to be noticed in what is ordinarily called the bifurcation of the trachea as it exists in the human subject contrasted with that of other mammalia. In the latter a large trunk is given off from the windpipe before it reaches the spot which is usually called its bifurcation. This trunk goes to the upper part of the right lung. The left bronchus is therefore in those animals the second alternate branch which proceeds from the main air-pipe. Each bronchial tube, instead of splitting up equally into lesser tubes, and thereby forming a dichotomous or a trichotomous division, passes towards the margins of the lobes in a continuous direction, though diminishing in size. It gives off its branches in an alternate manner, and each of the subordinate tubes pursues a similar course. When they have arrived at a certain degree of diminution, a set of membranous tubes, differing in some respects from the bronchial tubes, and also from the air-cells, but being intermediate in character between the two, are sent off from the terminal bronchial tubes. To these membranous tubes the author attaches the name of pedicles. The true pulmonary tissue is quite distinct in its anatomical peculiarities from those of the bronchial tubes, however small these may be. It does not at all resemble them, and they cannot be mistaken the one for the other. The ultimate parenchyma of the lungs is made up of little bodies, to which the author attaches the name of "leaflets." The pedicles connect the terminal bronchial tubes with the leaflets; and many pedicles from different terminal tubes enter each leaflet. This peculiarity in the leaflets causes a very minute anastomosis to take place between the different terminal bronchial tubes, which could not occur if the ordinary description were correct. Third. The author does not profess to have contributed any fresh facts relating to the lymphatics or to the nerves as to their purely anatomical characters. Fourth. With reference to the characters and functions of the so-called bronchial arteries. The author prefers to give the name of sustinent arteries and veins to the blood-vessels usually denominated bronchial. He considers that the latter word implies that they have some peculiar relation to the bronchial tubes, and more especially to the bronchial membrane, which is a destination usually attributed to them. They have in consequence been supposed to be the vessels peculiarly engaged in the pathological condition known as bronchitis. The author's investigations show that every sort of vascular action throughout every part of the lungs, by which any damage to its tissue is remedied, is accomplished through the sustinent vessels exclusively, although the peculiar plexus by which the whole of the mucous surface is covered, and by which the bronchial mucous is supplied, is not in any degree contributed by the so-called bronchial arteries. Physiologically and anatomically, the sustinent and pulmonary systems are quite distinct. While the duty of repairing the tissue of every part of the lungs devolves upon the sustinent vessels, that of bringing the venous blood furnished by the right side of the heart into contact with the air, and of accomplishing the physiological purposes which are aimed at by that arrangement, is intrusted solely to the pulmonary vessels. The purpose for which the vascular plexus is spread out in the mucous membrane is entirely connected with the atmospheric influences, and the large surface which that membrane affords for the furtherance of that object is thus turned to account, and the plexus itself is consequently in exclusive relation with the pulmonary system of blood-vessels. Modern authors, with the exception of Dr. Harrison, of Dublin, concur in believing that there is some kind of anastomosis between the minute branches of the pulmonary and the sustinent vessels. That gentleman, with great truthfulness and candour, acknowledges that he has not been able to satisfy himself that the presumed anastomosis has not been the result of the rupture of one or both sets of vessels in the act of injecting them. The author of this paper has found that the vasa vasorum of the pulmonary vessels are supplied entirely by the sustinent arteries; and that when the latter have been fully distended, and some degree of violence has afterwards been used, the minute capillaries in connexion with the sustinent arteries which are spread over the interior of the walls of the larger pulmonary vessels have sometimes been made to burst, and a false communication into the canal of one of the pulmonary vessels has thus been made. A channel for the injection having been once established by an accident of this nature, it becomes gradually enlarged in proportion as the injection is afterwards made to flow through the rent, and an unlimited quantity of injection may then be made to flow through the artificial passage. The pulmonary and sustinent vessels cannot be made to communicate with one another by any other means than this. It has been a disputed point as to whether the so-called bronchial arteries are furnished with veins. It is, however, easily shown that sustinent veins accompany the bronchial tubes, returning the residual blood supplied by the sustinent arteries to the internal parts of the lungs; and that other sustinent veins ramify in the subpleural tissue, which collect the blood from the exterior of those organs. Attention is called to the fact that the sustinent veins are furnished with valves, and with cross branches of anastomosis. These last facts are of some importance, not with regard to the lungs only, but also with reference to the blood-vessels, which discharge in other viscera a function similar to that of the sustinent arteries. Fifth. As relates to the distribution of the pulmonary vessels. Modern authors describe the pulmonary arteries as accompanying the bronchial tubes; as continuing to divide again and again, becoming more numerous than the tubes; as giving off branches of supply to the various tissues; as anastomosing with the so-called bronchial arteries; and their residue as being ultimately distributed to the air-cells. The author considers this account to be far from accurate. He finds that the pulmonary arteries never give off branches of supply to any tissue. They never form any anastomosis either among themselves or with any other blood-vessel. They do not become more numerous than the bronchial tubes, since each of these is accompanied by one, and never more than one, pulmonary artery, which pursues in relation to it a perfectly definite and invariable course; and the final distribution of every portion of the pulmonary artery, down to the minutest fragment, is precisely and entirely alike. The whole of it is split up so as to form the remarkable anastomosing plexus in the leaflets. The pulmonary veins commence in the interior of the leaflets by tufts of capillaries. The veins formed from these commencements are placed, in the first instance, at some distance from the bronchial tubes; but as they increase in size they come into contact with them. A remarkably vascular plexus, composed exclusively of pulmonary vessels, occupies the whole surface of the mucous membrane. This is derived as an offshoot from the plexus in the leaflets, and is reinforced in the larger tubes by blood-vessels furnished from the leaflets which cling to the tubes externally, and send perforating branches to the plexus in the membrane. Some ramasculi are also placed externally to the tubes. They collect the blood from the plexus in the membrane, and convey it to the larger pulmonary veins, the formation of which has been described above. There are, therefore, in the first instance, two distinct sets of minute pulmonary veins. One of these, after leaving the leaflets, makes its way at once in a direction towards the left auricle, without undergoing any further exposure to the air. The other is spread over the mucous membrane, and derives the benefit of the atmospheric influence which the surface of that membrane affords, and ultimately joins the other portion. The anatomical distribution of the pulmonary vessels indisputably proves that their physiological function is exclusively in relation with the air supplied by the bronchial tubes, and that it is totally independent of any purpose having relation to the construction or repair of any part of the tissue of the lungs.

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(The paper was accompanied by numerous drawings and diagrams.)

Dr. Heale, at the request of the President, drew attention to the apparatus which he employed. He showed that in injecting the pulmonary arteries and veins with different colours both should be injected simultaneously, so that the two fluids should meet in the capillaries. If the arteries by themselves were injected first, the fluid passing through the capillaries into the larger vessels beyond would prevent the proper injection afterwards of the veins, and *vice versâ*. He showed that no anastomosis existed between the so-called bronchial vessels and those of the pulmonary system, as the capillaries of the first could be injected in every part of the lungs without any of the injection reaching any of the other vessels. In speaking of the distribution of the air to the tissue of the lungs, he mentioned that a very free anastomosis was established between the air contained in different parts of the lungs after the bronchial tubes had reached their minutest subdivision. Dr. Heale gives the name of pedicles to the smallest of the bronchial tubes, and that of leaflets to the ultimate sub-divisions of the pulmonary tissue. He showed that there was a complex inosculation between different leaflets and pedicles. The equal diffusion of air throughout the lungs is further provided for by tubular passages which ramify in the subpleural and interlobular cellular tissue, and communicate with longitudinal channels in the substance of the pleura. Passing to the physiological points involved in the various anatomical details, he remarked that it was usual to speak of respiration as one thing, of circulation as another, and of nutrition as a third; but that in point of fact all three were parts of one and the same physiological operation, and that it was as impossible that the circulation or the nutrition should go on independently of the respiratory processes as that the hands of a watch should continue to point the hour when the mainspring was impeded in its action. Dr. Heale then explained at some length his views with regard to the heart's action in effecting the circulation of the blood, the physiology of respiration, etc.

Dr. Lee said that he did not come into the room until a considerable part of the paper had been read, and he could not tell whether any allusion had been made in it to the nervous structure of the lungs. He requested the author to state whether or not this was the case.

Dr. Heale replied that he had seen the nerves floating when dissecting the lungs in some fluid. He imagined they followed the course of the bronchial arteries.

Dr. Lee then begged to be informed whether there was any dissection on the table showing the nervous structure of the lungs, and (the author having replied that he had not on the present occasion made any dissections with the immediate object of demonstrating the course or distribution of the nerves) proceeded to say that he had been engaged during the last two years in dissecting the ganglia and nerves of the lungs, and that in these dissections a great system of ganglia and nerves was displayed throughout the lungs; and he considered that without taking into account these nervous structures of the lungs the functions of those organs could not be explained. Dr. Lee finally added that he would not now intrude upon the time of the Society by giving a description of his own dissections.

Dr. Dickinson gave a description of

A FŒTUS BORN WITHOUT HEART, BRAIN, LUNGS, OR LIVER.

This being, like all others of the same character, was a twin. Both umbilical cords were attached to a single elongated placenta. The imperfect fœtus was devoid of any vestige of head or neck. The upper extremities were present, but were in some respects imperfect. On the anterior surface was a small prominence, which appeared to represent the tip of the tongue. The umbilical cord was surrounded at its fœtal extremity by a small membranous bag, which contained a coil of intestine. The lower extremities were only slightly different from their usual state. The body was generally swollen and œdematous. The spinal column was deficient from the second cervical vertebra upwards. No trace of any cranial bones could be discovered. The clavicles were absent. The integuments were of unusual thickness, owing to a general infiltration of serous fluid. In the cavity of the trunk lay the lower two feet of the intestine, which commenced by a cæcal extremity, and two large kidneys. The ureters, the bladder, the urachus, and a pair of undescended testicles were found in their normal relations. The other viscera were absent. The umbilical cord contained a large vein and artery. The artery divided on entering the belly into two large branches, one of which passed into the right thigh and side of the pelvis. The other division served for all the rest of the body. It swept upwards to the position due to the aorta on the left side of the spine, and gave off vessels for the left thigh, for the left side of the pelvis, and for the kidneys. It terminated between the shoulders by dividing abruptly into two large branches, which went to each upper extremity. The veins were arranged in an almost parallel manner. There was no communication between the two sets of vessels corresponding to the foramen ovale. The entire encephalon and the upper part of the spinal cord were wanting. The sympathetic ganglia were large, but not numerous. A chain of eight lay along the side of the vertebral column. Numerous filaments maintained the connexion between the sympathetic ganglia and the spinal nerves. Since there was no communication between the veins and arteries of the fœtus answering to the foramen ovale, but the veins throughout the body were simply continuous with the umbilical vein, and the arteries with the umbilical artery, it was inferred that either in the cord or in the body of the monstrosity the usual direction of the blood must have been inverted. If it passed, as usual, from the mother down the umbilical vein, then it must have been continued into the tissues by the veins of the fœtus. On the other hand, if the course of the circulation was not thus reversed in the fœtus, the artery of the cord must have brought the supply from the placenta. This question was discussed, and the author finally adopted a suggestion of the late Dr. Young, which had been worked out by Sir Astley Cooper, that the circulation in such monstrosities is due to the impulse of the heart of the healthy fœtus, which always accompanies them, and which is conveyed through anastomosing vessels between the two cords upon the surface of the common placenta. The blood thus reaches the imperfect fœtus through its umbilical artery, and is thence distributed to its tissues.

Mr. Savory said cases like the one just related were especially interesting with regard to the forces concerned in the circulation of the blood. He believed it was now generally accepted that the heart was not the sole agent in the movement of the blood. Of the other forces employed, that which was generated at the capillaries was assuredly not the least. But cases like the present one confirmed this doctrine; for in this, as in some others, especially the case recorded by Houston, it seemed almost impossible, after a careful study of their anatomy, to arrive at the conclusion that the heart of the healthy child was sufficient to maintain, not only its own circulation but that of the monster also. These cases, he thought, might be profitably studied by the light of comparative physiology. Just as in the lower vertebrata—as in fishes—where the small and single ventricle seemed manifestly insufficient to accomplish unaided the circulation through the capillaries of gills and system; just as in some of the lowest of the invertebrata, where, as in plants, the movement is maintained without a heart of any kind, so in these monstrous forms among the highest we must more clearly recognise, in the absence of a heart, the existence of independent forces to circulate the blood.

Dr. Lee said that there was a placenta on the table, all the arteries and veins of which had been injected, and there were two umbilical cords seen passing into this placenta. It was a case of twins, and instead of there being one placenta for each child, as usually occurs, there was here only one for both fœtuses; but the circulation in these two fœtuses was not different from the ordinary circulation. Two umbilical arteries went from each child to the placenta, and conveyed the blood to it, and one umbilical vein returned to each fœtus and carried the blood back. By looking at the fœtal side of the placenta, it would be seen that there were large injected arteries and veins passing between the vessels of both umbilical cords, but the circulation was not altered in consequence. It was a mere anastomosis of the arteries and veins of the two cords in the placenta. The blood of the four umbilical arteries must have circulated through the placenta and returned to the two fœtuses by the umbilical veins, afterwards to circulate through the liver, heart, and other organs in the ordinary manner. The action of the heart of one of these fœtuses could have no influence upon the circulation in the other. The placenta of the malformed fœtus described by Dr. Dickinson was unfortunately not preserved, and hence no one could tell whether there was a placenta connected with the living and another with the malformed fœtus; but it was well

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known that in most of these cases of malformation there had not been found a placenta connected with the malformed fœtus, but that the cord had passed into the placenta of the other child. However that might have been, the circulation must have gone on in this placenta as in the one which lay on the table; and it was impossible to believe that the action of the heart of the healthy fœtus could have forced the blood back along the umbilical arteries of the malformed fœtus, and inverted the circulation in the manner first suggested by Dr. Young, and adopted by Sir B. Brodie, Sir A. Cooper, and other physiologists. Dr. Lee then added that he had examined the fœtus described by Dr. Dickinson in its recent state, and found the umbilical vein passing into the abdomen in the usual manner; but there being no liver, heart, nor lungs, the umbilical vein greatly enlarged, proceeded to the upper extremities and kidneys, from which he believed the blood passed into a vessel corresponding with the abdominal aorta, which divided and entered the cord as the umbilical arteries do usually. He (Dr. Lee) thought it impossible to believe that the fœtal circulation was carried on solely by the action of the heart. Both ventricles united to send the blood to the placenta; but the blood, after it had circulated through the capillaries of the placenta, could not return to the liver by the action of the heart; and it was obvious that the great circulation through the fœtal liver could not be referred to the action of the heart, but to the vessels themselves. In all probability the absence of the placenta in Dr. Dickinson's case, if it was wanting, was merely a part of the malformation of the fœtus.

Dr. Heale called attention to the fact that there must be some force acting on the circulation in the capillaries distinct from that of the heart's pulsation in order to remedy after each pulsation the distension of the blood-vessels, which would otherwise remain in a state of maximum distension, and be unable to yield any longer to the ensuing pulsation. This force, which emptied the capillaries, must be quite as real, and important as that which distended them. The changes which occurred during these intervals were precisely those for which the pulsation was calculated to furnish the materials, and they embraced all the strictly vital operations which occurred both in the pulmonary capillaries and in the system at large, and the two balanced each other with the greatest exactness. For, supposing it possible (which it is not) that one or the other should preponderate, the blood would immediately become either too arterial or too venous, as the case might be—a state of things which would necessarily be corrected in the very next pulsation. The heart's action therefore became auxiliary to the action of the capillaries. The placenta of the fœtus accomplished for it precisely what the lungs did for the adult. The difficulty of explaining how the circulation might have been carried on in the acardiac fœtus was materially lessened by these considerations.

Dr. Dickinson, in reply to the remarks of Mr Savory, allowed the possible existence of a force which promoted the circulation of the blood independently of the action of the heart. In vegetables the circulation was carried on by this alone; but the higher in the animal scale, the more active the circulation and the more necessary the heart. It could not be supposed that in the human fœtus the circulation could be maintained without this organ. It was almost proved that the circulation depended on the heart of the other twin by the fact that in every case of acardiac monstrosity not only was the monster a twin, but it was attached to the same placenta as served for the other child. If the circulation depended on forces within its own body, there could be no reason why it should not be carried on without this connection. As to the objections of Dr. Lee, that the currents of blood in the cord could not be inverted, Dr. Dickinson stated that, from the fact that there was no communication between the arterial and venous systems in the fœtus, it followed that the circulation must be inverted either in the cord or in the body of the monster. With a healthy child, the blood flowed to it along the umbilical vein, which blood eventually got into the left ventricle, and so was distributed by the aorta and its branches. In the monstrosity where no foramen ovale existed, if the blood passed to its body by the umbilical vein, it must have been carried into the tissues by the veins. Thus in the body the blood must have gone contrary to the usual direction. On the other hand, if the blood was distributed by the arteries after the usual manner, it was evident that it must have been brought from the placenta by the artery of the cord which was in direct continuation with them. In this case the circulation in the cord must have been inverted. In any case it was necessary to allow the inversion either in the cord or in the body.

THE PATHOLOGICAL SOCIETY.

Tuesday, May 19.

Mr. Prescott Hewett, President, in the Chair.

Mr. Spencer Wells exhibited

EIGHT OVARIAN TUMOURS REMOVED BY OVARIOTOMY.

The first was removed from a single woman, 36 years of age, on March 2. One cyst had held thirty six pints of fluid, and a large semi-solid adherent mass was also removed. The patient perfectly recovered. The second was removed on March 9, from a single lady, 29 years of age, who also recovered, though a very large tumour had been adherent. Teeth and hair had grown from the inner membrane of some of the small cysts. The third was a comparatively small cyst, weighing with its contents only seventeen pounds. It was removed on March 16, from a single woman, 36 years of age, who recovered perfectly. The fourth patient had died four weeks after operation of pelvic abscess and secondary pleurisy. She was a single lady, 26 years of age, and the pedicle was so short that it had been necessary to remove the clamp the day after operation. Mr. Wells thought this case another strong argument in favour of keeping the end of the pedicle outside the abdomen. The fifth was a small growth, like a cauliflower, from the right ovary, which had been surrounded by a large quantity of ascitic fluid. It was removed from a married woman, 29 years of age, on March 26. She died fifty-four hours after operation, of a low form of diffuse peritonitis. There had been no pedicle, but the right spermatic vessels had been tied, the ligature cut off short, left inside, and the wound closed, after the plan recommended by Dr. Tyler Smith. Mr. Wells illustrated this specimen by another taken after death from a woman 70 years of age, who had been treated for ascites, but who had a similar cauliflower growth from the inner surface of a ruptured ovarian cyst. The sixth patient had left the Hospital the day before the meeting. She was 61 years of age, the oldest patient upon whom Mr. Wells had operated. There had been very firm adhesions, and one to a long loop of intestine. The seventh cyst was nearly unilocular. It had been free from adhesions, and was removed on April 22, from a single girl, 19 years of age, who was now convalescent, although she had suffered a severe attack of bronchitis a few days after operation. The eighth patient was married, 37 years of age, and was going on well, though still suffering from debility and flatulent distension of stomach and intestines. The operation was performed on April 29, and very extensive adhesions to parietes and intestines had been separated. Mr. Wells added that he had presented every ovarian cyst or tumour which he had removed to the Society; and, in accordance with his annual custom, he now gave the result of all the cases upon which he had operated since the previous session of the Society. At the last meeting of the previous session, in May, 1862, he had operated on 36 patients. Since that meeting he had operated on 27 others, of whom 23 had recovered and 4 died, making a total of 63 cases, with a result of 20 deaths and 43 recoveries.

Mr. Spencer Wells also exhibited a

FIBRO-CYSTIC TUMOUR OF THE UTERUS,

which he had removed by gastrotomy on April 30, from a single lady, 53 years of age. It was a pedunculated outgrowth from the right side of the fundus of the uterus, consisting of a solid fibroid mass, which weighed 16 lbs. 9 ozs., and of a large cyst, which had held twenty-six pints of fluid and four pounds of lumpy masses of decomposed fibrin. There had been no important adhesions, and the tumour had been removed with nearly as much ease as an ovarian tumour, but the patient sank from shock four hours after operation. One ovary—the right—was attached to the tumour; the left was connected with the uterus.

The President said that a somewhat similar tumour had been exhibited at a former meeting of the Society, which had been removed in the belief that it was ovarian. There was a specimen in the College of Surgeons of a similar tumour. One cyst, which had held some fifteen pints of fluid, had been

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tapped three times, and it was not till after death that it was discovered to be uterine. He was not aware of any means by which the diagnosis between cystic tumours of the ovary and of the uterus could be established with certainty.

Mr. Spencer Wells also presented the parts removed after the performance of

GASTROTOMY FOR INTUS-SUSCEPTION.

The symptoms of intus-susception had commenced on April 10 in a child four months old. Purgatives had been given by a druggist, but Mr. Jay, of Park-street, was consulted on the 13th, and recognised the true nature of the case. Mr. Wells was called in by Mr. Jay, and efforts were made to overcome the obstruction by the injection of water, insufflation of air, and the use of a sponge probang, but without any good effect, although the involuted portion of intestine could be reached by the finger passed into the rectum. Gastrotomy was then proposed, but the consent of the parents was withheld until the night of the 14th. By that time the child was almost in a dying state, but it was thought right to try the slender chance of gastrotomy. Mr. Wells opened the abdomen in the median line, just below the umbilicus, by an incision two inches long. The obstructed portion of intestine was at once felt, and easily withdrawn; but it was so tightly jammed into the colon and rectum—or rather the cæcum and ascending and transverse colon were so closely involved by the descending colon—that they were only separated with great difficulty. Still, the reduction was accomplished, the intestines returned, and the wound closed. The intestines above the seat of obstruction being greatly distended by flatus, and a few needle punctures were made in them before they were replaced. The child continued to sink, and died five hours after operation. Mr. Wells added, that the fact of the possibility of withdrawing an involuted portion of intestine being thus established, it might be hoped that the operation would be successful if performed early enough, especially on patients of a less tender age.

Dr. Fox exhibited for Dr. Wyatt a specimen of

ANEURISM OF THE DESCENDING AORTA.

The chief symptoms during life were cough, dyspnœa, and consolidation of the whole of the left lung. The pulse was quick, but the heart's sounds were normal. The patient died suddenly from hæmorrhage. An aneurism of the descending aorta was found. It had opened into the left bronchus, and hence the fatal hæmorrhage. The bronchial tubes were full of blood, and the lung was quite solid.

Mr. Sydney Jones then showed the

SKULL-CAP OF A PATIENT WHO HAD BEEN TREPHINED TWICE.

A man, 23 years of age, had a lacerated scalp-wound on May 29, 1861. There was considerable loss of blood, and he was therefore taken to the Hospital. There was a wound on the right side of the head, and the periosteum was exposed for about the extent of a shilling. It was not detached. He did well for ten days, but on the eleventh he began to be feverish, and on the fifteenth had two distinct rigors. On the eighteenth tinnitus aurium, convulsive fits, and intolerance of light. His motions were passed involuntarily. He was trephined at 1 p.m. over the parietal bone, and pus was found between the bone and the dura mater. He was relieved, but on the 19th and two following days he had many fits, and then no more until the 28th. At that date a puffy swelling was noticed over the occiput. The patient was again trephined in this position, and pus found between the bone and the dura mater. He again improved, but six days later, *i.e.*, on the thirty-fourth or thirty-fifth day, he had pain in the left thigh, and an abscess was found there. He died on the forty-ninth day. At the autopsy, except at the thigh, no secondary deposits were found.

In reply to the President, Mr. Jones said that there was no pus in the arachnoid cavity.

The President said the case was a very rare one. He had never seen a case in which pus was between the bone and dura mater only. This was just the kind of case on which Pott dwelt so much, and which was now-a-days so seldom met with.

Mr. Sydney Jones exhibited

CYSTICERCUS REMOVED FROM THE LIP.

It was situated deeply in the muscular substance of the lip.

Mr. Sydney Jones exhibited a

FOREIGN BODY WHICH HAD BEEN IN THE PALM OF THE HAND SEVERAL MONTHS.

A gentleman ten months ago lacerated the palmar surface of the thumb. The wound healed in a month, and remained healed four months; and then a sinus formed, and again healed; and for the third time reopened. Mr. Jones succeeded in removing from the palm a small piece of stick, part of a walking stick.

Mr. Sydney Jones next showed a

TUMOUR REMOVED FROM THE ORBIT.

A man, 48 years of age, noticed, three months after a blow, a small tumour above the tendo oculi. It grew at first slowly, and then rapidly. There was no obstruction to the flow of tears, but, as the tumour was growing rapidly, it was removed. It was connected with the periosteum, and a piece of the ethmoid was removed with it. The tumour on section exuded a creamy fluid, which contained a large number of nuclei.

Dr. Bristowe exhibited a specimen of

INTESTINE (?) PASSED PER ANUM.

It was passed by a patient who had obstinate constipation with vomiting. Dr. Bristowe was not able to give a clear account of the case, and he was not quite certain that it was intestine. It was about the calibre of the intestine, and yet there were no villi, no follicles, and no muscular fibres. It was very much decomposed.

Dr. Harley, who was appointed to report on the specimen, said that sometimes hysterical women would swallow pieces of the intestine of some animal.

Mr. Hulke presented a specimen of

POLYPOID OUTGROWTHS FROM THE INNER SURFACE OF THE LARGE INTESTINE.

Some were simple rounded eminences, others pedunculated bodies, varying from a quarter to one inch in length, with a simple globose, or lobed extremity. Most were single, but some, by the union of their apices to those of neighbouring polypi, formed a loose net. The longest occurred just below the sigmoid flexure of the colon. They were thickly scattered over the entire surface, from near the ileo-cæcal valve to within three inches of the anus, where there was the depressed scar of a former ulcer. A couple of thin membranous folds penetrated with apertures of various sizes, occurred at the sides of the scar, and furnished the clue to the origin of the nets. The patient from whom the preparation was taken had laboured under chronic dysentery. Microscopical examination showed that the polypoid bodies were simple outgrowths of the mucous and sub-mucous tissues, and not cancerous.

Dr. Sanderson showed a specimen of

FIBROUS TUMOUR SURROUNDING THE LEFT URETER.

The patient was admitted for ascites depending on cirrhosis of the liver. There were no symptoms referable to the kidney or ureter.

Dr. Sanderson also showed a specimen of

COMMUNICATION BETWEEN THE ASCENDING DUODENUM AND THE TRANSVERSE COLON.

A man, thirty years of age, had had epigastric pain and vomiting fifteen days. He vomited several pints of a watery pultaceous fluid, never feculent. He had several such attacks before. There was a pouch communicating with the lower part of the duodenum and with the transverse colon; the latter was guarded by a valvular aperture.

Professor Czermak showed

PORTIONS OF EPITHELIAL GROWTHS FROM THE LARYNX,

which he had removed by means of simple curved forceps on several occasions from a young man, aged 25, who suddenly lost his voice in 1860. He likewise exhibited drawings illustrating the appearance of the larynx when the disease was first diagnosed, its progress and extension to the epiglottis, and other parts. Under the microscope their structure was found to be wholly composed of epithelial cells.

Dr. Gibb said the Society was much indebted to Professor Czermak for bringing forward this interesting case, as it was an illustration of so large an amount of disease. He (Dr. Gibb) had succeeded in the removal of growths from the larynx on several occasions, and in nearly all their structure was epithelial, with the presence of minute fibres, and nothing malignant about them.

Dr. Gibb exhibited the

LARYNX OF A CHILD AFFECTED WITH DIPHTHERIA.

It had been sent to him by Dr. Davies, of Putney. She was ten years old, and each tonsil when first examined was covered with a diphtheritic patch. She was progressing favourably,

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but was suddenly seized with symptoms threatening suffocation. Tracheotomy was performed with great relief, but she gradually sank six hours after in a semi-comatose state. The lungs were a little congested, the trachea and bronchi highly injected, but no diphtheritic membrane beyond the larynx. The epiglottis seemed especially affected.

Dr. Gibb showed diagrams of the larynx from a case of

TOTAL LOSS OF THE EPIGLOTTIS, WITH APHONIA FROM ULCERATION OF THE LARYNX AND PHARYNX.

In October, 1862, a lady had been ill with sore-throat for twelve months, and aphonia for six. She had no cough nor chest symptoms. She could swallow fluid but not solid food. Her throat was at times painful, with a pricking sensation on the right side of the fauces. She was very nervous, and expectorated a quart of mucus in the twenty-four hours. Large and deep ulcers were present at the back and other parts of the pharynx. The epiglottis was wholly destroyed. The interior of the larynx was red, œdematous, and irregularly prominent; the colour and shape of the vocal cords could not be recognised. Ulcers were seen on the aryteno-epiglottic folds, but the arytenoid cartilages were intact. There was no feeling of suffocation at any time—a noteworthy fact. Under local and constitutional treatment the ulcers healed, the swelling diminished, and the voice gradually returned, and she has remained well, although without an epiglottis.

DESTRUCTION OF THE EPIGLOTTIS, ARYTENO-EPIGLOTTIDEAN FOLDS, ARYTENOID CARTILAGES AND VOCAL CORDS, WITH INCURABLE APHONIA.

This was one of the worst cases that had ever come under Dr. Gibb's observation, for the laryngoscope showed the most fearful ravages. The uvula was almost gone, the soft palate was, for the most part, adherent to the wall of the pharynx. The epiglottis was wholly gone, and the aryteno-epiglottic folds were mostly destroyed, their remains being transformed into fleshy tubercles surrounding a narrow crescentiform glottis. The arytenoid cartilages were destroyed, as also were the vocal cords. Everywhere evidences of great destruction of tissue were visible. There was incurable aphonia, and a constant noisy inspiration. The patient could only swallow pultaceous food. Some months afterwards he died from bronchitis, to attacks of which he had been frequently subject.

MEDICAL NEWS.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.—DOUBLE QUALIFICATION.—The following gentlemen passed their First Professional Examinations during the recent sittings of the Examiners:—

Robert Lawson Tait, Mid-Lothian; Thomas J. Denton, Yorkshire; Henry L. James, Derbyshire; James S. Mathews, Edinburgh; Valentine Stone, Newark-on-Trent; Robert Sheila, Edinburgh; Richard Cranke, Ulverstone; Andrew Brown, Biggar; Thomas Sheriff, Northumberland; William G. Stevens, Ardrossan; William Tindal, Montrose; John Allen, Malta.

And the following gentlemen passed their Final Examinations, and were admitted L.R.C.P. Edin. and L.R.C.S. Edin.:—

Wynne Staton Ranson, India; John Aston Hill, London; William Wright Milligan, Dumfriesshire; Malcolm Brodie, Lochgilphead; Charles MacDonagh, Dublin; William Coutts, Aberdeenshire.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen passed their First Professional Examinations during the sittings of the Examiners:—

Archibald B. Telford, Motherwell; Robert Mackelvie, Wigtonshire; Angus Macdonald, Aberdeen; Bernard Doyle, County Down; John Thomson, Morayshire; Geo. H. Turnbull, Roxburghshire; Robert Gunn, Caithness; William Skene, Helensburgh; Robert B. Thomson, Fochabers; G. Rankine White, New York; William James Dickson, Auchtermuchty; William H. Semple, Stranraer.

And the following gentlemen passed their Final Examinations, and obtained the Diploma of the College:—

William Henry Cecil Tessier, London; Robert M'Kinnell Duncan, Dumfries; William Walker, Ayrshire; Samuel Gourley, Shannon; Robert Potter, County Limerick; James Barry, County Cork; James Bourke, County Limerick; Walter Reid, Fife; Peter Murray Braidwood, Madras; William Jeffrey, Berwickshire; John Brown, Haddington; Alexander Ingram Spence, Edinburgh; Roderick Macleod, Inverness-shire; John Charles, Lesswade; Alexander Montgomerie Bell, Edinburgh.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, May 21, 1863:—

Joseph James Ideson, Colne, Lancashire; Robert Lloyd Jordison, South Ockendon, Essex; Fred. Henry Alderson, Ipswich; Benjamin Maurice, Redlands, near Bristol; Marwood Sanderson, Rochester-street, Vincent-square; Joseph Needham Scrope Sharpnel, Ventnor, Isle of Wight.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BURRIE, THOMAS, L.R.C.P. Edin., has been appointed Junior Resident Surgeon to the Birmingham General Dispensary.

CHATER, SIDNEY, M.R.C.S. Eng., has been appointed Surgeon to the Metropolitan Dispensary, Fore-street, Cripplegate.

CLARKE, W FAIRLIE, M.A., M.R.C.S. Eng., has been elected Surgeon to the St. George's and St. James's Dispensary.

COE, ROBERT W., F.R.C.S. Eng., has been re-elected Surgeon to the Bristol General Hospital.

COWELL, GEORGE, M.R.C.S. Eng., has been appointed Medical Officer to the Royal Pimlico Dispensary.

*FREEMAN, JOHN HENRY, M.R.C.S. Eng., has been elected Medical Officer of Health for the Parish of St. George-in-the-East.

HARLEWOOD, JOHN A., M.R.C.S. Eng., has been elected House-Surgeon to the Morpeth Dispensary.

KEMP, CHARLES G., M.R.C.S. Eng., has been appointed Dentist to the Leicester Infirmary.

KING, HENRY, L.R.C.P. Edin., has been appointed Surgeon to the Bridewell Dispensary District in the Athlone Union.

PURVIS, J. P., M.R.C.S. Eng., has been appointed Surgeon to the West Herts Infirmary, Hemel Hempstead.

ROBERTS, W. R., M.R.C.S. Eng., has been appointed House-Surgeon to the Birmingham and Midland Free Hospital for Sick Children.

WIGLESWORTH, ARTHUR, M.R.C.S.E., was appointed Honorary Surgeon to St. Ann's Dispensary and Eye and Ear Institution, Liverpool.

WILLIAMS, ARTHUR WYNN, M.D. St. And., has been elected Physician-Accoucheur to the St. George's and St. James's Dispensary.

DEATHS.

FRAME, ARTHUR J., M.D., at Grenada, West Indies.

GARRARD, STAMY, M.R.C.S. Eng., at Atherstone, Warwickshire, on May 19.

GIBSON, THOMAS, L.S.A., House-Surgeon to the Dispensary, Morpeth, Northumberland, on March 12.

GRAY, WILLIAM, L.R.C.S. Edin., of Kinross, at Pardovan, Linlithgowshire, on May 12.

HANNA, WILLIAM, L.R.C.S. Edin., at Mill-street, Belfast, on May 22.

KEITH, J., M.D., at Wemyss-place, Edinburgh, on May 12, aged 79.

MCNAB, WILLIAM, M.R.C.S. Eng., at Ware, Herts, on May 23, aged 81.

ROWE, JOHN, in practice prior to 1815, at Cornwall-street, Plymouth, on May 16, aged 84.

ROWLEZOTTE, G. A., at Brompton, S. W., on May 16, aged 53.

TYTLER, HENRY WILLIAM, Surgeon in H.M. Indian Army, at Hampstead, on May 25, aged 44.

WALKER, THOMAS OSBORNE, Sen., at Crick, Northamptonshire, on May 10, aged 80.

MR. H. LEE's lectures and operations on Mondays at the Lock Hospital have been discontinued.

THE ROYAL VICTORIA HOSPITAL.—The following General Order has been issued in reference to the Queen's late visit to the Netley Hospital:—"General Order, No. 825, Horse Guards, S.W., May 14, 1863. His Royal Highness the Field Marshal Commanding in Chief has received the Queen's commands to express the satisfaction Her Majesty derived from her visit to the Royal Victoria Hospital at Netley on the 8th inst., when Her Majesty was highly pleased to observe how carefully and amply the comfort and requisite attendance upon the sick soldiers were provided for. Her Majesty was particularly gratified by the order, cleanliness, and regularity that pervaded the establishment throughout. By command. (Signed) J. Yorke Scarlett, Adjutant-General."

THE ELECTION OF PENSIONERS AND FOUNDATION SCHOLARS AT THE ROYAL MEDICAL BENEVOLENT COLLEGE.—At the election, which took place on May 21, the following were the successful candidates:—*Pensioners*—Mary Mutlow, 10,461 votes; Stratford Alfred Eyre, 9611; Harriet Sawyer, 7943; Grace Pidcock, 6956; Rebecca Scott, 5259. *Foundation Scholars*—George Henry Heald, 6550 votes; Francis George Wride, 6495; Matthew Lee Smith, 6417; Francis Beauchamp Johnson, 4679; Thomas G. F. R. Hobbes, 4395.

*** We have been requested by Mr. Eyre to return his most grateful thanks to those gentlemen and ladies who aided him with their votes and influence.—ED.

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CAMBRIDGE, May 16.—The following elections took place this day at Downing College:—1. To Foundation Scholarships: Norman Maccoll, Christ's College; Charles Thinger Questel, Sidney College; John Henry Robson, St. John's College,—to Scholarships of £70 per annum for three years, with rooms and commons; John Buckley Bradbury,(a) Caius College, to a Scholarship of £50 per annum for three years. 2. To minor Scholarships; Kimm, Schroeder, to Scholarships of £40 per annum for two years.

ACCIDENTAL POISONING AT BRADFORD.—During the past week several persons named Johnson, living at Bradford, exhibited symptoms of arsenical poisoning. Dr. Lodge, who was called to see them, found that all had been taking a mixture of cream of tartar and magnesia as a medicine. On analysis, the cream of tartar was found to contain arsenic, and the poison was also detected in the vomited matters. The poisoned drug was finally traced to the shop of a chemist named Potter. The Professional gentlemen who, in addition to Dr. Lodge and his assistant, Mr. Lee, have been engaged in treating and investigating the cases of poisoning, and making the chemical examinations, are Dr. Macturk, Dr. Brown, Dr. Goyder, and Mr. F. M. Rimmington, analytical chemist.

LARGE DOSES OF DIGITALIS IN DELIRIUM TREMENS.—Dr. William Bowman relates an interesting case of delirium tremens in which he administered large doses of digitalis. Two and a-half ounces of the tincture, made according to the London Pharmacopœia, from very fine digitalis leaves, were administered in half-ounce doses in the course of eleven and a-half hours. "The case, although a very severe one, was unaccompanied by any preternatural heat of the head. The first dose lowered the pulse (which was originally 80) permanently eight beats, but it was again raised by the second. The second, third, and fourth doses had no effect upon the number of the beats, but rendered them irregular at times. The fifth dose, however, brought down the pulse at once to 48, at which it remained most of the time for several days, producing no ill effects whatever, and merely rendering the patient languid." Mr. Bowman prefaces the narrative of this case with some interesting observations upon the experience of other Practitioners with this drug.—*Canada Lancet*, No. 2.

DEATH OF MR. THOMAS HILL, MEDICAL BOOKSELLER.—Mr. Thomas Hill, after very severe trials of life, died at the age of eighty-three on Monday, May 25, at the residence of his tried and faithful friend, Mrs. Hester Tadlow, of No. 47, Gerrard-street, Soho. In recording the death of Mr. Hill, we shall bring to remembrance a name known to most of the senior members of our Profession. Mr. Hill was partner with the late Mr. Burgess; this firm was long established in Great Windmill-street, and for many years carried on a large business. Mr. Hill was unassuming and obliging in his manners, and had secured the regard of many friends; but he had outlived nearly all who had known him in better days, so that he had to endure much poverty in his last years. The contemporary firms known to our fathers were—Burgess and Hill, Callow and Wilson, Cox and Son, Samuel Highly, and Thomas and George Underwood. Mr. John Wilson died last year. With Mr. Hill's death is lost the last link connecting the names of the Medical booksellers of the last with those of the present generation.

TRANSMISSION OF SYPHILIS BY VACCINATION.—Much interest has been excited in Paris by a case read before the Academy by M. Dévergie, purporting to be an example of transmission of syphilis by the vaccine virus in a boy fifteen years of age, who, seven months previously while a patient for pleurisy, had been vaccinated in the St. Eugénie Hospital. At the end of the seventh month he presented himself at the St. Louis with syphilitic tuberculous disease of the skin. Unfortunately nothing is known of the boy during the seven months which intervened, nor of his parents, nor of the other children who were vaccinated on the same day with the same virus. Inquiries have, however, been set on foot respecting these matters, and the results will be hereafter communicated to the Academy. In the meantime M. Ricord announced to the Academy that the great number of facts of this kind now published had overcome his scepticism, and that he was now a believer in the transmission of syphilis by vaccination. He comes to the conclusion with great regret, for he is unable to see what guarantee we can have of virus being taken from children not infected by syphilis, the symptoms of which may be only subsequently exhibited. M. Depaul regarded M. Ricord's fears with regard to healthy vaccine virus as exaggerated, although he has long been a believer in the possibility of the transmission of syphilis by it. But after all, this is a very exceptional occurrence, and among the many thousands of infants vaccinated at the Academy it has never once been met with—the children whence the virus is derived being, however, carefully selected. M. Depaul also is of opinion that an infant, the subject of syphilis, almost always exhibits signs of it from the period of its birth. This statement M. Ricord stated his thirty years' experience qualified him to deny, the symptoms always appearing at a more or less remote period from birth, and in this opinion MM. Cloquet and Dévergie entirely concurred.

SARACINEA PURPUREA IN SMALL-POX.—The following result of a trial of the Saracinea has been communicated to the *Times* by Mr. Cosmo G. Logie, Surgeon-Major Royal Horse Guards (Blue). Eleven men of Mr. Logie's regiment which is stationed at Windsor, contracted the disease. After expressing his disbelief in the perfect protecting power of vaccination, he writes:—"Some time ago, seeing a paper written by Assistant-Surgeon Miles, of the Royal Artillery, on the efficacy of the North American plant called the saracinea purpurea, or pitcher-plant, in the treatment of small-pox among the Indians, my colleague (Mr. Agnis) and myself have given this remedy, which has been imported into this country by Dr. Miles to the house of Messrs. Savory and Moore, a fair trial, and I am happy to say the eleven cases in our hands have recovered under its peculiar influence. This remedy I consider a boon to the public, for this reason—it is so easily managed; any one can make a decoction or infusion of the root like tea. An ounce of the root is sliced and infused in a quart of water, and allowed to simmer down to a pint, and given in two tablespoonsful doses every four hours, while the patient is well nourished with beef-tea and arrowroot. Four of the cases in my Hospital have been severe confluent cases; they have throughout the disease all been perfectly sensible, have had excellent appetites, been free from pain, and have never felt weak. The effects of this medicine, which I have carefully watched, seemed to arrest the development of the pustules, killing, as it were, the virus from within, thereby changing the character of the disease and doing away with the cause of pitting, and thus avoiding the necessity of gutta percha and india-rubber applications, or of opening the pustules. In my opinion, all anticipations of disfigurement from pitting may now be calmed, if this medicine is given from the commencement of the disease. Before leaving this subject, I may here caution the public that the useful part of the plant is its root, as recommended by Dr. Miles, and it can only be obtained from Messrs. Savory and Moore, to whose house alone it has been imported. With the usual kindness of Dr. Gibson, the Director-General, I have been amply supplied with it for the use of my regiment. So much am I impressed with the efficacy of it in small-pox over the old mode of treatment, that I hope to hear of it in every country gentleman's medicine chest, and before long that we shall see no more faces as described by Dickens, like the interior surfaces of sliced muffins."

MEDICAL CERTIFICATES OF DEATHS.—At a meeting of the Medico Chirurgical Society of Glasgow, held on the 12th inst., the following petition to Parliament was agreed to:—"Unto the Honourable the Commons of Great Britain and Ireland, in Parliament assembled; the petition of the members of the Glasgow Medico-Chirurgical Society humbly showeth.—That your petitioners are legally qualified members of the Medical Profession, and practise in Glasgow and the larger towns of the west of Scotland. That your petitioners suffer under a serious grievance, inasmuch as they are required, under the Births, Deaths, and Marriages (Scotland) Act, to render gratuitously certain very important Professional services of much value to the public, and that under heavy penalties. That while your petitioners recognise the important public benefits which the Act is calculated to confer, and are therefore willing to place their services at the disposal of the authorities, they feel that the requiring of gratuitous Professional services under a penalty is opposed to the spirit of all British law, and places the Medical Profession in Scotland in a degraded and invidious position. That your petitioners request the attention of your honourable House to the

(a) For proficiency in the Natural Sciences.

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fact that their co-practitioners in England are exempted from the oppressive operation of such an enactment, in as far as penalties are concerned; and further, that it was found expedient to obtain from introducing any penal clause into the Births and Deaths (Ireland) Act, which has just passed both Houses of Parliament and received the Royal assent. May it therefore please your honourable House to take your petitioners' case into consideration, repeal the penal clause referred to, and thus place your petitioners on the same footing as their co-Practitioners in England and Ireland, and your petitioners, as in duty bound, will ever pray.—Wm. Lyon, M.D., Fellow of the Faculty of Physicians and Surgeons, and President of the Medico-Chirurgical Society. Signed at a meeting, and for behoof, of the Medico-Chirurgical Society, held in the hall of the Faculty of Physicians and Surgeons.—Glasgow, May 12, 1863."

ROYAL COLLEGE OF SURGEONS IN IRELAND.—INAUGURATION OF THE ALBERT HALL.—It was some time since determined by the President and Council of the Royal College of Surgeons in Ireland to place in their new Examination Hall, which has recently been beautifully decorated in the Italian style of art, a bust of his late Royal Highness the Prince Consort, obtained from the Queen's sculptor by the direct permission of Her Majesty; and to confer upon the room the name of the "Albert Hall." His Excellency the Lord Lieutenant, through whose kindness Her Majesty's sanction had been obtained, having graciously consented to inaugurate the Hall, Thursday, the 21st inst., was fixed for the ceremonial. At half-past four on that day the Council assembled in their robes, and shortly before five His Excellency arrived at the College, and was received by the President, Dr. Mackesy, of Waterford, who conducted him to the Hall. Among those already assembled in the Hall were the Lord Mayor, the Lord Chancellor, the Lord Justice of Appeal, the President and Vice-President of the College of Physicians, and a large number of the Fellows and Licentiates of the College of Surgeons. The Lord Lieutenant having taken his seat, the President—Dr. Mackesy—read an address, in the course of which he explained the object of the meeting, and briefly alluded to the history of the College. In concluding, he requested his Excellency to inaugurate the bust of his late Royal Highness the Prince Consort, and to name the Hall the "Albert Hall." The bust having been uncovered, His Excellency the Lord Lieutenant spoke as follows:—"In proceeding to fulfil the high and pleasing duty which, in the name of the Royal College of Surgeons in Ireland, I have undertaken to perform, while I acknowledge in passing the courteous terms of the address directed to myself personally, I consider it a very great privilege to be associated in any work or function with a body so eminent, so useful, and so honoured as your own. The services which your College has rendered to suffering humanity are already counted by scores of years, and will soon be counted by centuries. You have adverted with just pride to the ever-widening circle that the extent of our dominions continually throws open to the healing and humanising influences which radiate from this centre, and which, far from being confined to merely physical benefits, salutary and even sublime as these are, tell largely upon the intellectual vigour and moral health of the nation. It is in entire harmony with the essential character and purpose of such a society and such a mission that you have resolved to perpetuate within these walls the lineaments, and to give this hall the name of our late beloved and lamented Prince Consort. For with that name and memory are inseparably blended all things most bright and pure, and just, and true—a pity most sensitively awake to the wants and sufferings of his kind—a courage so firmly poised that there was no error which it was not ready to meet with steadfast gaze, no truth for which it would not have braved the world—a purity in which his features were moulded, and his life was steeped. Let this be named the 'Albert Hall.'" His Excellency then left the Hall, and, after a brief inspection of the College, took leave of the President and Council. It is an interesting fact that the original petition of the "principal Surgeons of Dublin," praying for the foundation of the "Royal College of Surgeons in Ireland," was presented, in the year 1781, to "His Excellency Frederick Earl of Carlisle, Lord Lieutenant General and General Governor of Ireland," the grandfather of the present popular and justly-esteemed viceroy. Thus after the lapse of nearly a century the grandson, who is ever ready to lend the influence of his high station to advance the interests of literature and science, and to promote the welfare of the people over whom he rules, is found cherishing the institution commenced under the auspices of his ancestor. The petition alluded to, and the counter-petition of the corporation of Barber Surgeons are reproduced *in extenso* in Vol. VIII. of the *Dublin Quarterly Journal of Medical Science*, pp. 236, *et seq.*

PRESENTATION OF A TESTIMONIAL TO DR. GEORGE BUDD.—On Saturday last a testimonial, consisting of a massive silver candelabrum with three branches and movable top to receive a flower-vase, was presented to Dr. George Budd, upon the occasion of his retirement from the chair of Medicine, by a number of his old pupils. A numerously-attended meeting was held in the great hall of King's College, the Rev. the Principal being in the chair, and most of the staff of the Hospital being present. Dr. Lavies, in presenting the gift, said that "the meeting was assembled to tell Dr. Budd some of the thoughts which pressed on them when, after a long and patient career as Professor of the principles of Medicine in the College and of its practice in the Hospital, he was about to seek in partial retirement the rest to which he was so justly entitled. Nearly a quarter of a century had passed since he accepted the chair, and during that time hundreds of men had listened to his lectures and Hospital teaching, and hundreds had passed into practice in various parts of the world. What they thought of him was eloquently told by the offering made that day, and expressed individually by the numerous letters received from various quarters, and which would form part of the testimonial. The meeting had to think of Dr. Budd in four characters—Lecturer, Hospital Teacher, Consulting Practitioner, and Friend. Dr. Watson had predicted the success of his lectures, and all must admit that it had been a real pleasure to enter his class. His agreeable manner, eloquence, and earnestness, would be remembered by all. In the Hospital he was always most attentive to the students, taking deep interest in all who were willing to learn, while his own acumen and discernment, and his excellent clinical lectures, were the admiration of all. They could never meet Dr. Budd at the bedside without pleasure and instruction to themselves, and advantage to their patients. As a friend, all would own that their relation to him had been softened and beautified by his kind and conciliatory manner; a friendly word and cheerful smile for all. An attentive ear for every trouble, affectionate and paternal advice whenever it was sought, he was one well entitled to be called 'the student's friend.' And it was the same with his relations outside those walls; as no word of unkindness, still less of malice, ever escaped his lips, so were such words never directed against him. He had not a single enemy; loving his fellow-men, he was beloved by all." Dr. Lavies concluded with these words: "I trust I have not exceeded the bounds of delicacy in speaking of you thus, my dear Dr. Budd, in your presence. This latter portion of my theme is one on which I love to dwell; for I am sure that I only speak the sentiments of those I represent when I say that, greatly as we appreciate your unquestioned talent, we feel that you shine most brightly and conspicuously in your character as a sincere, simple-hearted friend—as a Christian gentleman. If I have said too much, forgive me. Let me only add, that it is our sincere hope that your future life may be as happy as that which is past has been useful; and let me assure you that you will carry with you into your retirement the hearty goodwill and the grateful regard of all those who have had the good fortune to be numbered among your pupils. I am certain that nothing could add to your pleasure in receiving this simple assurance, but as we desire to give you some tangible and visible evidence of our regard, we beg your acceptance of the piece of plate upon the table before you,

'Parvum non parvis dignus accidit,'

a small pledge, indeed, but bearing no relation whatever in its size to the large and affectionate friendship which prompts us to offer it." Dr. Lavies then concluded a most able and eloquent address, by bidding Dr. Budd, "as a teacher in the lecture-room and in the Hospital, respectfully, gratefully, and affectionately, farewell." When the cheering which followed had subsided, Dr. Budd, who was evidently much affected, rose and replied, that "It was impossible for him to describe what he felt. It was very gratifying to feel that the services of so many years had been so warmly recognised; but he was at a loss to express his high appreciation of the kindness of his old pupils, as shown by the magnificent testimonial with which they had just presented him. He remarked upon

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the gratifying evidence of sympathy shown by the presence upon the occasion of many who had come from great distances, and, doubtless, at considerable inconvenience to witness the presentation. He briefly sketched the rise and progress of King's College Hospital during the quarter of a century which had almost elapsed since first he became connected with the Institution, and showed how, from the old workhouse of St. Clement Danes the present noble building had gradually grown up to confer immeasurable benefit upon the suffering poor, and to fill a most important place in the education of the Medical Profession. The Profession, he remarked, had made great advances during this period, socially, as evidenced by the improved position and education of its members, and scientifically, as shown by the great improvements which year by year had marked its progress. He had had personally no small reason to note this latter fact, from the difficulty he had found in making his lectures upon Medicine keep pace with the rapid advancement of science. He had found wherever he went King's College men occupying prominent positions, and testifying, in this way, to the high standard of education which the College had helped to raise; and it was a source of gratification to him, in resigning the chair of Medicine, to know that it would be ably filled by one who had done so much to improve our knowledge of the pathology of the kidney, and was besides, himself a King's College man—Dr. George Johnson. He begged to thank his old pupils warmly and affectionately for their kind appreciation of his efforts as a teacher, and for the expressions of personal attachment which were even still more gratifying to him. A vote of thanks to the principal was then proposed by Dr. George Johnson, and seconded by Dr. Miller, and the proceedings, which had been of a highly interesting character, then terminated. In addition to the candelabrnm, an elegant blotting-book and envelope case were presented to Mrs. Budd.

PERMANGANATE OF POTASH AS A DISINFECTANT.—Dr. Ploss speaks in the highest terms of the disinfecting power of this substance. It effectually removes all smell from the most stinking suppurating sores and discharges. Most remarkable results of this kind have followed its injection, repeated several times a-day, in cases of cancer of the uterus—half a drachm to 8 oz. of distilled water being a good proportion. In the case of open wounds and ulcers, all the dressings covering them should be moistened with the solution. No means succeeds more rapidly than this in removing the disagreeable smell of the hands after the performance of autopsies, for which purpose a stronger solution (ʒss ad ℥j.) may be employed. It is far superior to chlorine in its effects, which are not, as is the case with that substance, fugitive. For this reason it is a superior prophylactic, applied to the hands of accoucheurs, to chlorine in puerperal fever. In ozœna it is strongly to be recommended, the solution (℈ss ad ℥viii.) being introduced into the nares by means of a caoutchouc syphon. In bad smells of the mouth, resulting from carious teeth, it is an admirable means, a little cotton wool being moistened in a weak solution. Finally, the permanganate is to be recommended as a wash for stinking feet. This remedy deeply stains linen it comes in contact with, but the spots may be removed by means of the sulphate of iron.—*Varges' Zeitschrift*, N. S., vol. i., p. 187.

THE INDUCTION OF PREMATURE LABOUR BY MEANS OF NITRATE OF SILVER.—Prof. Giordano, of Turin, states that premature labour may be much more effectually induced by the application of solid nitrate of silver to the cervix uteri than by any other mode. Having introduced it within the cervix, he imparts to it repeated, but slight, rotatory movements, so that most of the surface may undergo the process of cauterisation. While most of the other procedures are difficult, inoperative, or even sometimes dangerous, this one is of the most easy execution, is prompt and complete in its results, and is followed by no ill consequences. A case is narrated in which cauterisation was performed, on account of deformed pelvis, at 9 a.m. of the one day, and the fœtus was expelled at 8 a.m. the next day, the placenta following in an hour afterwards.—*Omodei's Annali*, vol. clxxxii., p. 407.

BOOKS RECEIVED.

The Physical, Moral, and Intellectual Condition of the Deaf and Dumb. By James Hawkins. London: Longman and Co. 1863.

British Journal of Dental Science, May, 1863. London: John Churchill and Sons.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Subscriber and Constant Reader.—Yes.

M.R.C.S.—We think not. Certainly not all.

Dissatisfied.—The Star or the Briton Assurance Companies.

Ωμεγα.—We believe so, provided that the member of the College is a registered Practitioner, and dispenses his own medicines.

Tympanum should communicate his name and address in confidence, as an action may be pending.

P. R.—We never recommend Practitioners. Apply to the Physician or Surgeon of highest character with whom you are acquainted.

Mr. Edwin E. Day.—Dr. Barnes' paper on the Induction of Premature Labour will be found in the Third Volume of the *Obstetrical Transactions*, p. 107.

Through inadvertence, the name of Mr. Liddle was omitted as the contributor of the Local Report on Small-pox in Whitechapel in our last Number.

We believe it to be for the public interest that the office of public vaccinator should be in few hands, so that each vaccinator may have a good number of patients. Thus he will keep up a good succession of healthy vaccine lymph from healthy children, and will not be driven to resort to dried matter, nor yet be tempted to use that from arms which display imperfect or irritable vesicles.

Vivisection.—Sensible people, when they have had their say, hold their tongues; others have a gift of absurd reiteration. The Royal Society for Preventing Cruelty to Animals is of the latter category; a few preachers, fanatics, sentimentalists, and doctors out of work make speeches year after year about vivisection, and bring a respectable cause into discredit by their exaggeration.

The Hotel Dieu of Montreal.—The first number of the *Canada Lancet*,—if, as its editor, Dr. W. E. Bowman, asserts, one of the smallest Medical periodicals in existence, certainly not the least promising,—contains the following account of the origin of the Hotel Dieu, at Montreal, a Hospital now containing upwards of 200 patients, independent of those in the private wards, besides 30 old men, 30 old women, 43 boys and 25 girls not under Medical treatment:—

"The Hotel Dieu Hospital of this city owes its existence to a few gentlemen, who, in 1640, incorporated under the name of 'Société de Nôtre Dame de Montréal,' obtained the cession of the Island of Montreal from M. de Lauzon, intendant of Dauphiné, in France, who had himself received it on condition of establishing a colony, but who could not induce persons to emigrate thither. On the 18th of May, 1642, these gentlemen, a Mdlle. Mance, with a few hardy men, prepared to act as soldiers, or in any capacity which circumstances might require, cast anchor at Pointe à Callières, opposite to where the Royal Insurance buildings now stand. The Iroquois—the most audacious among Indian tribes—soon manifested impatience at their presence, and kept up incessant warfare. The colonists were unable to gather fuel, fruit, berries, or roots, without running the risk of being killed or wounded by the wily savages, who were ever lying in wait for them. In 1644, the first Hotel Dieu was constructed, on the site it afterwards occupied for upwards of 217 years, near what was afterwards called Little St. Joseph-street, on the north-east side of the Catholic cathedral. The original building was of wood, 24 × 60 feet, and consisted of a kitchen, a room for Mdlle. Mance, another for the servants, and two for the sick. No sooner was it completed, than it was filled with wounded, for the Iroquois still kept up their incessant raids. A short time after its construction, the funds were exhausted; but Mdme. Bullion, who had already contributed 20,000 francs from her purse, added 60,000 livres more, on condition the poor should be received and cared for without charge. But even these funds were insufficient, and the exhausted state of the exchequer, and still more the small number to which the ceaseless activity of the Iroquois had now reduced the colonists, determined the latter to return to France. The energy of Mdlle. Mance, however, deterred them. She visited her native country, and returned to the colony with men and means. In 1650, the Hurons, most of whom had been Christianised, were completely exterminated by the more warlike Iroquois. The latter, from recent successes, now became still more insolent, destroyed the houses erected around the Hospital, and murdered the inmates. The history of the Hotel Dieu for many years subsequently is one of continued trials, dangers, and alarms. But now and again an Iroquois, wounded and captured in his attempt to murder, would be carried into the Hospital, his wounds dressed, and when restored to health dismissed with kindness, to tell his wondering comrades what the pale-faced women had done for him—how they had watched by and prayed to the Great Spirit for him—how they had carried food to his lips when he was hungry, and moistened them when parched with fever. And in this way Christianity, baptised in blood, was insensibly introduced among them."

SMALL-POX IN THE HOLBORN DISTRICT.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In the Local Report on Small-pox for the Holborn district, which appeared in your last impression, there is an error which I desire to correct. In saying that the district is never free from this disease, I give the average number of deaths for the six years ending Lady-day, 1862, as five and six-tenths (5 6), not fifty-six, as printed. The former mortality is the correct one, and is itself sufficiently discreditable in a population of only 46,317.

I am, &c.

3, Finsbury-square, E.C., May 27. SEPTIMUS GIBBON, M.D.

A "DIETETIC DEPÔT."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—We beg to inform you we have established the "Dietetic Depôt"

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for the purpose of supplying invalids with any articles of food they may be ordered to take by their Medical attendants, and intend supplying nothing that is not thoroughly genuine. We pledge ourselves to make up any jellies, soups, broths, or any other food strictly according to the wishes of the Medical gentleman ordering them. We are, &c.

G. Van Abbott and Co.

Dietetic Depôt, 5, Princes-street, Cavendish-square, London, W., May 21.

Comic Song in Ridicule of Vaccination.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Now that small-pox and vaccination are in everybody's mouth, I send you a copy of an old comic song, which was given me by my friend Hector Arney, Esq., and which well represents the fanatical prejudices of sixty years since, when "cow-pock inoculation" was accused as the cause of all sorts of beastly diseases and propensities. I hope it may amuse your readers as much as it has Your obedient servant,

37, Hertford-street, W., May 24, 1863. R. Druitt.

"*The Marvellous Physicians; or, the Blessings of Cow-Pock Inoculation.*

"*Tune*—' Down, derry down.'

"Three Physicians of London for Yorkshire set out,
Where an earl's noble stomach was storm'd by the gout;
And to guard the good Peer from all future assault
They physick'd him into his family vault.
With a down, down, hey derry down.

"Well paid by his heir, they departed for town,
Saying, 'We'll travel *up* since my lord travels *down*;
But at Newark we'll sup, where let each down his throttle
Pour a large dose of Port without shaking the bottle.'
Derry down, etc.

"At their inn three roast fowls Dr. Calomel chose,
Which fat Dr. Fingerfee didn't oppose:
'And,' cried Dr. Isaacs (tho' he was a Jew),
'Pray garnish dem fowls wid a sausage or two.'
Derry down, etc.

"Tho' the wine was as thick as the three Doctors' heads,
They had three pints a-piece, and then called for their beds;
Molly chambermaid stared when, with looks mighty grand,
Dr. Calomel bid her pull off his right hand.
Derry down, etc.

"When Calomel's hand was pull'd off and put by,
Dr. Fingerfee growl'd, 'Hussey, take out my eye;'
Dr. Isaacs, more mild, said, 'Wrap dese up in towels,
And mind you don't lose dem, my love, dey're my bowels.'
Derry down, etc.

"In the pantry the chambermaid stow'd all these articles
Of the three learned Doctors, profound in cathartieles;
But a hound, whilst they slept, and ne'er dreamed of the matter,
Swallow'd up all their property out of the platter.
Derry down, etc.

"Cried the maid the next morning, 'I've lost through magicians
A hand and an eye of two Christian Physicians;
Then the wizen Jew Doctor, as thin as a lizard,
How he'll grumble in all he has left that's his gizzard.'
Derry down, etc.

"But invention arrived in the midst of her crosses,
And bade her *repair*, not *lament* o'er her losses;
'A blind thief hangs,' says she, 'on the gibbet hard by,
I'll go cut off his hand—but then how get an eye?'
Derry down, etc.

"By chance a tom cat had expired in the night,
And his eye served for Fingerfee's lost orb of sight;
Then a hog had been butchered, a porker well grown,
Whose chitterlings Jews might mistake for their own.
Derry down, etc.

"Dr. Calomel rose—in this farce the first actor—
And put on the hand of the blind malefactor;
Dr. Fingerfee next drew his purse from his pocket,
Tipp'd Molly, and popp'd the cat's eye in his socket.
Derry down, etc.

"Isaac stow'd the intestines, and all left the inn,
'I've cheated two Christians,' said Moll with a grin;
'And how mad the Jew Doctor would be should he know
That half his inside is hog's liver and crow.'
Derry down, etc.

"Dr. Calomel muttered, 'I can't understand
Since we came from the North what ails my right hand;
Not content with its fees, as I walk thro' the street
It dives into all the folks' pockets I meet.'
Derry down, etc.

"'My disorder,' said Fingerfee, 'claims more remark,
For I ne'er can close my left eye in the dark;
So wakeful I've grown, that this morning at four
I sprang out of bed at a mouse on the floor.'
Derry down, etc.

"Dr. Isaacs exclaimed, in a pitiful note,
'Dear broders, you see how I've dirtied mine coat;
'Tis a wonderful thing, but I can't pass a slough
Till I've roll'd myself in it, just like an old sow.'
Derry down, etc.

"Now, success to the learned of famed Warwick-lane,
Their profession far be it from me to profane;
I shall hurt no Physicians, I trust, in the nation,
By a laugh at such methods of In-o-cu-lation.
With a down, down, hey derry down."

In-o-cu-lation.

Vaccino-Syphilitic Inoculation.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Your last Number contained a communication from Mr. Carter, of Stroud, recording what he considers an instance of constitutional syphilis communicated by vaccination. If such a thing does ever occur, which I, for one, have grave doubts of, I do not think Mr. Carter's case need be construed as an instance in point. One short sentence in that gentleman's communication explains to my mind the whole mystery. He writes—"The syphilitic one is the eldest." Is not this perfectly consistent with what we know of the history of transmitted syphilis?

One of the parents, in all probability the father, contracts primary syphilis; he afterwards marries, and the first of his offspring bears the brunt of the disease inherited from the affected parent. I grant it is exceptional for the succeeding children to show no trace of cachexia; but I think I can point out instances of the same thing occurring in which the disease has been undeniably hereditary. The first child appears to manifest the symptoms of the poison inherited in a very concentrated form, and the succeeding progeny, if showing it at all, do so in a very mitigated degree, so mitigated, indeed, as to be easily forgotten by the parents, and not to be recognised by Medical eyes at the age of ten years.

The worst instances of inherited syphilis are unquestionably those in which both parents have laboured under the primary disease, and in these I have usually found that two or three of the first pregnancies occurring after, have terminated in abortions, then the first living child has manifested the cachexia very strongly, and succeeding ones in a diminishing ratio. Where but one parent has transmitted the disease, one or two children are, as a rule, all that evince the characteristic symptoms.

I am, &c.

Nottingham. Samuel D. Hine, M.R.C.S. Eng.

Tin Vessels Destroy the Flavour of Coffee.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I read in your Journal of April 25 an interesting letter by Dr. Druitt on Beer *v.* Coffee, and that gentleman appears to be of opinion that, if good coffee could be procured by the working classes, it would be attended with beneficial results.

I am aware of the difficulty which there is in procuring good coffee, but I believe much depends upon the metallic vessel in which the coffee is made. For my own use I am accustomed to make coffee, by infusion, in a white metal silvered coffee-pot; but a few months since I happened to discover that when coffee was made, either by boiling or infusing, in a tin vessel, *i.e.*, iron coated with tin (block tin), the flavour of the coffee was completely destroyed, and its colour changed from the natural to a dirty opaque colour, having a most disgusting taste.

In order to remove all suspicion, I procured coffee myself from several different shops, both with and without chicory, and at various prices. Having carefully examined two vessels, I made the coffee by gently boiling for a few minutes in one vessel, and infusing another portion in the other, when the flavour and the colours of the coffee were destroyed precisely the same as when it was made by my servant. The tin vessel in which the coffee was boiled was nearly new, having scarcely any appearance of rust in the interior, but the tin vessel which was used for infusing the coffee had been in use some years previously, and had more of the tin worn off, though it was quite clean. I afterwards procured a new enamelled iron saucepan, and boiled several samples of coffee in it without finding any impairment of the liquid coffee; and, lastly, the experiment was tried in a copper vessel, tinned in the inside, without causing any alteration in the taste, colour, or flavour of the coffee. I therefore infer that it is the iron, and not the tin itself, that spoils the flavour and appearance of coffee, unless, however, any galvanic action exists between the tin and the iron. The water which I used was that which is supplied to the town by the waterworks. I am, &c.

Southampton, May 22. Henry Osborn, M.R.C.P. Lond.

Tumuli on the Cotteswold Hills.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—There are two kinds of tumuli scattered upon the Cotteswold Hills, containing human bones and other remains of man, as flint and bone implements, and bones of animals, the teeth of boars, horses, cattle, and parts of their jaws and other bones. The one set of tumuli are round, formed of loose stones rudely heaped over either human remains and flints, with marks of fire cremation or sacrifice, or over a grave built of dry walling, and covered with rough, unhewn stones, like the roof of a house, and containing the remains of several individuals, of both sexes and all ages, from infancy to old age. The tops of the graves are covered with loose stones, collected off the surface of the land, to the depth of a foot or two, and lastly with earth. They have been ploughed over, and cultivated, in some instances, for years, and are called giants' graves, from the large stature of the persons buried there. Sometimes they are found lengthways, with the face towards the rising sun; in other instances doubled up, as if they had been placed in the sitting posture.

In some instances these tumuli are twenty yards across. Although the bones in the graves are not burned, yet the ashes contain the remains of the burning of animal and human bones. The skulls found in the round tumuli present the low development and measurement of those described by Sir C. Lyell and Huxley, and may have belonged to the ancient Celts, or the first migration of human beings to the central part of England, and may be of the same antiquity as the human bones discovered in the caves.

The long and chambered tumuli are not uncommon. They contain chambers communicating with each other like pig's cots, made of very large, flat, unhewn stones, such as are often used for stiles in stone wall countries, and covered over with loose stones. The large stones are sunk a little way in the ground to support the large covering stones, and the spaces between them neatly walled up and packed around with flattened stones to support them, and, lastly, covered over with loose stones. Some of these tumuli are sixty yards long and thirty yards wide, and from seven to fifteen feet high, and contain many chambers, and also stone graves, with burned animal and human bones, pottery, very rudely marked, and teeth of animals, etc.

The human bones belonged to people of ordinary stature, rather above the average height, and the skulls are of superior development, some of them equal to any of the present day, offering a great contrast with those found in the round tumuli. These chambered tumuli may have been the burial places of the optimates, or higher classes, at, and for some time before, the Roman invasion. The shape of the skulls would support the assertion of Julius Cæsar, that the Belgæ were a mixed race of Germans and Celts.

Some difference of opinion having arisen regarding the size and sex of the individual skeletons, the following paper is subjoined to assist others in investigating such interesting subjects:—

The Characteristics of the Male and Female Skeleton.—The lower jaw bone, sacrum, pubis, ilium, last lumbar vertebra, the humerus, femur, calcaneum, and astragalus, are the bones which are stated to possess distinctive differences in the male and female skeletons.

Civilisation, residence in large towns, and crossing the races of men, diminish the distinctive characters of the sex, and often obliterate the most prominent marks, which are easily distinguished in purer and more barbarous races. In large towns males often present female characters and females those of the male, and the bones of the one may so approximate in form to those of the other, as to render it extremely difficult to distinguish between them. It has been ascertained that mental culture alters the form of the head. The development thus induced does not enlarge the whole, but only certain parts—as the vault where the intellectual part of the brain is situated—for the circumference of the base of the skull is smaller in civilised man than in the roaming savage, who constantly exercises the organs of sense. And this disproves the assertion that cases of difficult parturition are on the increase among civilised nations, for the base of the brain, which is the most unyielding part of the head, is lessened. Unless deformed by disease, females of large towns suffer less in parturition than the strong and muscular residents of the country; the muscles of the former, being thin and emaciated, offer less impediment to that process than the more developed and stronger ones of the latter.

The lower jaw is larger in the male than in the female, the condyles and coronoid processes are longer and wider; a line drawn from the condyle to the outer angle is nearly vertical. The rami are wider, deeper, and more square; the base is larger, longer, and more curved from its angle to the symphysis; the teeth are larger; the alveolar processes, and the anterior and posterior surfaces are deeper. In the female, a line drawn from the condyle to the posterior angle of the jaw is more oblique; the rami and teeth are smaller, and the base forms a smaller and more acute angle. The lower jaw, and the other bones of the skeleton before puberty, afford no distinctive characters.

Old age, the loss of teeth, and the absorption of the alveolar processes, alter the form of the male jaw, render the line from the condyle to the posterior angle more oblique, and diminish the square and oblong character of its rami and its depth. The female jaw becomes very shallow and projecting from age and loss of teeth, its anterior surface grows oblique, forming a close approximation with the nose, or nut-cracker chin. The head of the male is larger than the female, the bones are thicker, and the ridges and processes stronger. The face is less oval, and the cause of difference depends upon the size and shape of the lower jaw.

The sacrum is longer, and straighter, less curved, and narrower in the male than in the female. But the sacrum deviates from its typical form in different subjects, the other bones of the pelvis are higher and thinner, and the ala of the ilia are more expanded, their depth is lessened, and the circumference of the brim increased. The articulation with the coccyx is larger and wider, and that with the sacrum rounder. The bones of the leg are shorter, smaller, and more delicately formed in the femal than in the male. The femur is more curved, and the length varies from fifteen to seventeen inches; the head is scarcely nonce the trochanter; a line drawn from the head of the femur to its internal condyle forms a wider space in the female than in the male; between the shaft of the bone and that line the calcaneum and astragalus are smaller in the female. The humerus may be smaller and its circumference less.

The average height of a man varies between five feet five inches to five feet eight inches; woman between five feet and five feet three inches. The span of the trunk in the male is downwards, in the female towards the head and body, to enable him to protect and provide for his partner and offspring by mental or physical exertion.

The height of a person may be correctly ascertained by measuring the length of the femur and tibia. A femur seventeen inches may belong to a male under the average height, or to a female above that height. A line drawn from the upper part of the trochanter to the end of the outer condyle indicates about the fourth of the height of the body. A femur fifteen inches long, of delicate structure, small circumference (not exceeding three inches), with the head on a line with the trochanter, or a little above it, a triangular lower jaw, with small teeth, a small calcaneum and astragalus, and fine and delicate-looking vertebræ, would induce one to conclude that they were the remains of a female below the average height. A femur exceeding twenty inches, stout and strongly marked, with a square lower jaw and large teeth, a flat, long sacrum, large calcaneum and astragalus, strongly marked vertebræ, and thick skull bones, would lead to the conclusion that they were the remains of a male skeleton exceeding five feet ten inches in stature, or the average height.

The normal forms of animals are the strongest and most enduring; in uncivilised life the delicate and abnormal perish in infancy. Thus the sexual characters are more strongly marked upon the bones of savages. Civilisation covers a largeat number of abnormal formed infants to live to manhood. Such may become active members of society, but their skeletons lose the characters of the sex. The protection of residence, clothing, and food secures greater bulk of body; for the ancient armour of the Tower was found too small for the average sized men of the present day, but perhaps not of symmetry.

Symmetrical and normal forms give activity and power, and enable an individual to undergo fatigue. The savage races surpass the civilised ones in their power of walking and running, suffering cold and hunger, and exposure to weather, which superiority depends upon the strength and power of their symmetrical structure, and it becomes still clearer when such forms are compared with the result of civilisation upon human, and domestication upon animal forms.

I am, &c.

HENRY BIRD.

Cheltenham, May 18.

P.S.—The antiquity of the tumuli and their contents may be estimated at from two to three thousand years. The care with which they were constructed, their contents, and the presence of burned bones and ashes, may prove that a belief then existed in the Supreme Being, that they offered sacrifices, and believed in the resurrection of the body and the immortality of the soul. The absence of coins, gold, silver, or bronze, may prove that these burial places or elementary pyramids were constructed (the round ones) in the earlier part of the stone period, and the larger and long ones in the latter part of that state of civilisation. The Romans invariably used mortar in their stone buildings; and coins, abundance of pottery, shells of oysters and mussels, teeth of cattle, horns, tesselæ, and carved and worked stones indicate the sight of a Roman villa or town, which are common in the sheltered valleys beneath escarpments, on the hills and the extensive earth-works formed upon most of the tops of these hills which command the valleys and extensive views of the surrounding country.

COMMUNICATIONS have been received from—

Dr. Conway Evans; Dr. Charles Kidd; P. R.; Mr. P. W. Latham; Mr. S. D. Hine; Tympanites; Mr. F. J. Burge; Obstetrical Society; Royal Institution; Epidemiological Society; Mr. R. Craven; Dr. S. Gibbons; Mr. J. Ewens; Dr. T. R. Fraser; Mr Stewart M'Nicol; M.R.C.S.; Ethnological Society; Mr. G. Lessington; Dr. T. Buzzard.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 23, 1863.

BIRTHS.

Births of Boys, 961; Girls, 927; Total, 1888.
Average of 10 corresponding weeks, 1853-62, 1729·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	645	614	1259
Average of the ten years 1853-62	571·1	557·0	1128·1
Average corrected to increased population..	..	..	1219
Deaths of people above 90	..	..	1

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	11	12	6	2	7	5	2
North	618,210	19	7	19	6	8	10	1
Central	378,058	8	1	22	..	7	8	.
East	571,158	14	4	36	1	15	10	6
South	773,175	16	13	17	2	9	11	5
Total.. ..	2,803,989	68	37	94	11	46	44	14

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·813 in.
Mean temperature	48·3°
Highest point of thermometer	66·5
Lowest point of thermometer	35·7
Mean dew-point temperature	43·4
General direction of wind	N.E.
Whole amount of rain in the week	0·75 in.

APPOINTMENTS FOR THE WEEK.

May 30, Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

Royal Institution, 3 p.m. Prof. William Thomson, F.R.S., "On Electric Telegraphy."

June 1. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.

Epidemiological Society, 8 p.m. Dr. L. R. Harvey, "On an Epidemic of Typhoid Fever at Wing, Bucks." J. F. Marson, Esq., "On the Use of Sarracenia Purpurea in Small-pox."

Odontological Society of London, 8 p.m. Meeting.

Royal Institution, 2 p.m. General Monthly Meeting.

2. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Ethnological Society, 8 p.m. Professor Tagore, "A Discourse on the Institution and Formation of the Caste System in India, Aryan Polity."

Royal Institution, 3 p.m. Professor Tyndall, "On Sound."

3. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

Obstetrical Society of London, 8 p.m. J. Marshall, Esq., and Dr. Graily Hewitt, "On a Case of Tubal Pregnancy." L. B. Cooke, Esq., "On a Case of Simultaneous Uterine and Intra-uterine Pregnancy." J. Faker Brown, Esq., "On a Sequel to a Case."

4. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

Royal Institution, 3 p.m. Professor Ansted, "On Geology."

5. Friday.

Operations, Westminster Ophthalmic, 1½ p.m.

Royal Institution, 8 p.m. John Ruskin, Esq., "On the Forms of the Alps of Savoy."

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		£	£ s. d.	£ s. d.
1856	503	204,451	6,597 18 3	202,110 7 2
1857	572	224,122	7,735 9 5	228,055 1 7
1858	638	235,350	8,582 0 9	274,797 15 4
1859	812	294,495	10,172 19 6	309,444 5 2
1860	902	336,290	11,312 15 9	366,530 2 0
1861	1,115	361,960	12,868 3 11	414,231 5 9
1862	1,007	375,197	12,562 7 9	*484,976 14 0

JESSE HOBSON, F.L.S., Secretary.

* Since this Report was closed, the Accumulated Fund has so increased as to raise it above Half-a-Million.

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ORIGINAL LECTURES.

A CLINICAL LECTURE

DELIVERED AT

ST. THOMAS'S HOSPITAL.

By FREDERICK LE GROS CLARK, F.R.C.S.,

Surgeon to the Hospital.

Deformity of the Foot—Fracture of the Leg—Fracture of the Fore-arm—Injury to the Spine—Fracture of the Skull—Exostosis of the Humerus.

GENTLEMEN,—The cases (a) which I shall bring under your notice to-day are such as you will frequently meet with in your future practice, and on that account they are deserving of your attention. The record of rare cases of injury or disease has a statistical value; but in relative value to you, as Practitioners, they are inferior to those which you will soon, yourselves, be called on to treat, when you enter on the duties of your Profession.

The first case to which I shall refer is one of very simple character, though often, I believe, misunderstood, and consequently maltreated.

R. F., aged 13, was admitted into the Hospital on November 2, 1862. Two months since he sprained his left foot whilst at play, the sensation at the time being as if something had given way on the inner side of the ankle-joint. When admitted, the foot was very much everted, resting, as he walked, more on the inner than the plantar surface. The internal lateral ligament was much stretched, and the common extensor tendon stood out in bold relief when an attempt was made to invert the foot; the peroneî tendons were also thus rendered tense, but in a much less degree. An apparatus was adjusted to the foot and leg, by which, through the medium of a screw movement, the foot could be gradually brought into its normal position. This was worn for about a month, at the end of which time the tension of the muscles was completely overcome, and the foot retained its normal position when at liberty. A boot with an iron support was ordered, and he was directed to wear this for some time, until the deltoid ligament has regained its natural length and power of resistance

In the foregoing case the deformity was referred to an injury, probably the joint may have been previously feeble, though the other ankle was strong. The tension of the extensor tendon first attracted notice, and seemed to be the active cause of all the mischief; but the history of the case, and a more careful examination, satisfied me that the muscle was only taking advantage of a relaxed ligament, and the proper treatment was to supply the deficient support, and not to deal summarily with the offending tendon. The result proved that this opinion was correct; for the muscles were perfectly amenable to control when sufficiently and properly antagonised. I believe such cases have often been subjected to tenotomy, probably to the permanent enfeebling of the foot. It is very different where the muscles are shortened from tonic spasm; though, I may remark, in these cases patience and careful extension will effect a good deal. But I feel it my duty to warn you against the indiscriminate employment of this simple and tempting operation; for divided tendons do not always unite; indeed, it is questionable whether many do as the rule, and therefore they should not be cut through unless the necessities of the case demand it. The tendo-Achillis shows a greater aptitude for reunion than smaller tendons.

A patient who was the subject of fracture of the tibia and fibula is about to leave the Hospital, and I will briefly relate his case, for the sake of making one or two remarks on the treatment adopted.

J. A., aged 40, a painter, was admitted on December 2, 1862. Whilst at work at a railway station, in stepping from the platform on to the rails, his right foot slipped, and he fell with the leg bent under him, and felt the bone snap before the knee reached the ground. On admission speedily afterwards, the limb was very much swollen, and both bones were broken near their centre, the deformity not being great, although the fracture of the tibia was very oblique, and in a direction downwards and outwards. The limb was first laid on an outside splint; but as the swelling had further increased on the following day, and there was more displacement, a long back splint was substituted: cold lotion was applied over the leg. The swelling subsided very slowly, and there was great difficulty in keeping the fractured ends of the tibia in position, not so much from one riding over the other as from the tendency of both fragments to bow inwards, thus forming an obtuse angle at the seat of fracture. To obviate this a stout piece of gutta percha was moulded to the inner side of the leg, and under this there was afterwards placed a soft compress, the whole being confined by a bandage firmly applied from the ankle to the knee, the outside splint being still retained as before; this was done after the patient had been under treatment for a fortnight. The effect was entirely satisfactory; the displacement was thus quite controlled; and at the expiration of six weeks, union without deformity was sufficiently complete to place the limb in a gum bandage.

The points of practical interest to which I wish to direct your attention are the swelling of the leg and the means adopted to correct the deformity. Effusion is a necessary consequence of all fractures; but extravasation of blood is usually limited in quantity, and inflammatory or congestive exudation does not come on until after the lapse of some hours at least. Now, in this case the swelling immediately followed the accident, and its amount, at so early a period, satisfied me that it was due to extravasation of blood; indeed, I at first apprehended that some artery had been torn, and ice was for a short time applied. It is important to distinguish between the swelling of extravasated blood and that of transudation; and I believe the above test, as to time, is a sure one. But, again, it is desirable to distinguish between this condition resulting from venous and arterial extravasation. The latter is, in my experience, very rare in simple fracture; indeed it is wonderful, considering the proximity of the arteries to the bones, that it is so rare. In the above case, the tension of the leg was never such as is witnessed in arterial extravasation, and there was no interruption to the arterial circulation; moreover, the patient was not depressed as he would have been from the loss—for such it is—of arterial blood; therefore I concluded that it was general or venous extravasation. Then, as regards the deformity. The fracture was produced in a very usual way, by the indirect agency of the weight of the body, when the limb was placed in a position favouring the injury. The obliquity of the fracture was not in the most usual direction, which is downwards, forwards, and inwards, and thence the character of the displacement. You have often heard me deprecate the employment of pressure to keep a displaced fracture in position. Where relaxation of the muscles or extension fail, it is rarely of any avail, and often positively mischievous, to employ pressure. But the present case was an exceptional one; the displacement was not the usual riding of one fractured end over the other, but the bending inwards of the tibia; and this, as you have seen, was corrected by acting upon its two extremities, as well as upon the protected seat of fracture. If the deformity had been the consequence of one fragment overlapping the other, no good would have resulted from pressure, but probably serious mischief, by producing ulceration at the point of prominence; in this way a simple fracture may be readily converted into a compound one; therefore I say that this practice is applicable only to exceptional cases.

There are few fractures which require more constant attention than those of the fore-arm, especially if the injury be accompanied by contusion or laceration, as in the case I am about to relate.

R. E., aged 69, a carpenter, was admitted on December 4, 1862. He had been knocked down by a cab, the wheel of which passed over his fore-arm; both bones were broken near their centre, and the skin was contused and superficially lacerated; there being also considerable effusion in the neighbourhood. The arm was first laid on a palmar splint, and the wound dressed. At the expiration of a week the ordinary front and back splints, suitably padded, were applied, and kept in position with tapes and buckles. Daily examination was requisite for a time, that the wound might be dressed, and the proper adjustment of the fracture ascertained. At the expiration of six weeks the union seemed firm, the wound was healed, and there was free motion without deformity.

I do not refer to this case as presenting anything remarkable, but to impress upon you the principles upon which these fractures are to be treated. In an especial degree it is requi-

(a) Reported by Messrs. Greaves and Way.

rite to remember that muscles act very differently on a broken lever, from that which is their natural action whilst it retains its continuity. In the fore-arm we avail ourselves of the assistance of the interosseous membrane in the treatment of fracture; for the principle of management consists in keeping the bones apart by the adjustment of convex or padded splints, to counteract the tendency of the pronator muscles to approximate them. The comfort of the patient, the repose of other muscles, and the parallel relation of the bones are best consulted by placing the arm in a sling, semiflexed, and with the thumb upwards, for the palmar splint ought to be long enough to support the hand, and thus prevent it from acting by its weight on the lower part of the radius, except where that bone is broken near to the wrist, and then the hand should hang down. The above case occasioned some trouble at first, and exemplified the importance of constant examination to prevent a deformed union. The next case to which I will direct your attention is one of injury of the spine, followed by unusual symptoms.

G. E. F., aged 22, a sailor, was admitted on November 1, 1862. He stated that he had been struck by a cab, and that, in falling, he had seized the revolving wheel, and was thus brought violently to the ground. On admission he was perfectly sensible, said he should soon be "all right," and made no special complaint. A careful examination failed to show any injury beyond a trifling bruise on the leg and a scratch on the face. There was no evidence that the head had been struck, but there was some tenderness on percussion over the upper dorsal region. The only other peculiarity which attracted attention was the character of his breathing, which was a long inspiration succeeded by a rapid expiration. Though the injury seemed but trifling, the House-Surgeon thought it desirable to admit him. Shortly afterwards he vomited his supper. At ten o'clock, being three hours after the accident, he had a fit, resembling epilepsy. There was tetanic spasm of the anterior muscles of the trunk (emprosthotonos), and of the flexor muscles of the limbs, with a marked depression of the pulse: these symptoms lasted for five minutes, during which time he was unconscious. Through the night these attacks recurred at intervals of from ten minutes to half an hour, and lasted sometimes for a quarter of an hour. By order of the House-Surgeon, the head was shaved and ice applied, and an active purge administered. His pulse continued to sympathise as at first, the circulation being depressed in power, and sinking from 80 to 60, whilst the fits lasted. Towards morning he lay for some time in an insensible state, with the eyes upturned. A careful examination of the head and spine were again made at the morning visit, but no evidence of injury could be detected; the patient was perfectly rational, free from any signs of loss of power or sensibility in the lower limbs, and complaining of nothing but general soreness, the consequence, no doubt, of muscular cramp. On the second night he slept a little, and had no further recurrence of the fits; the bowels were relieved. He still complained of pain on pressure in the upper dorsal region. The treatment was still expectant. From this date he continued to improve, and in the course of a few days was discharged at his own request, free from untoward symptoms, but with a caution to avoid all source of excitement or much exertion for a time.

I have narrated this case more at account of the singularity of the symptoms, than from any practical interest which is attached to it. The injury appears to have been confined to the spine; and the patient had never, according to his own statement and that of his relatives, been subject to fits of any kind before. The concussion of the spine—for as such, I presume, it must be regarded—produced none of the ordinary symptoms accompanying such injury; and the only explanation which the actual symptoms suggest, is that the true spinal centre was the special seat of lesion, and thence the tetanic spasm affecting the trunk and limbs, and constituting so important a feature in the fits. The absence of any violent expiratory effort, and the depressed condition of the pulse, both as regards its strength and frequency, distinguish these attacks from well-marked epilepsy; and there seems no reason to ascribe them to any other exciting cause than the accident. As regards the treatment it was necessarily expectant, and I should not have been at all surprised had more permanent symptoms of injured spinal cord supplanted these intermittent attacks. To keep the patient quiet and on a low diet, to administer a purge and keep his head cool, was all that could be done under the circumstances. The issue of the case proved that there could have been no organic lesion.

A patient with injury to the skull has recently left the Hospital, on whose case I wish to make a few remarks:—

J. G., aged 17, was admitted on October 31, 1862. Whilst at work he was knocked down by one angle of a falling box of bricks striking him on the forehead. He rallied speedily from the stunning effects of the blow, and was immediately brought to the Hospital. On admission he was quite sensible, though a little drowsy. He complained of no pain in the head; the pulse was natural, as were the eyes, with the exception of some suffusion of the conjunctiva. About two inches above the orbital ridge, and near the centre of the frontal bone, was a horizontal wound of the scalp, from which blood oozed freely; this was about two inches long. On clearing the blood from this wound, the skull was found to be fractured, and a fragment of bone, about half an inch in breadth, and two and a-half inches in length, was driven in and depressed so as to place the outer table on a level with, or even a little beneath, the inner table of the surrounding bone. On more careful examination, some comminution was discovered, and it was also evident that the inner table of the fragment covered a larger area than the outer, being fractured with a squamous or bevelled edge. Pulsation, synchronous with the heart's action, was apparent in the wound as the blood welled up. Head to be shaved, and cold lotion applied. The wound was supported with a strip of plaster. Milk diet. November 1.—He passed a quiet night, with sleep; no pain in the head; slight oozing of blood still; feverish and thirsty; pulse 92; skin hot; eye suffused; bowels relieved by a purgative. He is perfectly sensible and less drowsy. A light poultice to be laid over the wound. 2nd.—Less feverish; no pain in head. 3rd.—Continues free from head symptoms. The pulsations in the wound can still be seen as before. Wound looks healthy. 4th.—General condition good. The depressed piece of bone appears stripped of its periosteum, and white at the bottom of the wound. The raised edges of the circumference of sound bone are sharp and distinct. Pulsations still seen deeply in the right corner of the wound. 5th.—Free from pain; health appears good; functions all healthily performed; discharge from the wound more copious. Diet to be improved. From this time the daily report simply records improvement in health and in the condition of the wound, without the occurrence of any untoward symptom; and after the lapse of about five weeks, a fragment of exfoliated bone, about one inch and a-half long, and about a-third of an inch wide, was removed from the wound, where it was confined only by granulations. It was a thin plate, consisting evidently of the outer table only. The patient was presented, at his own request, with the wound still unhealed, but healthy, and he has since attended from time to time as an out-patient.

The interest of this case is in the existence of so severe an injury with the absence of cerebral symptoms; and this association is suggestive of considerations of practical importance. I may remark that the boy had been previously an inmate of our Hospital with a severe injury of a similar nature, to which the scars on his scalp bore witness. I saw him soon after his admission, having been sent for; and you will remember as to what I thought I should do, and how I should proceed in elevating the depressed bone; and I believe not a little surprise was felt by some of you that I at once decided not to interfere in any way with it. I then explained to you that the mechanical injury to the bone and its depression were not sufficient to justify such interference, in the absence of any cerebral disturbance, but that it was not improbable symptoms might present themselves which would give a different complexion to the case, and require an operation. As it turned out, no such step was needed, for the dreaded symptoms never made their appearance. The symptomatic fever, as it is termed, which occurred on the following day, was nothing more than the reaction which ushers in the healthy reparative effort, after the infliction of a severe injury with shock. It is that which we look for, and indeed desire, so long as it can be controlled, as it was in this case, by a light diet and free evacuation of the bowels. The important lesson, therefore, to be impressed on you by this case is, that you are to be guided by the cerebral symptoms as to interference in fracture of the skull with depressed bone, and not by the mechanical injury to the bone and the possible future symptoms to which it may give rise. I do not mean that this remark should be accepted with so

exception or reserve. A large fragment of bone may be driven into the brain without producing any apoplectic symptom, as I have often seen; and its relations may be such that, without materially complicating the injury, you may elevate it. In such case it would be right to do so, for its presence in such a position is certain to create mischief sooner or later. But I hold it to be bad practice in cases of limited fracture with depression to anticipate symptoms. In the present instance, if I had done so, I have very little doubt that I should have placed the patient in great jeopardy, for I could not have raised the depressed fragment without seriously enlarging the chasm; and you must remember that the use of the trephine is in itself a serious, I may say dangerous, infliction, and one which all prudent Surgeons would avoid where it is possible to do without it. The risk of sloughing of the dura mater, and consequent tendency to protrusion of the brain, render the statistics of this operation anything but satisfactory.

You may naturally inquire why there were no symptoms of compression of the brain attending this circumscribed depression of bone. The only explanation I can offer is, that there must have been space around the fracture for expansion corresponding to the amount of depression; and this view seems to be confirmed by the distinct pulsation which was visible at the bottom of the wound synchronous with the pulse. I did not think it right to thrust a probe in for the purpose of ascertaining this, and I am therefore unable to say further whether or how far the dura mater was lacerated.

I may, advantageously to you, contrast the foregoing case with one which has been more recently under your notice. This was under the care of my colleague, Mr. Solly, and in many respects his case presented a singular analogy to mine. The patients were of the same age, or nearly so; the accident occurred in a similar way, by the fall of a brick on the head, an angle of the missile striking the vertex, and producing fracture with depression. The patient in like manner recovered soon from the shock. But here the analogy ceases: he became the subject of a severe epileptic seizure soon after his admission, and when I saw him on the following morning he was very dull and drowsy, a condition which was augmenting as time passed on. A large fragment of bone had been driven into the brain, but not to any depth. Under these circumstances, I did not hesitate, when asked, to express my opinion that the depressed fragment should be elevated. This was done, but, unfortunately, the patient did not long survive, as the amount of injury was very great. The dura mater and brain were both found lacerated, and pus was diffused over the surface of the brain for some distance around the wound.

The last case to which I shall direct your attention is one of exostosis of the humerus.

W. D., aged 12, was admitted on December 12, 1862. He stated that he had received a blow on the upper part of the arm about a year since, and from that he dates the swelling. Attached to the inner side of the humerus, and just clear of the axilla, was a hard, immovable, globular tumour, irregular on the surface, and about an inch and a-half in diameter, with a somewhat contracted attachment to the bone. He complained of no pain, except a tingling sensation down to the fingers, when the tumour was struck or pressed on. The brachial artery and basilic vein were stretched over its most prominent part. Having satisfied myself that it was an exostosis, I made an incision about three inches in length parallel to the brachial artery; this, together with the basilic vein, being carefully drawn aside, and a small artery tied and divided, some fibres of the coraco-brachialis muscle were found spread over the morbid growth. When these were cut through the exostosis was exposed, surrounded, as is commonly the case, with a bursal capsule. This being dissected back, and the surrounding parts carefully retracted, the connexion between the growth and the humerus was severed with one sweep of a pair of long and narrow bone forceps. The growth was almost entirely bony, consisting of cancellous structure, with capacious cells, and an investment of thin cartilage. The wound was held together with metallic sutures, and the boy made a good recovery.

This is not a very frequent position for exostosis. The only other case which I have had under my care was one in which the patient, also a boy, was the subject of three or four of these excrescences on the arm, and as many on the femur and tibia. Probably the accidental injury mentioned had nothing to do with the growth, as the blow was received on the outer side of the humerus, and the growth was from the inner side.

ORIGINAL COMMUNICATIONS.

ON AN IMPROVED MODE OF USING REFRIGERATION AS AN ANÆSTHETIC AND AS A REMEDY.

By JAMES ARNOTT, M.D.

It is now, I believe, universally admitted that, by the application of intense cold, pain may be certainly prevented in the numerous operations in which the incision is confined to the skin and the superficial texture; and few will dispute that, in these operations at least, its perfect safety gives it a great advantage over ether or chloroform. But the general opinion is, that it is more troublesome to use it than chloroform, and that it is more apt to fail in producing anæsthesia from some oversight or error in the application. This idea has prevented many from employing refrigeration, except in cases where the patients have objected to chloroform, or where there was more than the ordinary risk from its use. In Hospital practice, the longer time occupied in effecting congelation has made chloroform be preferred in almost every case. In consequence of this, many deaths have occurred from the administration of the latter in the most trivial operations—in the extraction of a toe-nail, the opening of an abscess, or the cutting off a wart.

There is nothing singular in this objection, arising from the supposed difficulty or trouble in the use of intense cold. Some of our most valuable remedies have only become generally adopted when the mode of administering them has been simplified. Artificial respiration, galvanism, and several measures resorted to in the treatment of stricture and stone, may be adduced as examples. But the most striking instance of this is found in a therapeutical agent more nearly connected with our present subject. Although sulphuric ether, when properly employed, is not inferior as an anæsthetic to chloroform, the greater trouble attending its administration would have probably very much lessened the use of etherisation, had no easier mode of effecting it been discovered. Chloroform is a more dangerous agent than ether, and has on this account been banished from some of the principal Hospitals in North America and France, yet so much valued by the great majority of Surgeons is its greater ease of administration, that the honour of discovering this means of facilitating anæsthesia, has been almost as keenly contested as that of the great discovery of etherisation itself.

Congelation has hitherto been generally produced by placing the freezing materials on the part to be benumbed. In order to ensure success, care must be taken that the ice shall be well pulverised and rapidly mixed with the salt or salts constituting the frigorific. The mixture must be applied by means of gauze, or some other thin permeable material; and when the part is not in a horizontal position, a gutta-percha cup fitted to it may be required to keep the frigorific in contact with the skin. Now, all this trouble may generally be avoided by the adoption of an expedient similar to that employed in the therapeutical application of extreme heat. It is rarely the case that a burning substance is applied directly to the part; instead of this, an iron, which has been previously heated in the fire, is used. In a similar way, an iron, or a brass, or copper implement, of appropriate shape, may be previously cooled in a freezing mixture, and applied with the greatest accuracy to any accessible part in whatever position this may be. A small, flat laundry iron, which may be used for pounding the ice, will also answer in a great many cases as the refrigerator. If an extensive or continued refrigeration is required, two such irons, immersed in a semi-fluid mixture of two or three pounds of ice and salt, may be necessary to replace each other, just as two hot irons are often required for cauterization.

When a metallic body of this description has been cooled to below zero of Fahr., it will often arrest the circulation of the skin the instant it touches it; but more frequently it must be moved and gently pressed on the part for a few seconds, so as to bring a continuous fresh surface in contact with it while the blood-vessels are compressed.

Another expedient, partly resembling that just described, and partly that hitherto in use, consists of a thin metallic bottle (tinned iron or aluminium) completely filled with the frigorific mixture. A Florence flask will sometimes answer the same purpose.

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I think the above description is sufficiently minute, and that the Surgeon, by the adoption of this method, will no longer have to complain of difficulty or trouble in using congelation, either entirely to prevent pain in minor operations, or to prevent the more acute portion of pain, or that arising from incision of the skin, in operations of a deeper or severer kind. In the preface to his work, entitled "Ten Years' Operative Surgery in the Provinces," Mr. Prichard states, that he "refuses chloroform in the lesser operations wherever ice and salt can be conveniently applied." By means of the metallic refrigerator almost every part will be accessible. The complaint made by Messrs. Perrin and Lallemand in their recent and very complete work on "Surgical Anæsthesia," that congelation has been too much restricted to certain operations will probably, by this improvement of the process, have no longer any foundation; but that, if I may be allowed to use the words of these writers, "on peut prévoir le moment où grace a la réfrigération, l'anesthésie pourra être étendue à toute la pratique usuelle de la chirurgie," page 651.

It is not, however, in being a safe anæsthetic that the principal value of congelation consists. I am anxious to see it more generally employed as a prompt and certain antiphlogistic in all accessible inflammations. The extraordinary remedial powers of congelation in the various forms of chronic rheumatism, which I have related in former publications, may be attributed partly to its anæsthetic and direct antiphlogistic virtues, and partly to the peculiar counter-irritation which it excites. As promptness of action is eminently characteristic of this remedy, it would be especially serviceable in many of those inflammatory and painful diseases to which soldiers and sailors are liable, and which are at present cured with so much difficulty as to render them long unfit for their duties. Amongst these may be reckoned sprains and inflammatory affections of the joints, wounds, irritable ulcers, headache, lumbago, and other painful affections, inflammation of various glands, ophthalmia, erysipelas, and other diseases of the skin.

Being convinced, from no little experience, that a short application of intense cold, produced by a frigorific mixture of appropriate strength, constitutes a certain and speedy remedy of every accessible inflammation, as well as a means of preventing pain in operations, without the risk of sudden or (which has been much more frequent) consecutive death attending the use of chloroform, I do not deem that portion of my time misspent which has been employed in devising and describing such a simple and easy mode of making this application as may lead to its more general adoption.

London.

ON THE USE OF THE LARYNGOSCOPE.

[A Paper read at the Medical Society of London, April 20, 1863.]

By GEORGE JOHNSON, M.D., F.R.C.P.
Professor of Medicine in King's College, London; Physician to King's College Hospital.

In the laryngoscope we have a most interesting and important addition to our means of investigating and treating the diseases of the larynx and trachea. No unprejudiced observer who has given attention to the subject can deny or doubt that this instrument, throwing, as it does, literally a new light upon a very common, painful, and dangerous class of diseases, is of the highest practical value. By the aid of the laryngeal mirror not only are we enabled during life to see the condition of the larynx with almost as much ease and distinctness as when the parts are exposed to view after death, but the treatment of laryngeal diseases has been greatly facilitated and improved, and will doubtless be still further improved.

In illustration of the improved treatment of laryngeal diseases, it may suffice to refer to performances which, without the aid of the laryngoscope, would have been simply impossible,—I mean the removal of tumours from the interior of the larynx. This has been done by Czermak, (a) and, I believe, by others on the Continent, by Dr. Walker, jun. (b) of Peterborough, and by our Secretary, Dr. Gibb. Operation of this kind will become common, when, with a diffused knowledge of laryngoscopy, suitable cases for operation are recognised. Important additions to our knowledge of laryngeal diseases are being made almost daily, so that the materials for an entirely new history of the whole subject are constantly accumulating. In order that this good work may proceed as rapidly as possible, it is desirable to increase the number of labourers in this most interesting field of research. It is to be hoped that henceforth all teachers of Medicine and Surgery in the various Schools will encourage their pupils, and give them every facility to acquire a practical knowledge of laryngoscopy.

There is no valid reason for making a specialty of the laryngoscope. Any one after a short course of training and practice may use the instrument with ease and success, and every Practitioner should endeavour to acquire the requisite knowledge and practical skill.

One of the chief objects which I have in view this evening is to offer some suggestions on this method of examining the larynx. While I hope to give useful hints to those who are commencing the art, I must crave the indulgence of those amongst my audience who are skilled and experienced laryngoscopists. To them I am aware that many of my remarks must appear trite and commonplace.

Here it may not be out of place to indicate very briefly the successive steps by which our present knowledge of laryngoscopy has been arrived at. It is a well-known fact that the first observer who successfully practised auto-laryngoscopy, and published the results of his observations, was a distinguished professor of music in this town, M. Garcia, who has honoured us with his presence here to-night. M. Garcia's "Physiological Observations on the Human Voice" were published in the *Proceedings of the Royal Society* in 1855. This publication became known to Dr. Türck, of Vienna, and induced him to use the laryngeal mirror in the wards of the General Hospital, of which he is the chief Physician, during the summer of 1857. In the early part of the year 1858, Dr. Türck lent his mirrors to Dr. Czermak, who set to work with great zeal and energy, who soon made the important step of introducing the large ophthalmoscope reflector as a means of concentrating artificial light, and who has since done more than any other individual to excite an interest in the subject, and to diffuse a knowledge of it throughout the civilised world. Garcia's paper is, without doubt, the fountain-head from which our present knowledge of laryngoscopy had its source and origin. In Czermak's earlier publications, Garcia's name is inseparably connected with the laryngoscope. Thus the title of his work published in 1858 was "Physiologische Untersuchungen mit Garcia's Kelkopfspiegel" ("Physiological Researches with Garcia's Laryngoscope.")

Long before the date of Garcia's publication attempts to examine the larynx had been made independently by various observers. These attempts had been but partially successful. So far as I know, the very earliest application of the laryngoscope was made by Dr. Babington, who showed his instrument at a meeting of the Hunterian Society in March 1829 (c). The instrument was essentially the same as that now in use. "It consisted of an oblong piece of looking-glass set in silver wire with a long shank. The reflecting portion is placed against the palate, whilst the tongue is held down by a spatula, when the epiglottis and upper part of the larynx become visible in the glass. . . . The Doctor proposed to call it the 'glottiscope.'"

It was long after this that Liston (in his "Practical Surgery," 1840) referred to the use of a dentist's mirror for obtaining a view of the glottis.

In the *Traité Pratique de la Phthisie Laryngée*, par MM. Trousseau et Belloc, 1837, there occurs the following passage, p. 179:—"Depuis plusieurs années, nous nous occupons de la confection d'un *speculum laryngis*. On connait celui de M. Selligue, très ingénieux mécanicien, qui, atteint lui-même d'une phthisie laryngée, dont il est complètement guéri, exécuta, pour son Médecin, un speculum à deux tubes, dont l'un servait à porter la lumiere sur la glotte, et l'autre servait à rapporter à l'œil l'image de la glotte réfléchie dans un miroir placé à l'extremité gutturale de l'instrument." The authors go on to say that this instrument is very difficult of application, and that not one patient in ten could bear its introduction.

The late Mr. Avery worked long and successfully in the construction of a laryngoscope, and of other instruments for

(a) See the second edition of his monograph "Der Kehlkopfspiegel und seine Verwerthung für Physiologie und Medicin," p. 117.

(b) *Lancet*, November 9, 1861, p. 444.

(c) *Medical Gazette*, Vol. III., p. 555, and *British and Foreign Med.-Chirr. Rev.*, January, 1863, p. 269.

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examining internal organs (d), but he published nothing on the subject.

Lastly, in 1844, Dr. A. Warden invented a prismatic speculum, with which he succeeded in seeing disease of the glottis in two cases. (e)

The instruments required for the practice of laryngoscopy are few and simple, namely, a reflector to condense the light of the sun or of a lamp into the fauces, and a small mirror which, being placed beneath the uvula and soft palate, reflects the image of the larynx to the eye of the observer.

The best position for the concave reflector is on the forehead, and not in front of one eye.—In a short paper which I lately published in the *Medical Times and Gazette* (February 14, p. 157), I stated that, so far as I knew, it had up to that time been the invariable practice to use a perforated mirror, to fix it in front of one eye, and to look through the central opening into the mouth of the patient. I have since learnt that, in Paris, the practice of placing the reflector on the forehead is very general; and I find that Dr. Moura-Bourouillou, in his interesting "Cours Complet de Laryngoscopie," published in 1861, insists on the advantage of using a non-perforated mirror and placing it on the forehead, so that the laryngeal image may be seen by both eyes (p. 17).

I have met with very few persons who, having tried both methods, fail to appreciate the great convenience and advantage of having the reflector on the forehead rather than in front of one eye. The chief advantages of the method which I advocate are these. We avoid the discomfort and inconvenience resulting from the effort required to keep the eye applied to the small opening in the reflector; we have the free and unimpeded use of both eyes, and, consequently, find it much easier to direct the light into the patient's throat, to keep the laryngeal mirror in the required position, and to practise any other manipulation which may be required either for diagnosis or treatment. With the reflector in front of one eye, it should be observed that, even if the operator succeed in using both eyes for looking into the throat, there is an uncomfortable strain upon the eyes, in consequence of one eye having to look through a concave glass while the other is uncovered. The effect of this arrangement must be to make an inequality in the focal distances of the two eyes.

With the reflector on the forehead, immediately above the eyes, the eyes may be more or less completely shaded from the direct light of the lamp or of the sun, whereas with the reflector in front of one eye, both eyes are necessarily exposed to a fatiguing glare of light. Another incidental advantage attending the position of the reflector on the forehead is that we thus get a more free movement of the reflector in all directions—this free movement being required for the practice of a simple method of auto-laryngoscopy to which I shall presently advert.

Again, the central perforation not being required in the reflector placed on the forehead, we get rid of the dark spot in the centre of the luminous disc which exists when the light is reflected from a mirror whose centre is not silvered. But are there advantages in the practice of looking through the centre of the reflector which in any degree compensate for its inconveniences? I know of none, and I believe that the practice would never have existed but for the fact that when Czermak, to the great advantage of laryngoscopy, adopted the large ophthalmoscope reflector as a means of concentraing the light, he continued the use of the perforated mirror, perhaps without having fully considered the very different conditions which attend the exploration of the eye through the small opening of the pupil, and that of the larynx by light reflected from a mirror of considerable size placed above it at the back of the wide-open mouth.

I have recently received two long and interesting letters from Professor Czermak, with reference especially to the best position for the reflector. He says, "I acknowledge with pleasure that it is comfortable, and, in most cases, of no obvious consequence or disadvantage to place, as you have suggested, the reflector in front of the forehead." He maintains, however, that if you have to look far down the trachea you can use only one eye, and that this is best placed behind the aperture in the reflector, so as to look "in the direction of the axis of the luminous cone." In reply to this argument I say that in practising laryngoscopy we do *not* look down the tube of the trachea; but we see only the image of the larynx and trachea as it is reflected from the flat surface of the laryngeal mirror. And in these days of stereoscopes and binocular microscopes, and even binocular ophthalmoscopes, it surely will not be denied that we get a more complete and satisfactory view of the interior of the larynx and trachea when the light from the laryngeal mirror has unimpeded access to both eyes than when one eye only is used.

M. Garcia states, with regard to the use of a perforated mirror, that he tried it in order that Drs. Williamson and Sharpey might observe his larynx while he experimented upon himself. He found, however, that this was not attended with any marked advantage. They could see the reflected image of his larynx as well by looking over the top of the mirror as by looking through its perforated centre. (f)

It appears to me that sufficient reasons have been adduced for placing the mirror on the forehead rather than in front of one eye. Until quite recently, all the reflectors in this country have been made to come to the front of the eye. Messrs. Weiss and Son have sold some hundreds of this kind. It may be interesting to those who possess these instruments to know that, by simply shortening the hook which attaches the reflector to the frontal band, the reflector may be brought to the middle of the forehead. The alteration can be made very speedily, and at a most trifling cost.

My friend and colleague, Mr. Mason, has lately had an instrument made by Mr. Matthews, in which the reflector is connected to the frontal band by means of a ball and socket-joint. In my opinion, any slight superiority in the movements of such a joint is more than counterbalanced by the greater space which the instrument occupies, and the consequent necessity for a case inconveniently large for carrying in the pocket.

With regard to the introduction of the faucial or laryngeal mirror, the beginner has to bear in mind that the mirror having been warmed over the lamp, so as to prevent its being dimmed by the breath, is to be introduced so as to slightly raise the uvula and soft palate, while we carefully avoid touching the tongue and the back of the pharynx, which are the most sensitive parts of the throat. I believe that the experience of most observers is in accordance with my own, namely, that in the majority of cases, even of patients who are suffering from acute disease of the larynx, the careful introduction of the faucial mirror is attended with surprisingly little inconvenience.

The mirror, be it remembered, does not come near the larynx or the epiglottis, but is placed far above these parts, and in contact with the uvula and soft palate.

I have never found it necessary to use the bromide of potassium, which has long been supposed to have the effect of lessening the reflex sensibility of the fauces, nor have I any experience of the bromide of ammonium. My friend Dr. Routh tells me that in one case, finding the throat very sensitive, and being anxious to make a thorough examination, he administered a small dose of chloroform by inhalation with the best results. This very day I repeated Dr. Routh's experiment in the case of a patient whose throat was unusually sensitive, and with good effect.

The tongue is one of the most frequent and most serious impediments in the way of laryngoscopy. There are various modes of dealing with this unruly member. Sometimes—though very rarely until after a considerable amount of training—the patient has sufficient control over the tongue to hold it down by a voluntary effort while the laryngeal mirror is introduced; in nearly every case, however, the tongue requires to be kept out of the way by some mechanical means. The plan which usually answers best is to hold the tip of the tongue between the thumb and forefinger, and to draw it gently forward over the lower teeth. This may be done either by the operator or by the patient himself, the thumb and finger which hold the tongue being covered by a cotton glove, or by a towel or napkin. In some cases a metallic tongue-depressor may be used with advantage, or the tongue may be kept down by the pressure of the forefinger of the operator's left hand. Practically, it is often found that the effect of depressing the front of the tongue is to make it arch upwards at the back so as nearly to touch the palate. This arched position of the tongue obstructs the passage of the light to and from the larynx, and often is attended with nausea in consequence of the tongue coming in contact with the mirror.

(d) "Introduction to the Art of Laryngoscopy." By James Yearsley. 1862.

(e) *Brit. and For. Med.-Chir. Rev.*, January, 1860, p. 210.

(f) "Notice sur l'invention du Laryngoscope," par Paulin Richard p. 14. Paris. 1861.

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For these reasons, the attempt to depress the tongue is usually less successful than its gentle traction forwards.

It is important to practise the introduction of the laryngeal mirror with the left hand as well as with the right. In applying nitrate of silver or other local remedies to the interior of the larynx, the plan is, while the patient or an assistant manipulates the tongue, for the operator to introduce the laryngeal mirror with the left hand, and with the right to apply the remedy to the larynx by means of a camel-hair brush or a sponge on a curved whalebone.

One of the most useful means of acquiring aptitude in the examination of the larynx is the practice of *auto-laryngoscopy*. Various methods of auto-laryngoscopy have been proposed and practised. The simplest, and, on the whole, the most satisfactory plan, is one devised by myself, and which, I think, may fairly claim to be called "the ready method." This method has the advantage not only of being very easy of execution, but also of requiring no special apparatus. The concave reflector on the forehead, and the laryngeal mirror required for the examination of patients, with a common looking-glass and a lamp, constitute the whole of the apparatus. The method is this: Sitting at a table of a convenient height, I place a looking-glass, at a distance of about eighteen inches, in front of me, and a moderator or gas-lamp on one side of the glass, but two or three inches further back, so that the light may not pass directly from the lamp to the mirror. The light of the sun may be used when available. Now, with the concave reflector on my forehead, I throw the light, as it were, into the open mouth of my own image in the looking-glass; then introducing the laryngeal mirror into my mouth, I see the reflection of my larynx and trachea in the glass before me, and any one looking over my head or shoulder can see the image at the same time. This method therefore serves for auto-laryngoscopy and for demonstration. In other words, the experimenter can by this means see his own larynx, and show it to others; and this method certainly possesses some advantages over that employed with such wonderful success by Professor Czermak.

In the first place, Czermak's plan requires a special and costly apparatus. I learn from Messrs. Weiss that scarcely more than one in a hundred of those who have obtained laryngoscopes from them have purchased the apparatus for auto-laryngoscopy. The instrument is too costly and complicated to allow of its coming into general use. My own method is certainly a much easier and a more ready one. I find that while holding the laryngeal mirror with my right hand, and changing the position of my head and neck so as to obtain different views of the larynx and trachea, I can, with the greatest readiness, keep the light directed where it is required, by adjusting the frontal reflector with my left hand. This adjustment of the light cannot so readily be made with Czermak's apparatus, on account of the distance at which the reflector is placed.

For beginners in the art of laryngoscopy this method affords a very useful means of training and practice. One of the chief difficulties at first is to keep a steady light in the patient's throat. Now, the student after arranging his looking-glass and his lamp, may direct the light from the frontal reflector into his own open mouth in the looking-glass. This process scarcely differs from that which he will have to practise on his patients. Then, having learnt to keep the light steady, he may practise the introduction of the laucial mirror, and he will soon see the interior of his own larynx and trachea. I have seen more than one of my Medical friends succeed in doing all this within less than half-an-hour of their first attempt.

It is important to observe that in practising this method of auto-laryngoscopy both eyes may and ought to be protected from the glare of the lamp. The lamp is most conveniently placed by the side of the glass to the left of the operator. The right eye is then shaded by the lower margin of the reflector on the forehead, and the left eye, which would otherwise be exposed to the direct light of the lamp, may readily be shaded by one or two fingers of the left hand placed at the edge of the reflector. The fingers thus placed serve at once as a shade for the left eye, and a means of moving the reflector when the direction of the light has to be changed.

In the practice of auto-laryngoscopy and in the examination of others it is of considerable importance that the experimenter should have the power of readily changing the direction of the light, so as at once to adapt it to the varying position of the body, which is often required for the thorough exploration of the larynx. A feebler light, which can readily be reflected in any required direction, is of more practical value in laryngoscopy than a stronger light which is fixed.

I differ entirely from Dr. Walker, (g) of Peterborough, in his estimate of the practical advantages of the direct illumination of the fauces by a concentrated *fixed* light, as compared with that by means of a reflector attached to the head of the observer.

The light from the reflector may be somewhat less intense, but it is much more handy. The light from a good moderator lamp, when thrown into the throat by the reflector, is sufficient for all the purposes of laryngoscopy, and I have repeatedly obtained a very good view of the larynx by the light of an ordinary composite candle. All observers agree in stating that the light of the sun, when it can be obtained, is the best means of illuminating the throat. The patient sits with his back to the sun, and the operator directs the light into the throat by means of the reflector, taking care not to burn the throat, by bringing the rays to a small focus. Solar caustic, be it remembered, is as powerful as lunar caustic.

I have found, as others must have done, that the concave reflector is very useful as a means of illuminating the throat, for the purpose of examining the tonsils, palate, and pharynx. Placing a lamp or a candle by the side of the patient, or using sun-light when available, the operator, with the reflector on his forehead, throws the light into the throat, and has both his hands free to do whatever requires to be done—to depress the tongue, and to apply caustic or other local remedies.

In cases of diphtheria and scarlatina, by this method of illumination a thorough examination of the throat can be made in a much shorter time than by the ordinary method. And thus the operator incurs less risk of infection from inhaling the patient's breath, or having the morbid secretions coughed into his face.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

SAMARITAN HOSPITAL.

FIVE CASES OF OVARIOTOMY.

(Under the care of Mr. SPENCER WELLS.)

[From notes by Mr. E. Parson, House-Surgeon.]

In our Number for March 14, 1863, we published five cases of ovariotomy, which all terminated successfully, under the care of Mr. Spencer Wells, in the Samaritan Hospital. We now publish five other cases which have been observed in this Hospital since our last report. Four of them have resulted in recovery; only one death having taken place of the whole ten cases.

Case 1.—*Large Semi-solid Ovarian Tumour—Tapping—Ovariotomy—Recovery.*—M. S., unmarried, age 36, applied to Mr. Wells in January, 1863, with a very large multilocular ovarian cyst. She measured 48 inches round the body at the umbilicus, 31 inches from one ilium to the other, and 24 inches from sternum to pubes. Increase in size had commenced about two years before, and during the last few weeks it had been very rapid. She returned to Oxford, and Mr. Wells wrote to Dr. Acland, suggesting a preliminary tapping. She was tapped on February 1, and thirty-six pints of fluid removed. Dr. Acland wrote to say "There remains a large partially-solid mass, not readily movable. The poor creature's fate is sealed without the operation." She was accordingly admitted on February 27, and Mr. Wells performed ovariotomy on March 2. Dr. Jottrand, of Brussels, Mr. Partridge, and many other visitors were present. The incision was six inches long, from one inch below the umbilicus. The cyst was universally adherent anteriorly, but it was easily separated. The adhesions on the solid mass on the left side were very firm, and considerable force was required to break them down. After emptying the large cyst, the tumour was gradually withdrawn, and a long pedicle on the right side secured by a clamp. The left ovary was healthy. The peritoneal cavity was carefully cleansed by sponging, and the wound closed by silk sutures. The patient rallied tolerably well,

(g) *British Medical Journal*, March 14, 1863, p. 268.

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but reaction was rather deficient all the evening. At night, finding some oozing of viscid bloody fluid around the pedicle, Mr. Wells applied a ligature tightly beneath the clamp, as this did not seem to compress the pedicle perfectly. After this she passed a good night. One opiate enema was given, the only one which was needed. The clamp was removed on the third day after operation. The bowels acted on the fifth day; and, although she was a feeble, nervous person, she recovered well, and has been heard of since she left the Hospital as in excellent health.

Case 2.—Multilocular Ovarian Cyst—Ovariotomy—Recovery.—E. C., unmarried, aged 36, admitted March 13, 1863. She had been an out-patient, under Dr. Rogers, occasionally for about two years, the abdominal enlargement having commenced about four years ago. She had been obliged to give up a situation as housemaid, and had been dressmaking. She had been admitted twice before for a few days, under Mr. Wells, and had been advised to wait until there was clearly a necessity for surgical interference. At length she became subject to severe pains in the left side, was unable to earn her living by the needle, and was admitted for operation. The diagnosis made on March 14 was "multilocular cyst of left ovary. No parietal adhesions." The girth at the umbilicus was thirty-five inches, measurement from sternum to pubes seventeen inches. Mr. Wells performed ovariotomy on March 16. Dr. Jottrand of Brussels, Dr. Gream, etc., were present. Mr. Parson gave chloroform. An incision, five inches long, was made from the umbilicus downwards; the parietes were very thick and vascular, the rectus and adipose layer both very thick. The cyst was quite free anteriorly. One large cyst was emptied, and then the whole tumour passed outwards, with some assistance from pressure. A small clamp was applied on the pedicle on the left side. The right ovary was healthy. There was some oozing of blood from superficial vessels, but none were tied, and the wound has closed in the usual manner. Two small opiates that evening, and one on the third day, were the only medicines required. The remains of the pedicle became quite dry, and adhered so firmly to the clamp that it was not removed till the eighth day. The bowels did not act till the eleventh day. The catamenia came on at the usual time, and had passed off on April 7. She rapidly gained strength, and left the Hospital on April 13 in excellent health.

Case 3.—Ascites—Tapping—Removal of Small Ovarian Tumour—Death.—A married woman, 26 years of age, was first admitted December 22, 1862, with considerable enlargement of the abdomen from fluid which was evidently free in the peritoneal cavity. She had been married eight years, and had had one child seven years ago; none since. The catamenia had been quite regular, and without pain, until the spring of 1862, when there was pain at each period, extending round from the right iliac region to the back. Soon after the first severe attack of this pain the abdomen began to enlarge, and she suffered from dysuria for about three months. The abdomen increased in size, and she was tapped in the London Hospital in October, 1862, sixteen pints of fluid having been removed. She was bandaged tightly for three weeks after the tapping, but the fluid soon began to collect again. Mr. Wells tapped her in December, and removed twenty-nine pints of clear fluid. There was nothing in the nature of the fluid to decide whether it was ascitic or ovarian. The patient left the Hospital on January 10, 1863, and returned again in February, with the abdomen full of fluid. It still seemed to be free in the peritoneal cavity, but as the uterus, though movable, was rather low down, the cervix large, and pushed to the left side, and there was marked dulness in the right loin, it was thought that there was disease of the right ovary, although nothing could be felt through the abdominal wall anteriorly. Accordingly, an exploratory incision was made on February 21, and after removing twenty-six pints of clear fluid, a growth, about the size of a small cauliflower, was found to occupy the place of the right ovary. Nothing more was done, and the wound was closed. It healed by the first intention, and the patient recovered without a bad symptom; but the ascitic fluid re collected rapidly, and it became a question whether the tumour should be removed, or tapping repeated. It was known that the ovarian tumour was small, and its attachment broad; but the prospect of repeated tapping was so hopeless, that the earnest desire of the patient to have the tumour removed was complied with, and Mr. Wells performed the operation on March 25. Union of the incision made on February 21 being complete, the lower half was included in the incision at this second operation, and it was carried an inch nearer to the pubes. An opening was made just large enough to admit the hand midway between the umbilicus and symphysis pubis—the ascitic fluid allowed to escape—and the ovarian tumour drawn forwards, with the intention of placing a ligature round its base. But it broke away completely from its attachments, and there was free bleeding, mostly venous. There was no pedicle, the diseased ovary preserving its natural relations with the uterus, but having a broad base of attachment between the posterior surface of the uterus and the cæcum, following the course of the right spermatic vessels where they cross the psoas muscle. Both artery and vein were tied by a silk ligature, the ends of which were cut off short, and the knot allowed to remain within the abdomen. The bleeding then ceased, the abdomen was carefully sponged, and the wound closed. The patient rallied fairly after operation, and did not suffer pain; but vomiting became troublesome. She seemed pretty well all the next day; but on the second day vomiting became urgent and exhausting, and she died fifty-four hours after operation, apparently exhausted by the vomiting and the rapid formation of serum in the peritoneal cavity. On *post-mortem* examination about forty ounces of dark red serum and two ounces of blood-clot were found in the cavity; a little recent lymph showing slight peritonitis. There were some oid adhesions between the left broad ligament and colon, thickening of the capsule of the liver, and fatty degeneration of this organ. There was a thrombus in the enlarged right spermatic vein, extending about an inch above the spot where the ligature remained firmly tied. The tissue included in the ligature was dead and fetid, the dead portions probably weighing about half a drachm. There was no evidence of any process of attempted capsulation, or covering up of the ligature and slough by any effusion of lymph.

Case 4.—Removal of an Ovarian Tumour Weighing Thirty-seven Pounds from a Woman 61 Years of Age—Recovery.—A married woman, 61 years of age, mother of six children, the youngest of whom is 18, was sent to Mr Wells in March last by Dr. Giles, of Oxford. A large multilocular ovarian cyst filled the whole abdomen, from the sternum downwards. It had only been of two years' growth, and the increase of late had been rapid. The girth at the umbilicus was thirty-eight inches, and eighteen inches from sternum to pubes. It was evident that ovariotomy was her only resource, and, as she was in good spirits, and the general health still unbroken, it was decided that her age alone was not a sufficient reason for refusing to make the effort to cure her. She was admitted on April 8, and the operation was performed on the 13th. Mr. Parson gave chloroform. Dr. Giles, of Oxford, Dr. Llewellyn Williams, etc., being present. After exposing the cyst by an incision from the umbilicus five inches downwards, some very firm parietal adhesions were separated, and a large cyst was emptied. As it was withdrawn, a long coil of small intestine was found to be adhering to it by its mesentery. This was carefully separated, and it was then found that the proper pedicle could not be safely separated from the cæcum above or the bladder below; the clamp was accordingly placed round the neck of the cyst rather than on the pedicle. A little blood which had escaped from the torn adhesions was then sponged away, and the wound closed as usual. She had three opiate enemas during the night on account of pain, but was very comfortable all the next day, without pain or vomiting. On the third day the clamp was removed, and on the fifth day the upper sutures. The lower sutures were left two days longer, as they appeared to prevent the surface of the pedicle from sinking into the abdomen. Some delay in the healing process was caused by these two lower sutures producing a slough; but recovery went on very satisfactorily. The bowels acted freely on the tenth day, and continued to do so without pain, occasionally assisted by injection of warm water. The note on May 9 was—"Convalescent; sitting up; still a slight purulent discharge from lower angle of wound."

On the 18th she left the Hospital. The fluid and solid portions of the tumour removed weighed together thirty-seven pounds.

Case 5.—Ovariotomy—Bronchitis—Venesection—Recovery.—S. B., unmarried, aged 19, was sent to Mr. Wells, by Mr. Rumsey, of Cheltenham, as a very favourable case of ovariotomy. The abdomen was filled by an ovarian cyst, nearly unilocular, free from adhesions, and she was otherwise healthy. The girth at the umbilicus was thirty-six inches, and the distance from sternum to pubes sixteen inches. She was admitted April 17, and the operation was performed on

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the 22nd—a week after the cessation of the catamenia. Mr. Parson gave chloroform; Dr. Boulton, of Horncastle, Mr. Macilwain, etc., were present. The operation was of the simplest possible description. An incision, four inches long, downwards, from one inch below the umbilicus, exposed a non-adherent cyst, which was tapped, and withdrawn as it was emptied. A small pedicle on the left side was secured by a clamp, the cyst cut away, the right ovary felt to be healthy, and the wound closed by sutures, without the slightest exposure of any of the viscera. There were fourteen and a half pints of fluid removed, and the cyst weighed seventeen ounces. She went on for two days perfectly well. The stitches were removed on the 24th, and the wound was quite healed. On the 25th symptoms of bronchitis, with pulmonary congestion, came on—cough, very viscid expectoration, raised with much difficulty, thirst, hot skin, and pain under the sternum. The pulse was 100, respiration 32. Acetate of ammonia was given freely, and hot linseed poultices were applied to the chest. On the 26th, all the symptoms were aggravated. Early in the morning the pulse was 130, the respiration 40. At 11 a.m., the respiration being still 40, and the pulse 140, Mr. Wells took eight ounces of blood from the arm. The patient immediately felt great relief; the pulse fell to 120, respiration to 36, and free perspiration came on. Ten grains of chlorate of potash were given every two hours. A little champagne was given during the night. During the next day the respiration was about 40, and pulse 120. Expectoration very viscid. Five minims of ipecacuanha wine were given with each dose of chlorate of potash. On the 28th all medicine was discontinued, as the pulse had fallen to 100, respiration to 36, and the cough and dyspnœa had nearly disappeared. It was curious that, notwithstanding the obstinate cough, the abdominal wound had healed perfectly, and she never complained of the slightest pain in the abdomen. The clamp was removed on May 1. A little pus escaped from the lower angle of the wound for a few days, but she was quite convalescent fourteen days after the operation, and left the Hospital in good health on May 23.

MIDDLESEX HOSPITAL.

EPILEPSY ARISING FROM AN INJURY TO THE THUMB.

(Under the care of Dr. GREENHOW.)

E. R., aged 16, domestic servant, was admitted as an out-patient November 5, 1862. She had run a splinter of wood the distance of an inch underneath the left thumb-nail four months previously. Much pain and irritation ensued, and at the end of a week she had an epileptic fit, and had had five subsequently, at uncertain intervals, before presenting herself at the Hospital. The wound was still open and painful on pressure. The fits were preceded by a sense of numbness in the thumb, rapidly extending up to the shoulder, when a feeling in the shoulder-joint came on as if it were being wrenched, accompanied by dyspnœa, and pain in the cardiac region. In a few moments the fits followed, in which the patient lost her senses, became convulsed, and usually bit her tongue. After the convulsions subsided she always fell asleep. She had not suffered from convulsions while teething, and had neither had fits previous to her accident nor been subject to hysteria. When seen she was quite free both from headache and vertigo. Catamenia normal; bowels regular; tongue clean.

Thumb to be dressed with warm poultices. ℞ Liq. bichlor. hyd.; tinct. cinchon. co., ℥ ʒiss.; aq. cinnam., ℥j. ter die.

November 17.—Had had a fit, in all respects resembling the former ones, on the 14th inst. Wound healing. Pergat.

January 30, 1863.—Has had no fit since the last report. Wound quite healed. Pergat.

March 6.—Discharged quite well.

HOSPITAL FOR THE EPILEPTIC AND PARALYSED.

UNILATERAL EPILEPTIFORM SEIZURES, ATTENDED BY TEMPORARY DEFECT OF SIGHT.

(Under the care of Dr. HUGHLINGS JACKSON.)

In the two following cases there was, as well as the epilepsy, some temporary defect of sight. As a clinical fact, this is common in cases of epilepsy in which the convulsions are unilateral. Sometimes in such cases the temporary defect of sight passes into a permanent one, but more frequently epileptiform seizures follow amaurosis. Such is, we repeat, the clinical fact, but the causes of the temporary loss of sight are very various, being due in some merely to a passing defect of the accessory apparatus of the eye, and in others to defects in the circulation of the retina itself. In a case of epileptiform convulsion in a patient who had recently suffered from syphilitic rash, recorded in this Journal, January 31, 1863, the slight defect of sight appeared to be due to want of parallelism of the eyes from convulsive action of the external rectus muscle on the side of the body affected, as this muscle was afterwards paralysed in the hemiplegia which followed a severe attack. In other cases there appears to be evidence that the defect of sight is due to some change in the circulation of the retina itself, and these are more likely to be followed by amaurosis. A young, robust looking man consulted Dr. Hughlings Jackson, November, 1862, for epileptiform convulsions on the left side. He had then had only one complete attack. In this case the sight failed in the beginning of the paroxysm. A few months afterwards he lost the sight of both eyes. In a case now under the care of Dr. Brown-Séquard, at the Hospital, there has been complete amaurosis for twelve months, followed by epileptiform convulsions on one side.

The attacks of coloured vision in the second case are interesting, but the patient's description is not very exact. It would seem that light entering the eye was temporarily broken up into various colours, as it is more permanently in organic affections, as retinitis, in which patients frequently complain of seeing a "rainbow" round the flame of a candle.

As will be seen by referring to a series of cases recorded in the Hospital reports of this Journal, June and July, 1861, the convulsions in epilepsy from syphilis are generally unilateral. In the following cases there was no evidence of any taint. It is singular that both these patients should have had tapeworm. In the first no worms were passed after taking a dose of the oil of male fern; the other patient did not attend again after taking it:—

A married woman, 38 years of age, consulted Dr. Hughlings Jackson, November 25, 1862, for attacks of convulsion of the left arm and left side of the face. The sight also was affected during the attacks.

She had been delivered four months before, after a natural labour. The child she brought with her was healthy. She was suckling, but her general vigour and health seemed good. There was, however, another condition which might exercise an important influence,—before her confinement she had passed tapeworms.

Fourteen days after her confinement, whilst in bed, she noticed that the first two fingers of the left hand moved. The movement lasted ten minutes. For one month nothing further of the kind occurred. Then, one day whilst at tea, she felt a glimmering over the eyes, then "it took the elbow, next the hand, so that all the fingers worked together," and her face was drawn to the left side. She then became insensible. She did not bite her tongue. She was "black in the face." She did not sleep after the fit.

She had had many abortive attacks since, but no actual fit. They all began with a kind of glare before the eyes, and then the arm became rigid, and the fingers "worked." She would get her husband to pull the fingers back, and this relieved her. After the attack she could use the arm as well as ever. Iodide of potassium was given.

October 2.—She had had one severe attack in the hand, which, she said, her husband "stopped" by pulling back the fingers, but as it was ten minutes before it ceased, very likely the effect was not due to his interference. As she had had tapeworms at one time, a drachm and a half of the oil of male fern was ordered; castor oil to be taken before and after. To continue the iodide.

November 28.—She did not pass any worms after the draught. She had had no actual fits, and complained of nothing except a "glare" before the eyes, and pain, chiefly in the region of the malar bone. She spoke thickly, and this had been so since one attack of movement in the left side of the face. It moved, she said, just as the hand did.

December 11.—Only one slight attack. Her sight, as usual, was affected, and after it she saw "colours and figures."

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METROPOLITAN FREE HOSPITAL.

EPILEPTIFORM SEIZURES—AURA FROM THE THUMB—ATTACKS OF COLOURED VISION.

(Under the care of Dr. HUGHLINGS JACKSON.)

ALICE F., a married woman, aged 49, was admitted an out-patient, under the care of Dr. Hughlings Jackson, on November 28, 1862. Until about seven or eight months ago she had had good health, and indeed looked still in fair health, and was very intelligent. She had not menstruated for twelve months, and complained a good deal of "sinking," of faintness, weakness, etc.,—symptoms so common at the change of life. Until the attack to be described she had had no definite ill-health, except a pain in the right arm of no very special character, so far as could be ascertained.

Five weeks before she had a tingling sensation in the right thumb. It began under the nail, and extended about as high as the styloid process of the radius, and then "went to the face." The part of the face first attacked was the upper lip on the right side; next, the whole of that side of the face, and the tongue also; "it took her speech away for five minutes." She was not at all insensible. She had great pain in the arm, but the leg was not affected in any way. She had had about twenty of these attacks before admission.

It is interesting to note that, before any question of any kind was asked, she said that catching the shuttle with the thumb and finger, and even touching the thumb, would sometimes bring on the fit. She gave a circumstantial account of this. She had also attacks in which there was coloured vision, which were distinct from the seizures just described. The first was about four days before the seizure described above.

This patient took iodide of potassium. At her next visit she was better, and had only had one attack. It was now ascertained that she had had tapeworms three years ago.

December 19.—She had had no fit, but "had had the colours dreadful." It affected the right eye only, as she shut each eye in turn, in order to ascertain. The coloured vision was attended by pain in the right superciliary region. Both the pain and the colour came and went suddenly, lasting each time about ten minutes. She could see things in spite of this peculiarity, but rather dimly. The colours were violet, white, and orange, and seemed about three yards distant. At other times the sight was good, and she had no pain. She had not at any time during these attacks any vertigo or insensibility, but numbness of the right leg. She had considerable pain still from the elbow to the fingers, but this was constant. A dose of the oil of male fern was prescribed.

GUY'S HOSPITAL.

PURPURA—SMALL-POX (?).

(Under the care of Dr. WILKS.)

The following is another instance of purpura supposed to be due to small pox. We refer our readers to two cases recorded in the Hospital Reports of this Journal, April 11, 1863, for some valuable information on the subject, embodied in clinical remarks on those cases by Dr. Gull and Dr. Wilks:—

Martin T., aged 21, admitted April 23, 1863. He died the same afternoon. He was brought in a cab to the Hospital, but was too ill to give any account of himself. The whole surface of his body was livid, or extremely congested, and his face and hands presented numerous small papules. His breathing was very difficult, of a character indicating some swelling of the fauces. Mr. Stocker, who alone saw him, judging from his general appearance, and from the prevalence of variola, thought that the man was suffering from small-pox. There was no actual purpura on the body, nor was there any hæmorrhage from any part.

Autopsy, by Dr. Wilks.—The body was that of a remarkably fine, strong, muscular man. It was of a purple colour, from extreme congestion of the cutaneous capillaries. The appearance of a papular eruption seen during life was now scarcely perceptible. Blood was oozing from the mouth. The interior of the pharynx as well as the trachea, etc., was of an intense purple colour, as the outside of the body. The mucous membrane of the glottis was swollen. A few minute points were visible, which suggested the commencement of variolous pustules, but there was no proof that they were of this nature. The pleuræ were healthy, but their surface was covered by purpuric spots. The lungs were extensively congested; every part was full of blood, and some apparently extravasated into the tissue. In the veins leading to the heart the blood was very dark and fluid. There was ecchymosis of the inner surface of the stomach, but no effusion of blood. Other organs healthy. The head was not examined.

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Medical Times and Gazette.

SATURDAY, JUNE 6.

SURGICAL HONOURS.

IN spite of all that has been written, said, and done, with the intention of widening the entrance to the high places in the great Surgical corporation of Lincoln's-Inn-Fields, it is clear that any success which has been gained is, to a great extent, neutralised by the centralising and conservative tendencies of the present age Medical. Formerly, when the Council of the College were self-elected, it was in the nature of things that they should be exclusive. They were London Hospital Surgeons, and, their idea of excellence culminating in themselves, they could conceive of no merit, unless it were the result of the process which had elaborated their own. But now that the election rests with the great body of the Fellows, it is curious to observe how the same veneration for metropolitan training has been imbibed by the electors with their accession to power. It is true that last year a good precedent was set by the return of Mr. Paget, of Leicester, but this year, although there are three vacancies to be filled, we have only heard the name of one provincial Surgeon—Mr. Turner, of Manchester—mentioned as a probable candidate. All the other candidates are metropolitan, and, with one exception, they are all attached to London Hospitals.

We object to this exclusiveness for many reasons; amongst them, not the least important is the effect it has of narrowing the field open to able and ambitious young men, who look forward to obtain the high honours of their Profession. We know of no reason why one-half the seats in the Council of the College should not be filled by Surgeons from the provinces. The opportunities of practice offered by Manchester, Liverpool, Birmingham, and other of our large towns are, in the aggregate, as wide as those to be found in London itself. But a young Surgeon whose ambition and ability lead him to indulge in an occasional day dream of filling the Presidential seat of the College, knows that to leave London for never so extensive a practice in a great manufacturing or trading town would be certain ruin to his hopes. So with the Army and Navy, a Surgeon who enters either of the public services cannot, whilst he remain in them, rise to the highest honours in his Profession. The result is that for every inferior post in the London Hospitals there are half-a-dozen applicants. Men of the highest abilities and attainments wear out the best part of their lives in Assistant-Surgeoncies, thinking themselves fortunate if, when in charge during the absence of the higher functionary, a stray operation fall to their lot.

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The other day we were dozing over the pages of a respected Medical contemporary in the Library of the College of Surgeons, when we were woke up by the entry of two old friends—old fellow-students of ours at St. Magog's Like ourselves, they were both on the shady side of forty, and we recollect them both prize men at the school, and House-Surgeons to Crusher. One of them—Freshfield Sharp—looked sleek and rosy, the very personification and type of success. Sharp is Surgeon to the Infirmary at West Thrivington; he does a large practice, is married, has a family, and has achieved a first-rate Surgical reputation with wealth and position in his county. The other, Dryhope Pure, is now Assistant-Surgeon at St. Magog's, and grinder, or, in modern phrase, College Tutor to the school. He has hung on at the Hospital ever since we were students, has stood three times for vacant Assistant-Surgeoncies, was at last successful, and now lives in two rooms in a dingy street at the West-end, where, for an annual consideration, he is allowed the privilege of putting his plate on the door. Poor Dryhope! the grey locks on his temples and crow's feet tell his tale. His private patients may be counted with the weeks of the year. His public practice consists of sitting for three hours twice a-week repeating lotions and mixtures, and attending to ulcerated legs and whitlows in the out-patients' room. Lucky does he think himself when he gets a case of minor Surgical operation which he can take into the theatre. A day or two after our meeting we went to St. Magog's on operating day, attracted by seeing in the diary that Crusher was going to excise a hip-joint, perform lithotomy, and remove a tumour weighing forty pounds. The theatre was crammed to the topmost bench. One by one the patients were brought in, and, amid the silence of the admiring students and the approving whispers of his friends, the great Surgeon performed. When the last suture had been inserted, and the last patient had disappeared under the care of the Hospital porters, Crusher turned to the assembled crowd, and, in his usual deliberate, happy way, began to deliver "a few clinical remarks." The attention was profound. Crusher went on, dwelling with the fondness of a great artist on each point in the operations, illustrating the cases by the accumulated experience of a third of a century—stating the reasons for what had been done—demonstrating the structure of the diseased tissues removed. Considering how valuable his time is, thought we, Crusher's prolixity is certainly most self-sacrificing. His oration, however, seemed absolutely short to the students who listened with rapt attention. The only individual evidently grudging the time was our friend Dryhope. His assistant's duties performed, we watched him narrowly whilst Crusher was haranguing. There he sat restless on the foremost bench, apparently engaged in examining the qualities of a new forceps, but his eye all the while wandering impatiently from speaker to listeners, and his fingers straying mechanically every five minutes to his waistcoat pocket, and more than once diving impulsively for his watch. But at length his trial is over. Crusher stops, and taking with him the calculus he has extracted, gracefully makes his exit. His departure is the signal for a universal round of applause, and then a universal seizure of hats. The theatre in the course of a minute is almost cleared, when Dryhope, in a voice half deprecatory, half reproachful, announces that he is going to remove a piece of necrosed bone from the terminal metacarpal of the middle finger of an out-patient. But the spell is dissolved; the men are gone, with the exception of some half-dozen friends and one or two first-year's men, who gather up and form a thin semicircle round the operator. The sequestrum is neatly removed, and when the finger is bound up, we take our friend's arm, and make our way into the street. "What a selfish fellow Crusher is," are the first words that fall from the assistant. "He knew that I had that operation to perform, that it was the only one I had had for a month, and that the students were all due at the Medicine class in a quarter of an hour, and yet he takes up all the time with his long-winded commonplaces. I wonder whether *my* time will ever come." Just then we are hailed by a Hansom cab on its way to the railway station. Sharp's rubicund visage looks out, and he greets us with "Good bye, old fellows. I have just been telegraphed for. Old Lady Broadacres has tumbled down stairs and broken the neck of her femur, and I have two stone cases at the West Thrivington to-morrow." We walked home musing on which was in reality the true path to Surgical honour.

THE WEEK.

THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

The meeting of the General Council has been marked by several votes, which require special notice from us. As it is more pleasant to award praise than blame, we would, in the first place, congratulate the Council on the vigour they have shown in dealing with certain offenders against Professional morality. The names of the notorious Robert Jacob Jordan, and of the still more notorious Samuel La'Mert, have been erased from the Register which they had disgraced. An application made by Mr. Richard Organ to the Society of Apothecaries, to be admitted to examination, having been referred by the Court of Examiners to the Council, that body were recommended not to examine Mr. Organ, on the ground that he had endeavoured to procure a license from the College of Physicians of Edinburgh by personation. The cases of John Lacey and John Potter Sargeant, persons whose names had been formerly erased from the Register, were also discussed. These cases are still *sub judice;* that of Lacey having been referred to the Branch Council, in order that his statement may be heard, and that of Sargeant to the Executive Committee, who are to require satisfactory evidence of character. The Council refused to comply with the petition of John Kearney, of Clonmany, for re-registration. A thorough desire to do their duty in this department, and to keep the Profession pure from quackery and imposture as far as their powers permit, seems to have animated the Council, and they deserve and will receive the credit which appertains to a just discharge of their functions.

We now turn to matters of a different complexion. In the first place, by the casting vote of the President, reporters for the press are still excluded. This may be a merciful arrangement for us of the fourth estate, considering the amount of *vox et preterea nihil* which characterises the proceedings of certain Medico-political conclaves we wot of; but in this matter we are bound not to consider our own ease, and we object to the policy of the Council as contrary to the spirit of open discussion which is embodied in the institutions of this country, and to the maintenance of a due sense of responsibility amongst the members of the Medica Parliament. A still graver charge against a small majority of the Council is, that they continue to permit the Royal College of Surgeons of England and certain of the Scottish Universities to set at naught their educational recommendations, and to defy their authority. It is true that the Council of the College of Surgeons has condescended to address a letter to the General Council, in which they argue in favour of the course they have adopted. But their argument terminates in the announcement that they "accordingly propose to continue their regulations on the subject" of general and professional education. We do not now discuss the wisdom of the apprenticeship system, nor the precise time at which a preliminary examination ought to be passed. The broad fact lies before us that the recommendations of the General Council of Medical Education of Great Britain have been openly and publicly set aside, that the General Council find themselves incompetent to enforce their own regulations, and that they have quietly submitted to be bearded by a Corporation which the law has placed under

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their authority. Such a state of things requires no comment. It is bootless to speak of the injustice dealt out to loyal Corporations—a point which has been fruitlessly urged by the President of the Royal College of Surgeons of Edinburgh. Equally useless is it to descant on the contempt to which a narrow majority has subjected the whole body to which they belong. It is plain that an assembly which does not respect its own acts and powers can command but slight respect out of doors. The motion of Mr. Teale, that a year spent in pupilage to a Practitioner holding the appointment of Surgeon to a Hospital, Dispensary, or Union Workhouse, should be recognised as part of Medical education, provided it be passed after the first year of studentship, agreeing as it does in spirit with the view we have taken on the apprenticeship question, cannot be held to settle the matter. It remains a fact that the recommendations of the General Council are not binding on any Corporation or University, for the Council itself has ratified their disavowal by one of the leading educational bodies of the Medical commonwealth.

PARLIAMENTARY.

On Monday night the House of Commons listened to Mr. J. A. Smith's narration of some extraordinary occurrences which have recently taken place in the girls' school of the Royal Victoria Patriotic Asylum. The explanation afterwards given by Sir John Pakington, one of the Royal Commissioners of the Patriotic Fund, appears to us to have left the main facts alleged untouched. The idea of punishment and of treatment entertained by the officials of Wandsworth is, we trust, peculiar to themselves. Under the category of punishment comes the case of a girl of sixteen who was flogged with a birch rod by order of the chaplain. Under that of treatment, we have an instance of two girls sent by desire of the secretary to town to be mesmerised. With regard to the former, it may be that the punishment was meted out for some flagrant crime, for it was stated that theft was not uncommon in the school. But birching young women of sixteen smacks too much of St. Petersburg to suit our English taste. The result, as might be supposed, was the resignation of a large number of ladies who acted on a committee appointed to investigate the condition of the school. The birch is now said to be discontinued, but the cane is still honoured in the establishment. Mesmerism, we suppose, is also abandoned, as Mr. Corry assured the house that a Medical officer of experience attended the Asylum daily, and no cases were treated except under his direction. A more serious case than either of the preceding was brought forward by Mr. Smith. It appears that a girl named Bennett was subjected to solitary confinement for two days for some act of insubordination by direction of the chaplain. She was locked up during the day, and only released at night to go to bed. At half-past eight on the evening of the second day, when another girl went to visit her, to take her food, and to set her at liberty, she was found burnt to death. She was the daughter of a soldier, but not a pupil. She was too old to be admitted as a pupil, but she was admitted as a servant, for the purpose of instruction in domestic duties, and received no wages. A coroner's inquest was held, and a simple verdict of "Accidental death" returned. The lady superintendent, it is admitted, was absent at the time of the occurrence. But there can be no doubt that the whole circumstances were highly disgraceful to the management of the Asylum.

We are glad to see that on Tuesday night Mr. Fenwick's motion of "An Address to her Majesty to issue a Royal Commission of Inquiry into our Sea Fisheries, with the view of increasing the supply of a favourite and nutritious article of food for the benefit of the public," was carried by a majority of 50 to 27. Mr. Fenwick, after stating the almost incredible numbers of fish consumed in England, and the enormous amount of the capital embarked in the trade, observed that it was generally acknowledged that the fisheries were falling off year by year, and that, unless something were done to arrest this progressive diminution, the result would be serious. He then pointed out the causes of this reduction in the produce of the fisheries—namely, the waste and destruction of the spawn, the taking of fry and small fish, and the mode of fishing, the causes being similar to those which had destroyed the salmon fisheries. He read various communications and reports in confirmation of his statements, and instanced the success that had attended the appointment of a Commission of Inquiry into the salmon fishery. The increasing population of England can ill afford that any food supply should be diminished, much less one that requires neither land nor labour for its production.

THE DEATH OF SIR CULLING EARDLEY.

We need not repeat what we said last week, to the effect that vaccination is no plaything; nor is there anything surprising in the fact that an agent so potent should occasionally run riot, if the health of the recipient be in an unsatisfactory state. It is most deeply to be regretted that so benevolent a man as Sir Culling Eardley should have fallen a victim to this usually life-preserving and beneficent operation. But as it is, the circumstances are worthy to be put on record, and we willingly insert the following account, for which we have to thank Dr. Tasker Evans, of Hertford. We would also especially call attention to the letter of Dr. Miller, recording cases of small-pox during vaccination in India, published in another part of our columns. Dr. Evans writes:—

"In consequence of one of the lady's-maids having fallen ill at Bedwell Park with small-pox, I was requested by the late Sir Culling Eardley to call and re-vaccinate the whole of the establishment, which I did on the 19th of April. They were all adults, eighteen in number, and the vaccine lymph inserted into Sir Culling's arm was from the same source as that used for the other members of the family, who all did well. When I saw Sir Culling's arm on the 23rd, there was no appearance of the vaccine vesicle, but more inflammation and swelling than I have usually seen after re-vaccination. These symptoms increasing, Dr. Headland met me in consultation, and it was our hope the case would yield to treatment; but, on the 28th the symptoms becoming more unfavourable, Mr. Headland saw him. Yet we still hoped that the case would terminate favourably; but, on the 2nd of May, we feared there were purulent deposits into the cellular tissue of the arm. The following day Mr. Headland came again to Bedwell, accompanied by Mr. Hancock, of the Charing-cross Hospital. The latter gentleman made incisions into the upper and fore-arm, when a good deal of matter oozed out; there were further operations of the kind required afterwards. Sir Culling was relieved by these operations. Suitable nourishment and medicine were administered to support the system, and opiates were given at night. After some days, sloughs separated, and the arm seemed going on tolerably well; but on the 18th there was more constitutional disturbance, giving ground for increased anxiety, and symptoms of pyæmia appeared on the 20th. Death ensued on the following morning."

POISONING BY CHLORIDE OF ZINC.

The following case of accidental poisoning appeared in the *Times* of last week. This is at least the seventh instance of poisoning which has resulted from the reckless obstinacy of the proprietors of Burnett's disinfectant, who persist in selling to the public a corrosive irritant in bottles which closely resemble in shape and general appearance those in which Dinneford's solution of magnesia is supplied:—

"A most distressing case of accidental poisoning occurred a few days ago at the hamlet of Rusthall, near Tunbridge-wells. The deceased, Maria Frances Jane Wood, was the wife of Captain T. P. Wood, late of the 29th Regiment. It appeared by the evidence adduced at the inquest on Tuesday, that the deceased, who had recently been confined, had been

accustomed to take occasional draughts of 'Dinneford's pure fluid magnesia,' a bottle of which was kept upon a shelf in Mrs. Wood's dressing-room, in which her maid and the baby slept. On the morning of the previous Saturday, about five o'clock, the maid, having been requested by her mistress overnight, took down from the shelf what she supposed to be a bottle of magnesia, and, pouring out three-quarters of a wineglassful, took it to her mistress, who drank it. Mrs. Wood felt a burning sensation, and asked her maid to fetch the bottle out of which she had taken the liquid. The maid then discovered that she had administered to her mistress a quantity of 'Sir William Burnett's disinfecting fluid,' which is a well-known active corrosive poison. Mrs. Wood, immediately she ascertained the mistake, took a large dose of castor oil, and Dr. Johnson, who arrived as speedily as possible after he received information of the accident, administered a mixture of milk, oil, and eggs, and afterwards the stomach-pump was used. The unfortunate lady, however, never rallied from the violent shock to her nervous system, and died about midnight on Sunday. It transpired during the inquiry that the bottle of disinfecting fluid had been used by the monthly nurse during the confinement of the deceased, and that she had left it on the same shelf as the fluid magnesia. In the meantime the maid had not administered any medicine to her mistress, and, being unaware that the bottle was on the shelf beside the magnesia, seized it in the hurry of the moment. Glancing at the label, she saw the word 'fluid,' and thought it was a bottle of magnesia which she had used previously to the confinement of her mistress. It was singularly unfortunate that the two bottles were alike in size and form, and in the colour both of the glass and liquid. The label on both was large, and the word 'fluid' was in a prominent line. The bottle of disinfecting fluid, however, was fluted at the back, denoting that it contained poison, though the word 'poison' was not printed upon it. The maid was described as a very kind and attentive servant to her mistress, who fully exonerated her from blame, and expressed a hope, when death was approaching, that she would continue to take charge of the infant, and be as attentive to Captain Wood (who has become totally blind from the effects of an accident sustained in military service) as she had previously been, and Captain Wood expressed himself in similar terms. The jury returned the following verdict:—'That the deceased died from the effects of a dose of Sir William Burnett's disinfecting fluid accidentally given for a dose of Dinneford's fluid magnesia; and the jury cannot separate without expressing their strong disapprobation that a mixture of such a poisonous nature as the former should be sold without the bottle being legibly labelled with the word "Poison," and they request the coroner to communicate with the agents for the fluid accordingly.'"

GENERAL CORRESPONDENCE.

IS RE-VACCINATION DANGEROUS?

LETTER FROM DR. MILLER.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your remarks on vaccination, and Mr. Wells' letter upon re-vaccination, have recalled to me some facts connected with the subject which came under my immediate observation. I send them to you with the hope that they may call forth others of a similar character, and make Medical men reflect and determine that the little operation is not so trifling or free from serious consequences as many suppose.

In Calcutta, in the year 1850, a severe epidemic of small-pox broke out. Its ravages were most severely felt amongst the natives; the Europeans and Eurasian population suffered also. The *furore* for re-vaccination was great. Two cases, adults, both good-looking women, were re-vaccinated with healthy lymph, selected with great care by the Superintendent of Vaccine; but in both cases, on the eighth day, variola set in, of a confluent form; and though they both narrowly escaped with their lives, the indelible impression of the disease is to be seen on their faces to this day. One of these cases was so bad, that for nine consecutive days she was supported entirely by beef-tea and brandy enemata: the mucous membrane of the mouth was in such a pustular condition she could not swallow, and in the air-passages also I infer, because she had aphonia for six months after her attack.

The most painful case of all was the following:—I vaccinated, in August, 1854, when no epidemic prevailed, a healthy infant, the first child of a mother aged twenty. The vesicle passed through all its stages to maturation. The mother was suffering from "prickly heat," and had abraded the skin on the right fore-arm by scratching it (a common thing in the tropics). In carrying her child the vesicle burst, and the lymph trickled over the abraded surface; in short, she accidentally re-vaccinated herself. On my visit to inspect the child's arm on the eighth day, the mother showed me her own. I treated it with indifference. On the sixth day she was attacked with rigors, followed by fever; on the eighth day a pustular eruption appeared, which proved to be variola of the most confluent form. She soon became the most revolting mass of corruption, and died on the seventeenth day from the date of the accidental re-vaccination. Need I add, that these experiences have impressed themselves on my mind. I am sure other Medical Practitioners in India will corroborate these cases, by offering some of a similar nature for publication.

These occurrences are so rare, that it is difficult to speculate on the causes from whence they arose. They were not dependent on impure lymph, because the utmost care was evinced in selecting it. In the two first the variolous poison was abroad, but the evidence of the last case goes against that, for no epidemic then existed. It may be fairly questioned whether they do not help to confirm the experiments made by Mr. Ceely, that vaccine and variola are one and the selfsame disease, the latter modified by passing through the system of the cow, and whether there are not certain conditions in the human system already vaccinated which would favour the re-conversion of the vaccine lymph into variola, and so render re-vaccination a very questionable proceeding.

I am, &c.

J. W. M. MILLER, M.D.,
Physician Royal Portsmouth, Portsea, and Gosport Hospital.

June 1.

GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

MINUTES OF MEETING, WEDNESDAY, MAY 27, 1863.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

MR. GREEN, *President*, took the chair at Two o'clock, p.m.

Present—

Dr. Burrows.	Dr. Fleming.	Sir Charles Hastings.
Mr. Arnott.	Mr. Syme.	Dr. Sharpey.
Mr. Cooper.	Dr. Thomson.	Mr. Lawrence.
Dr. Bond.	Dr. A. Smith.	Mr. Teale.
Dr. Embleton.	Mr. Hargrave.	Dr. Christison.
Dr. Storrar.	Dr. Leet.	Dr. Stokes.
Dr. Alexander Wood.	Dr. Apjohn.	
Dr. Andrew Wood.	Dr. Corrigan.	

Dr. FRANCIS HAWKINS, *Registrar*.

The Minutes of the last meeting were read and confirmed.

1. Moved by Dr. BOND, seconded by Dr. STOKES—"That a Committee be appointed to take into consideration and to report (during the present meeting) what further steps it is desirable for the General Council to take in reference to the "British Pharmacopœia. The Committee to consist of

Dr. Christison, Chairman.	Dr. Acland.
Dr. Apjohn.	Dr. A. Smith.
Dr. Sharpey.	Mr. Arnott.
Dr. Stokes.	Dr. Storrar."
Dr. Burrows.	

—Agreed to

The Registers of Students for 1862-3, with explanatory letters, were submitted to the Council.

2. Moved by Dr. ANDREW WOOD, seconded by Mr. TEALE—"That the Registers of Students, with explanatory letters, be referred to the Committee on Returns."—Agreed to.

Read the following letter from the Royal College of Surgeons of England:—

"Royal College of Surgeons of England, May 4, 1863.

Sir,—I am desired to acquaint you, for the information of the General Council of Medical Education and Registration, that the Council of this College, on the 13th of June last, appointed a Committee to consider—

"'Whether any, and if so, what alterations it would be proper to make in the Regulations of this Council relating to the education and examination of candidates for the diploma of Member of the College, so as to bring them more in accordance with the recommendations of the General Medical Council in reference to general and professional education.'

"That this Committee addressed letters to the Fellows and Members of the College holding appointments in the Hospitals, Infirmaries, and other charitable institutions of England and Wales, and to those engaged in large general practice, in order to ascertain what opportunities are available throughout the country for practical instruction in Medicine and Surgery, and what is their opinion on the best mode of commencing professional education. The whole subject of the College Regulations was examined carefully at repeated meetings of the Committee and of the Council. As the circumstances of those who desired to adopt the medical

Profession, and the opportunities of instruction within their reach, are extremely various, the Council are of opinion that the course of education cannot be subjected to any absolute and inflexible rule without great disadvantage, and even much unnecessary hardship in particular cases.

"In the opinion of the Council, the leading principle in the education of those whose life will be devoted to the treatment of accidents and diseases should be to make it as practical as possible, especially at its outset. The minor duties of Surgery, especially in the manipulative department, and the usual course of injuries, diseases, and their treatment, can be understood in great measure without previous theoretic training; they are matters of great interest in themselves, calculated to excite and keep up the attention of the student, and to make him feel the advantage, or rather the necessity, of that clearer insight which is to be derived subsequently from scientific teaching in the schools. He thus becomes acquainted with those ordinary duties of his profession with which he will be principally occupied from the very commencement of his active career, although, in plain truth, they cannot be learned in a great school. The Council would think favourably of the arrangement if the early portion of the Medical education could be carried on at home, under the influence of domestic life and associations, or in the house of a competent master, so that the danger of sending an inexperienced youth into the world without guidance, and especially into a great Metropolitan Medical School, should be reduced to the smallest possible amount.

"The Council therefore are of opinion that an option should be left to parents and guardians as to the time and manner in which that portion of study not spent in Medical Schools should be employed, and accordingly propose to continue their Regulations on the subject.

"They have, at the same time, introduced modifications into their rules calculated to provide against irregularities and abuses, and to ensure the continued and efficient prosecution of the studies now required.

"Copies of the Regulations, as thus amended, are herewith enclosed.

"I have the honour to be, Sir, your obedient servant,

"EDMUND BELFOUR, *Secretary*."

3. Moved by Dr. STORRAR, seconded by Mr. HARGRAVE—"That the letter of the Royal College of Surgeons of England now read be received, printed in the Minutes, and referred to the Education Committee."—Agreed to.

Read the following letter from the President of the Royal College of Surgeons of Edinburgh:—

"To the President of the General Medical Council.

"The Royal College of Surgeons, Edinburgh, May 19, 1863.

"Sir,—I am directed by the Royal College of Surgeons of Edinburgh, over which I have the honour to preside, to bring under the notice of the General Medical Council, at its ensuing meeting, the position in which the College has been placed by the proceedings of the General Medical Council.

"The College adopted the whole of the Recommendations issued yearly by the General Medical Council. It did so in the trust that other licensing bodies would likewise do so, and in the faith that, if they did not, the General Medical Council would not fail to endeavour to compel them to do so. I refer more especially to two of the most important of the Recommendations issued by the General Council. 1. That after September, 1861, the preliminary examination in general education be passed previous to the commencement of professional study. 2. That the commencement of professional study be understood to be the time of commencing study at a Medical School.

"After due notice given to intending students of the approaching changes, this College acted on these Recommendations, and accordingly no student beginning after September, 1861, was allowed by the College to register as a student of Medicine during Session 1861-2, who had not passed the whole of the preliminary examination in general education. In this course the College had the co-operation of the Royal College of Physicians of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow, by both of which bodies the same regulation was announced and carried out. This Recommendation, however, was not adopted or carried out by other bodies conferring qualifications in Scotland (I refer to the Scottish Universities), the Regulations of which require the preliminary examination in general education to be passed before the commencement of professional study only 'as far as possible.' Again, the Recommendation defining the commencement of professional study to be by attendance at a Medical School, has not been adopted by the Royal College of Surgeons of England, which recognises attendance at an Hospital or Dispensary, or pupilage with a Surgeon, as modes of commencing professional study equally with attendance at a Medical School; and the fact of that College having issued such Regulations contrary and subsequent to the Recommendations of the General Medical Council, was prominently brought before the Council at its meeting in May, 1862.

"The General Medical Council, however, took no steps to enforce the adoption of its Recommendations by the bodies whose regulations were not in accordance with them, and even refused to pass a vote of disapproval of the course pursued by a body which had issued regulations contrary to the Recommendations of the General Council. By this course of procedure on the part of the General Medical Council, this College was placed in a very difficult position, and has reason to complain of having been led on by the Council to adopt regulations, in the endeavour to carry out which it has been deserted by the Council itself.

"I need hardly say that it is in vain for one licensing body to endeavour to carry out a regulation requiring the examination in general education to be passed before the commencement of Professional study, if the doors of other bodies are open without such a condition; or for one College of Surgeons to define the commencement of Professional study to be only attendance at a Medical School, so long as another recognises apprenticeship as one of the modes of constituting such commencement. In consequence, therefore, of the failure of the Medical Council to support the College in its endeavour to carry out the recommendations of the Council, the College has been compelled to suspend the operation of the regulations in question. This the College has done by attaching to section 1, chapter iii., to section 2, chapter iv., and to section 3, chapter v., of its printed regulations, issued in August, 1862 (a copy of which is herewith transmitted), a foot-note, intimating that, 'In consequence of the proceedings of the General Medical Council in May, 1862, this regulation will not take effect until further notice' This course was adopted by the College after a conference with the Royal College of Physicians of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow, held to consider the position in which the Colleges and Faculty were placed by the above-mentioned proceedings of the General Medical Council.

"In regard to requiring the examination in general education to be passed before commencing attendance at a Medical School, the College, without expressing any opinion upon the merits of the question, is ready to enforce such a regulation, in the event of all the Colleges, Universities, and other licensing bodies engaging to do the same, from and after a certain date, and in such a manner as shall leave no room for doubt.

"In regard to Professional study, the College has avoided ambiguity, by simply fixing the number of sessions of attendance at a regularly constituted Medical School, as not less than four Winter Sessions, or the alternative of three Winter and two Summer Sessions; and I have to suggest to you, that, by adopting a similar formula, the General Medical Council would avoid the difficulty which—as experience has shown—arises from the use of a phrase so ambiguous, and so liable to evasion, as that of 'Professional study.'

"I may be permitted to add that the proceedings of the Medical Council above referred to have occasioned not only embarrassment to the College, but disappointment of the hopes entertained in the College of an improvement in Medical education through the influence of the Medical Council. Unless the Council will confine its Recommendations (as distinguished from the mere expression of what it considers desirable) to what it is able to enforce, and will show its intention to enforce them without fail or delay, on any of the bodies which shall have failed to adopt them at the specified time, it is obvious that the influence of the Medical Council for good to the Profession must be seriously impaired.

"I remain, Sir, your obedient servant,

"P. NEWBIGGING, *President*."

4. Moved by Dr. STORRAR, seconded by Dr. SHARPEY—"That the letter of the President of the Royal College of Surgeons of Edinburgh now read be received, printed on the Minutes, and referred to the Education Committee."—Agreed to.

Read a letter addressed to Dr. Burrows by the Registrar of the Royal College of Physicians of London:—

"Royal College of Physicians, London, S.W., May 23, 1863.

"Dear Sir,—I am directed to state, for the information of the Medical Council, that this College has passed a bye-law (March, 1863), providing for the appointment of an additional Examiner in Surgery. After June, therefore, the examinations on the subjects of professional education will be conducted by

Two Examiners in Anatomy and Physiology.
" " Chemistry, Materia Medica, and Practical Pharmacy.
" " The Principles and Practice of Medicine.
" " The Principles and Practice of Surgery.
" " Midwifery and the Diseases Peculiar to Women.

"I am also further directed to inform you that the College has passed the following Regulations:—

"'That the University of Athens be added to the other Universities already qualifying candidates for admission to the examination of this College.

"'That the testamur of having passed the Examination in Arts at Codrington College, Barbadoes, be accepted in lieu of the examination on the subjects of general education conducted by the Examiners of this College.

"'That the certificate of the second class in literature and science of the Cape of Good Hope should be accepted in lieu of the examination conducted in the College before the admission of students to professional studies.'

"I am, dear Sir, yours faithfully,

"HENRY A. PITMAN, *Registrar*.

"George Burrows, M.D., etc.,
Representative of the College in the General Council
of Medical Education and Registration."

4. Moved by Dr. ANDREW WOOD, seconded by Mr. HARGRAVE—"That the letter from the Registrar of the Royal College of Physicians of London to Dr. Burrows be received, printed on the Minutes, and referred to the Education Committee."—Agreed to.

Read the following letter from the Director-General of the Army Medical Department:—

"Army Medical Department, March 14, 1863.

"Sir,—I have the honour to forward the enclosed correspondence from the College of Surgeons of Ireland, by which it will be seen 'that the Council of this College has granted diplomas to its Fellows and Licentiates, testifying that they are qualified to practise Medicine as well as Surgery,' and to inform you that, having submitted the same to the Right Honourable the Secretary of State for War, together with your reply to my letter of the 12th ult., stating that you have no authority to answer the question as to whether the holder of the licence of the Royal College of Surgeons in Ireland, registered as such, is qualified to practise Medicine as well as Surgery. I have been directed by Sir George Lewis to refer this question to the General Council of Medical Education, and have therefore to request you will be pleased to submit the same to the next meeting of the General Council, and to favour me with their reply.

"I have the honour to be, Sir,

"Your most obedient humble servant,

"J. B. GIBSON, *Director-General*.

"The Registrar, General Council of Medical Education,
32, Soho-square, W."

5. Moved by Mr. HARGRAVE, seconded by Mr. SYME—"That the Licentiates of the Royal College of Surgeons in Ireland, registered as such, are qualified to practise both Medicine and Surgery, in accordance with the powers of the Medical Act."

The debate on this motion was adjourned.

Confirmed—JOSEPH HENRY GREEN.

MINUTES OF MEETING, THURSDAY, MAY 28, 1863.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

MR. GREEN, *President*, took the chair at Two o'clock p.m.

Present—

Dr. Burrows.	Dr. Andrew Wood.	Dr. Corrigan.
Mr. Arnott.	Dr. Fleming.	Sir Charles Hastings.
Mr. Cooper.	Mr. Syme.	Dr. Sharpey.
Dr. Acland.	Dr. Thomson.	Mr. Lawrence.
Dr. Bond.	Dr. A. Smith.	Mr. Teale.
Dr. Embleton.	Mr. Hargrave.	Dr. Christison.
Dr. Storrar.	Dr. Leet.	Dr. Stokes.
Dr. Alexander Wood.	Dr. Apjohn.	

Dr. FRANCIS HAWKINS, *Registrar*.

The Minutes of the last meeting were read and confirmed.

The adjourned debate was resumed on Mr. HARGRAVE's motion, viz.—"That the Licentiates of the Royal College of Surgeons in Ireland, registered as such, are qualified to practise both Medicine and Surgery, in accordance with the powers of the Medical Act."

1. Question put—"That Mr. Syme be allowed to withdraw his name as seconder of the foregoing motion."—Carried.

Mr. Hargrave required that the majority and minority be entered on the Minutes.

Majority—	*Minority—*
Mr. Cooper.	Dr. Burrows.
Dr. Acland.	Dr. A. Smith.
Dr. Bond.	Mr. Hargrave.
Dr. Embleton.	Dr. Apjohn.
Dr. Storrar.	
Dr. Alexander Wood.	
Dr. Andrew Wood.	
Dr. Fleming.	
Mr. Syme.	
Dr. Thomson.	
Dr. Leet.	
Dr. Corrigan.	
Dr. Sharpey.	
Mr. Teale.	
Dr. Christison.	
Dr. Stokes.	

2. Moved by Dr. Corrigan, seconded by Dr. Smith—"That the Registrar be directed to forward the following reply, with the documents referred to, to the Director-General of the Army Medical Department :—

"Sir,—I am directed by the General Council of Medical Education and Registration, in reply to the inquiry in your letter of March 14, 1863, 'whether Licentiates of the Royal College of Surgeons, registered as such, are qualified to practise Medicine as well as Surgery,' to inform you that a similar question has been already before the General Council, having been submitted by the Poor-Law Board of England, in a communication of August 5, 1859, and the reply of the General Medical Council will be found in the Minutes of the meeting of General Council of August 10, 1859, a copy of which is herewith sent.

"The General Council, in explaining in that Minute the nature of the qualifications or licences legally granted by the several licensing bodies, enumerated the Royal College of Surgeons in Ireland among the bodies authorised to grant only a Licence or Diploma in Surgery.

"The Royal College of Surgeons of Ireland raised the question again before the Poor-Law Board of Ireland, in October, 1862.

"The Poor-Law Commissioners of Ireland referred the matter to the law officers of the Crown, the Attorney-General and Solicitor-General for Ireland.

"The following is their opinion :—'After perusing and considering the charters of the College of Surgeons, we are of opinion that it has not the power, and is not competent, to grant a Diploma or Degree in Medicine'

"A copy of the opinion is herewith sent. The correspondence at length between the Poor-Law Commissioners of Ireland and the Royal College of Surgeons of Ireland will be found in the Annual Report (16th) of the Poor-Law Commissioners for Ireland, dated March 21, 1863.

"If the opinion of the law officers of the Crown in Ireland be correct, the Royal College of Surgeons of Ireland has not power, and is not competent, to grant a Diploma or Degree in Medicine."

Amendment moved by Dr. Storrar, seconded by Dr. Sharpey—"That the Director-General of the Army Medical Department be respectfully informed that the question, whether the Licentiates of the Royal College of Surgeons of Ireland are qualified to practise both Medicine and Surgery, is one of legal interpretation, on which the Council declines to pronounce an opinion."

The amendment was put, and negatived.

The original motion was then put, and carried.

Dr. Andrew Wood required that the majority and minority on the original motion be entered on the Minutes.

Majority—	*Minority—*
Dr. Burrows.	Dr. Acland.
Dr. Bond.	Dr. Storrar.
Dr. Embleton.	Dr. Thomson.
Dr. Alexander Wood.	Mr. Hargrave.
Dr. Andrew Wood.	Dr. Sharpey.
Dr. A. Smith.	
Dr. Apjohn.	
Dr. Corrigan.	
Sir Charles Hastings.	
Mr. Teale.	
Dr. Stokes.	

3. Moved by Dr. Corrigan, seconded by Dr. A. Smith—"That the Report of the Committee of the King and Queen's College of Physicians in Ireland, on the recommendation of the General Council relative to Preliminary and Professional Education, be printed in the Minutes."—Agreed to.

King and Queen's College of Physicians, Ireland.

Report of the Committee on the Communication of the General Council relative to Preliminary and Professional Education.

The President and Fellows of the King and Queen's College of Physicians in Ireland have had under consideration the Report of the General Medical Council of August 11, 1859, on Preliminary and Professional Education and Examination ; and, fully impressed with the great importance of the subject, they desire to submit the following observations :—

They consider that the mere "opinion" or "recommendation" of the General Medical Council as to what should be required in education and examination will be of no avail to insure competent education and efficient examination in the present circumstances of the numerous qualifying or licensing bodies in the United Kingdom ; for, as the incomes of many of them are dependent more or less on the fees received for licences and degrees, each licensing body is deterred from raising its standard of education and examination to what it may consider adequate, by the apprehension that, in so doing, such standard may exceed the requirement of some other licensing body, and that thus candidates may desert the body requiring the higher standard to obtain a qualification elsewhere on easier terms. This apprehension has not only prevented improvements in education and examination, but it has led to a downward competition, that has of late years caused a progressive deterioration in the standard of preliminary and professional education and examination.

The College is of opinion that this great fundamental defect can only be met, in the present state of the law, by the General Medical Council laying down a definite scheme of preliminary and professional examination for the several Medical licensing bodies ; and in the event of any of those bodies not adopting such scale, that then the General Council should have recourse to the powers vested in them under clause xx. of the Medical Act, and apply to the Secretary of State to have such college or corporation removed from the list of recognised licensing bodies.

It has become the more imperative to lay down such a scheme since the passing of the Medical Act, as previously to the passing of the said act the degrees and diplomas of the several universities and colleges held different values in public estimation, according to the standard of education and examination demanded by each ; but the Legislature having, by the Medical Act, placed all degrees and diplomas in Medicine and Surgery from the several universities and colleges on an equality, it is now incumbent on the General Medical Council to enforce uniformity in education and examination according to the respective qualifications granted.

The College begs to submit the following observations on preliminary education :—

The preliminary education of the Medical student demands the greatest attention. In it is most fully seen the baneful effect of each corporation fearing that its standard may be higher than that of another : and the unfortunate result of preliminary examination not being required previously to entrance on professional education is, that young men enter on the study of the Profession, not only ignorant of Latin and Greek, and of any modern foreign language, but unacquainted with the simplest rules of English composition. As the only occasion of testing preliminary education that presents itself is at the final examination, the consequence is, that if there be then any examination at all in preliminary education, it becomes little more than a mere form, inasmuch as it would be considered harsh to reject a candidate for deficiency in preliminary education after he had spent several years in the study of the Profession.

This great evil can only be obviated by requiring a definite preliminary examination, which the student must pass in whole or in part before commencing his Medical studies.

The College does not approve of the view put forward in the following extracts from the Report of the Medical Council as to the mode of testing preliminary education :—

"That, as far as may be practicable, testimonials of proficiency granted by the national education bodies, according to the following list, be accepted, with such additions as the Medical Council may from time to time think proper to make.

"That the examination on general education be eventually left entirely to the examining boards of national education bodies recognised by the Medical Council."

The following are the reasons on which the College dissent from the foregoing recommendations :—

There never could be any certainty that the "testimonials of proficiency," or "the examination on general education," of the examining boards of "national education bodies" would be, or continue to be, uniform, or such as might be applicable to the Medical Profession. The examinations might frequently vary. They might be from time to time of too high or too low a standard ; they might comprise branches of knowledge not requisite as preliminary to a Medical education ; or they might be deficient in branches which are essential, and the times of the year at which some of them are held would be inconvenient for Medical students. There would be thus entailed on the General Medical Council the annual task of revising the regulations of all the national education bodies of the United Kingdom ; and thence would arise alterations, extensions, or withdrawals of recognition, creating annually perplexity and confusion, which would be still further increased by the changes that are now taking place in progress in some of the universities, by which the undergraduate course is being divided into two departments, one for literature, the other for science.

The General Medical Council would appear to have already in some measure entertained the view here put forward, that a definite code of preliminary education for the Medical Profession should be laid down, for they admit that "a very few, though important branches of knowledge" will require to be specially provided for in the education and mental training of the Medical student.(a)

For the above reasons, the President and Fellows of the King and Queen's College are of opinion that the General Medical Council should originate a scheme of what they consider a sufficient preliminary education and examination for students of their own Profession.

This scheme being thus laid down by the Council, all students who had gone through such examinations in the arts' course of any university as comprised the subjects of such preliminary examination, or who had undergone examination before national education bodies recognised by the General Council, which should in like manner comprise the subjects of preliminary education as laid down by the General Medical Council, should be considered as having passed their preliminary examination. This plan would preserve to the Profession the independence of regulating its own curriculum of preliminary education, and at the same time recognise all arts' courses and examinations of national education bodies which contained the required curriculum.

The President and Fellows are, however, of opinion that the mere matriculation or entrance examination of any university, even though it should ostensibly include all the subjects in the scheme of the Medical Council, should not be received in any case as a sufficient guarantee of the possession of the requisite preliminary education, as the College is aware that many educational authorities are of opinion that matriculation or entrance examinations should be as lenient as possible, in order that students might not be deterred from entering on a university course.

The proposed plan, it is suggested, will preserve a proper control over preliminary education, insure its consonance with the peculiar requirements of the Profession, and tend to enlarge the sphere of the student's general acquirements ; for, while any insufficient course of education will be rejected, there will be an encouragement to his entering on an arts' course that may contain more than he requires, and that will exempt him afterwards from any special examination in preliminary education.

The College would suggest the following as the subjects of preliminary or general education and examination, viz. :—

English composition.
French or German—translated into English.
Latin, do. do.
Greek, do. do.
Logic.

(a) The General Council "believe that, with the exception of a very few though important branches of knowledge, the education and mental training of the students destined for the Medical Profession ought not to differ from those adopted for other professions."—*Vide* Report, p. 1.

Physics, including Elementary Mechanics.
Optics; Hydrostatics; Pneumatics.
Mathematics, including Arithmetic to end of Decimal Fractions.
Algebra, to end of Simple Equations, involving one unknown quantity.
Euclid, first three Books.

There still remains a class of students, though it is hoped their number will rapidly diminish, who may not have gone through a sufficient portion of an University Arts' Course, or undergone any other examination, for whom it will be necessary to provide a preliminary examination.

With regard to these, the following plans are submitted for consideration:—

I. That examiners, to be appointed by the respective Branch Councils of England, Ireland, and Scotland, which severally represent the licensing bodies of their respective divisions of the United Kingdom, should at certain stated periods forward, with due notice, to an authorised person in the several cities or towns in which recognised Medical schools are established, printed examination papers, under regulations such as are now adopted in examinations in the Civil Service Department; or—

II. That at stated periods the students of this class should attend at London, Dublin, or Edinburgh, to undergo a like examination as in the Civil Service.

The College desires to express its preference for the first of these plans.

Before quitting the subject of preliminary or general education, the College desires to draw the attention of the General Medical Council to an inconsistency in the list of bodies proposed to be recognised in Ireland as competent to grant "testimonials of proficiency," by their ordinary examinations. The matriculation examinations of the three Colleges of the Queen's University, viz., the Queen's Colleges of Belfast, Cork, and Galway, and of the Apothecaries' Hall of Ireland, are excluded, although comparatively extended, and with a very moderate fee annexed; while the entrance examination of the Dublin University is the only testimonial recognised, which is not so extended as the others, and for which the fee is so heavy as almost to amount to a prohibition.(b)

The Apothecaries' Hall of Ireland is protected against competition, and has therefore a power of maintaining the curriculum as above, which the other corporations named in Schedule A of the Medical Act do not possess; for Clause LV. of the Medical Act enacts that "nothing in this Act shall extend or be construed to extend to prejudice or in any way affect the rights, privileges, or employment of duly licensed apothecaries in Ireland, so far as the same extend to selling, compounding, or dispensing medicines;" and by the Apothecaries' Act of Ireland of 1791 (31 Geo. III. c. 34, s. xxvi.) it is enacted that, "if any apothecary shall open shop or wareroom for the retail of medicine, or practise the art and mystery of an apothecary, within the kingdom of Ireland, without such person or persons having obtained the proper certificate for that purpose hereinbefore directed, such person so offending shall for every such offence forfeit the sum of twenty pounds, to be recovered by the Governor and Company of the Apothecaries' Hall of Dublin."

With regard to recommendation No. 8, that no student should be permitted to begin his Professional studies who had not previously passed the requisite preliminary examination, the College is of opinion that it would be more conducive to a sound general education for the student to undergo it in two parts:—the first, comprising English, Latin, Greek, and arithmetic, previously to his beginning any Professional study; the second part, containing a modern language, logic, mathematics, algebra, and physics at the end of the first and second year's professional study, to be undergone previously to his admission to the first professional examination.

By thus prolonging the general or preliminary education into the first years of professional study, a better general education would be secured to the student, than by premature and isolated studies of literature and science.

On the second division of the subject of professional education, the College desires to observe that they consider it most desirable that the examination should be divided, as recommended by the Education Committee, into two parts: the first comprising the elementary and collateral branches; the second, the practical department of Medicine, Surgery, and Midwifery.

The College does not think it necessary at present to go into details of courses of lectures or branches of study; these will more properly remain for the consideration of the General Council.

It is, however, equally as incumbent on the General Medical Council to lay down a course of education and examination under the head of Professional education, as under the head of preliminary or general education; and the College only desires at present to suggest that, in the second or final part of the professional examination in Medicine and Surgery, a portion of it should be strictly practical, viz., by examination and diagnosis, and proposed treatment of Hospital cases at the bed-side, carried out under the immediate observation of the examiners; and also, in addition to the *vivâ voce* examination, that a portion of the examination should be by papers, which would be available for reference, in the event of any inquiry being found necessary as to the efficiency of the examination.

The College attaches much more value to efficient examination than to any code of education or courses of attendance on lectures or Hospital practice; for they believe it will be admitted, that under the present system the required certificates can frequently be obtained without any sufficient evidence of regular attendance on the part of the student, or any proof whatever of his having acquired any Professional knowledge during such attendance.

The College is also of opinion that, in all applications for diplomas in medicine or surgery, the applicant should state whether he has been previously rejected by any of the Universities or Colleges; for it is well known that at present it is frequently the case that a rejected candidate passes in quick succession from one examining body to another, until he meets with an examination sufficiently low to permit him to pass it. It might be advisable to have a regulation, that a candidate rejected by any University or College should not be examined by any other until a period of — months had elapsed.

Should any of the plans here proposed, or any others, which will enforce uniformity and sufficiency of education and examination, be adopted by the General Medical Council, the President and Fellows of the King and Queen's College of Physicians in Ireland will support and carry it out; but they have no confidence in the construction or permanence of any scheme of education or examination which is not rendered compulsory on all; nor do they consider it practicable for any of the several corporations to sustain any improved code of education or examination while it is left optional with other competing licensing bodies to adopt it or depart from it.

P.S.—The question of the fees payable for degrees or diplomas has not been alluded to in the Report; but the College would suggest that the subject is one deserving the consideration of the General Council.

The College is not sufficiently acquainted with all the relations and circumstances of the several licensing bodies of England and Scotland to offer any general observations in reference to the United Kingdom.

They beg to observe, that in Ireland there are at present four public bodies granting degrees or diplomas in medicine and surgery, viz., the University of Dublin, the Queen's University, the King and Queen's College of Physicians, and the Royal College of Surgeons. Of these, the two former, viz., the Dublin University and the Queen's University, are in possession of large endowments granted by the State in former years, or of a large annual Parliamentary grant; while the other two, viz., the King and Queen's College of Physicians and the Royal College of Surgeons, receive no aid from the State, and are wholly dependent on the fees received from candidates for examination.

It appears to the College that a competition as to fees between bodies so differently circumstanced would be most unfair; and the College hopes that, on the subject being brought under the notice of the representatives of the several licensing bodies constituting the General Council, such a scale of fees for degrees and diplomas will be arranged as will be satisfactory and just to all concerned.

Ordered by the College to be printed.

April, 1863. Lombe Atthill, M.D., *Registrar.*

Read the following memorial from the Company of the Apothecaries' Hall of Dublin:—

To the General Council of Medical Education and Registration of the United Kingdom.

The Memorial of the Company of the Apothecaries' Hall of Dublin

Sheweth,—That by Royal Warrant for the regulation of Medical Officers of the Army, bearing date October 1, 1858, and issued subsequently to the passing of the "Medical Act," it is required that every candidate for the Army Medical Service, before being allowed to present himself at the Competitors' Examination, should, in addition to a Diploma in Surgery, "produce a Qualification in Medicine, or a Licence to practise it from one of the Colleges or Bodies legally authorised to grant a Certificate to that effect, or that qualifies a Civilian to practise Medicine" in Great Britain or Ireland.

That the late Director-General of the Army Medical Department, and the late Secretary of State for War, signified their intention to recognise the licence of the Company of the Apothecaries' Hall of Dublin, as being one of the bodies enumerated in schedule (A) of the Medical Act, as "a certificate that qualifies a civilian to practise Medicine" referred to in the Warrant.

That the Medical Council, by raising doubts as to the sufficiency of the qualification granted by the Company, have prevented this recognition taking effect, and have thereby entailed obloquy and injury upon the Company and their licentiates.

That the Company have left no means untried to satisfy the Council of the power of the Company to grant a licence, such as entitles its holder to practise Medicine, as well as of their licentiates being both "de facto and de jure" Medical Practitioners; and in evidence thereof the Company have laid before the Council legal opinions by the highest authorities both

(b) The following are the Curricula of the Matriculation or Entrance Examination of the several bodies above mentioned, with the fees of each, viz:—

Apothecaries' Hall of Ireland.	Queen's College, Belfast.	Queen's College, Cork.	Queen's College, Galway.	Dublin University.
Latin. Sallust. Virgil.	*Latin.* Horace. Quintus Curtius. Virgil. Livy. Sallust–Cæsar. Any two of the above Books which the Candidate may select; with translations from English into Latin of portions of Cæsar.	*Latin.* Virgil. Re-translation into English from Cæsar.	*Latin.* Any one of the following authors:— Virgil. Horace. Sallust. Cæsar. Re-translation	*Latin.* Any two of the following:— Virgil. Horace. Sallust. Livy. Terence.
Greek. Gospel of St. John; Or Dialogues of Lucian; Or Homer's Iliad, two Books.	*Greek.* Homer. Euripides. Xenophon. Lucian. Any two of the above	*Greek.* Xenophon. Grammar.	*Greek.* Any one of the following authors:— Homer. Xenophon. Lucian.	*Greek.* Any two of the following:— Homer. Gospel. Euripides. Sophocles. Plato. Lucian. Xenophon.
French. Telemachus. Charles XII.	*English Language.* English Grammar and Composition	*Mathematics.* Euclid, Book I.	*Mathematics.* Euclid, two Books.	*English.* Composition. History.
Science. Euclid, two Books. Algebra, including simple Equations. Arithmetic, especially Decimals.	*History.* Roman History.	*Arithmetic.*	*Arithmetic.* Algebra.	*Algebra.*
Composition. *English.*	*Geography.* Ancient and Modern.	*English.* Grammar.	*English.* English Grammar and Composition	*Geography.* Modern.
	Mathematics. Euclid. Algebra. Arithmetic.		*History.* Grecian and Roman. *Geography.* Ancient and modern.	
Fee 5s.	Fee 10s.	Fee 10s.	Fee 10s.	Fee 16 guineas.

in England and Ireland; to wit, the Right Honourable Joseph Napier, late Attorney-General of Ireland, who states: "That, on a full consideration of the statutes and authorities (English and Irish) I am of opinion that the legal rights and privileges of the Irish Apothecary are not inferior to those of the English. That in the course of a considerable experience I have never known these rights or privileges doubted, or made a question in courts: several proceedings have taken place in later years to put down ignorant and unskilful persons who practised *though unlicensed*, but the general rights of the licensed Apothecary have not been, nor, as I conceive, could they have been properly questioned." And the Right Honourable Sir Richard Bethel, late Attorney-General of England, who, with the Irish Apothecaries' Act, the Medical Act, the Royal Warrant, and the objections of the Medical Council before him, states: "I have not the least doubt, therefore, of the Company of Apothecaries in Ireland being a body legally qualified and empowered to grant licences to *practise Medicine*, or of its Licentiates being *regularly qualified Medical Practitioners* within the true meaning and intent of the Medical Registration Act." There can be no doubt of the right of existing and future Licentiates of the Apothecaries' Hall, Dublin, to be registered under that Act, and when registered as such licentiates to *practise Medicine*; the fact of being registered under the Medical Act is such a certificate as justifies a civilian to *practise Medicine*; and every person so registered *has a good title to present himself at the competitive examination.*"

That the Company are induced thus briefly to restate their case, and from it make another appeal to the General Council, with the hope that they will be led to see that it is a matter not of favour, but of simple justice to recognise the license of the Company as "a qualification in Medicine," and that having accepted the course of study and examination to be gone through in order to obtain this qualification, and having finally admitted the Licentiates of the Apothecaries' Hall of Ireland to the *Medical Register*, the Council cannot judicially deny to them the title which is common to all other persons similarly circumstanced, to present themselves at the competitive examination for the appointment of Assistant-Surgeon in Her Majesty's service.

Signed, on behalf of the Apothecaries' Company of Dublin,

JEROME O'FLAHERTY.

Apothecaries' Hall of Dublin, October 25, 1862.

4. Moved by Dr. STORR, seconded by Dr. ALEXANDER WOOD—"That the Memorial from the Apothecaries' Company, Dublin, be received and printed in the Minutes."—Agreed to.

5. Moved by Dr. LEET, seconded by Mr. SYME—"That the General Medical Council, having by their resolution of August 9, 1859, declared "that the License of the Apothecaries' Hall of Ireland is not equivalent to a Degree from a University or College authorised to grant such;" and that this resolution being at variance with the provisions of the Medical Act, which does not recognise any difference in the qualifications of registered Practitioners, as regards the right of practice, further than as those qualifications refer to Medicine or Surgery; that this Council now declare that the Licentiates of the Apothecaries' Hall of Ireland are admitted to registration as Practitioners in Medicine."—The debate on this motion was adjourned.

Confirmed—JOSEPH HENRY GREEN.

MINUTES OF MEETING, FRIDAY, MAY 29, 1863.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

Mr. GREEN, *President*, took the chair at Two o'clock p.m.

Present—As before.

The Minutes of the last meeting were read and confirmed.

Dr. BURROWS laid before the Council the Report of the Finance Committee.

1. Moved by Dr. BURROWS, seconded by Dr. ANDREW WOOD—"That the Report of the Finance Committee be received and entered on the Minutes."—Agreed to.

Report.

The Finance Committee beg leave to present, in the Table subjoined, a statement of the Estimated and Actual Income and Expenditure of the year 1862; also an Estimate of the Income and Expenditure, as far as the Committee are able to judge, for the year 1863.

	Estimated Income for the Year 1862.		Actual Income for the Year 1862.		Estimated Income for the Year 1863.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Fees received by—						
Branch Council for England	2400 0 0	..	2529 5 0	..	2500 0 0	..
" " Scotland	600 0 0	..	556 0 0	..	550 0 0	..
" " Ireland	650 0 0	..	702 10 0	..	650 0 0	..
		3650 0 0		3787 15 0		3700 0 0
Dividends received by—						
Branch Council for England	600 0 0	..	618 9 8	..	616 0 0	..
" " Scotland	80 0 0	..	81 7 3	..	78 0 0	..
" " Ireland	70 0 0	..	71 0 2	..	69 0 0	..
		750 0 0		768 17 1		763 0 0
Sale of Registers	..	80 0 0	..	85 2 0	..	350 0 0
Penalties	..	..	..	20 0 0		..
		£4480 0 0		£4661 14 1		£4793 0 0

	Estimated Expenditure for the Year 1862.		Actual Expenditure for the Year 1862.		Estimated Expenditure for the Year 1863.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Expenses of—						
General Council	3000 0 0	..	..	(a)3161 15 5	..	3068 0 0
Branch Council for England	650 0 0	..	527 12 5	..	580 0 0	..
" " Scotland	314 0 0	..	248 13 6	..	270 0 0	..
" " Ireland	400 0 0	..	289 11 6	..	300 0 0	..
		1364 0 0		1069 17 5		1115 0 0
		4364 0 0	Advanced to the Pharmacopœia Committee	600 0 0		4183 0 0
Balance in favour of Medical Council		116 0 0			Balance in favour of Medical Council	610 0 0
		£4480 0 0	Total Expenditure ..	4830 12 10		£4793 0 0
			Total Income	4661 14 1		
			Excess of Expenditure over Income ..	£168 18 9		

(a) This includes the sum of £406 7s. for the General Meeting in October.

The Committee also append a statement of the actual and prospective expense of the publication of the Register, under the reduced charge for printing, and the arrangement that 2000 copies in sheets are to be purchased for circulation by Her Majesty's Government.

Statement showing the Actual and Prospective Saving in the Expense of Publishing the Register.

750 Copies of the Medical Register for 1862 cost	£489 5 7	
Total Receipts for Sale of ditto	85 2 0	
Loss in 1862	£354 3 7	
750 Copies of the Medical Register for 1863, under the new estimate (see General Minutes, No. 38, p. 2, and No. 48, p. 5, and Executive Committee Minutes, No. 37, p. 2), cost ..	325 15 10	
2000 Copies in sheets to be circulated by Government	168 0 0	
	£493 15 10	
Probable Produce by Sale of the Medical Register for 1863, say £280 0 0		
By Sale of 2000 to the Government 250 0 0		
	330 0 0	
Loss in 1863	£163 15 10	
In future years the cost of 2500 Copies of the Medical Register will be about	475 0 0	
And the Produce of the Sale about	330 0 0	
Leaving a deficiency of about	£145 0 0	

The Finance Committee of 1862 called the attention of the Council to the cost of publishing the monthly lists of new entries on the local Registers (see General Minutes, No. 42, p. 11), and the Council, on the recommendation of the Committee, directed that henceforth the publication of the lists should be quarterly. The result of this change has been as follows:—

The Monthly Lists for 1861 cost £53 17 6

The Quarterly Lists for 1862, as recommended by the Finance Committee of last year, cost 30 0 0

Being a saving of £23 17 6

The Finance Committee have also suggested certain modifications in the Annual Statement of Receipts and Expenditure, etc., for the consideration of the Executive Committee.

The Committee have again to report that, with respect to the further demand that may be made on the funds of the Council, on account of the publication of the Pharmacopœia, they can offer no approximate estimate.

The General Secretary of the Pharmacopœia Committee has placed before the Finance Committee a statement of Accounts for the past year, and this is appended to the foregoing Report.

We have examined this account and the vouchers, and find that there is a balance of £119 0s. 10d., as stated.

J. M. ARNOTT, AQUILLA SMITH, GEORGE BURROWS, M.D., } *Auditors.*

On the motion of Dr. EMBLETON, the Council resolved itself into a Committee on Education.

Dr. EMBLETON laid before the Council a corrected tabular statement, showing the conformity or non-conformity of the Regulations of the Bodies in Schedule (A) with the recommendations of the Medical Council, and the reasons for non-conformity given by the respective bodies.

2. Moved by Dr. EMBLETON, seconded by Dr. STOKES—"That the corrected tabular statement, showing the conformity or non-conformity of the regulations of the Bodies in Schedule (A) with the recommendations of the Medical Council, be received and printed in the Minutes."—Agreed to.

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TABLE OF THE REGULATIONS OF THE BODIES MENTIONED IN SCHEDULE (A) TO THE MEDICAL ACT, RELATIVE TO EDUCATION AND EXAMINATIONS, SHOWING THEIR CONFORMITY OR NON-CONFORMITY WITH THE RECOMMENDATIONS OF THE MEDICAL COUNCIL.

	Examination in General Education (including Latin) before Commencement of Professional Studies. (Recommendations 1 & 5.)	Commencement of Professional Studies to be at a Medical School. (Recommendation 2.)	Four Years at least of Professional Studies required. (Recommendation 18.)	Professional Examinations to be divided into at least Two Parts; the First to take place after Two Years, the Second after Four Years of Study. (Recommendation 19.)	Twenty-one to be the earliest Age for a Licence. (Recommendation 17.)	Candidates to sign Statement that they have not been rejected within Three Months. (Recommendation 24.)
Royal College of Physicians, London.	Conformable	Conformable ..	Conformable.	For Licentiates. First examination after the termination of the 2nd Winter Session of study at a recognised Medical School; the Second after at least 18 months from the first examination. Not conformable as regards Members.	Conformable.	Conformable.
Royal College of Surgeons of England.	Conformable	Attendance on lectures or hospital practice, or registered pupilage, considered as commencement of professional studies. Not conformable.	Conformable.	First examinant is after the termination of the 2nd Winter Session of attendance at a recognised School; the Second after the termination of the fourth year of professional education. First examination not conformable.	Conformable.	Not noticed.
Society of Apothecaries, London.	Conformable	Conformable ..	Conformable.	First examination after the 2nd Summer Session; the second after the 4th Summer Session. Conformable.	Conformable.	Not noticed.
University of Oxford.	Conformable	Not conformable ..	Conformable.	Generally conformable .. .. Not conformable.	Not stated .. Not conformable.	Not required.
University of Cambridge.	Conformable	Conformable ..	Conformable	Conformable	Practically in conformity, but no such regulation has been framed.	Not required. All students have, in fact, been required to do so by the examiners; but no formal Regulation has been made.
University of Durham.	Conformable	Conformable ..	Conformable.	Conformable	Conformable.	Not noticed.
University of London.	Conformable	Conformable ..	Conformable.	Conformable	Conformable.	Not noticed, but implied.
Royal College of Physicians of Edinburgh.	Not conformable. Preliminary examination before admission to the professional examination.	Doubtful	Conformable.	Not conformable. Professional examinations conducted either as a whole, or in parts. In case of students, always in two parts, but no distinction of interval of two years.	Conformable.	Not noticed.
Royal College of Surgeons, Edinburgh.	Not conformable. In consequence of the proceedings of the General Council in May, 1862, these recommendations will not be complied with until further notice.	Not conformable, for the foregoing reason; postponed.	Four years, which shall include not less than four Winter Sessions, or three Winter Sessions and two Summer Sessions. This regulation, for the foregoing reason, postponed.	First examination not sooner than the end of the 2nd Winter Session; the second not before the termination of the Winter Session of the last year of study.	Conformable.	Not noticed.
Faculty of Physicians and Surgeons, Glasgow.	The same as preceding..	The same as preceding.	The same as preceding.	The same as preceding..	Conformable.	Not noticed.
University of Aberdeen.	Conformable	Conformable ..	Conformable.	Three professional examinations: the first after 2nd year's study, the second after 3rd year's study, and the third after 4th year's study. Candidates may, if they choose, be admitted to examination on the two first of these divisions at the end of their 3rd year, or to three examinations at the end of their 4th year. Not conformable.	Conformable.	Not noticed.
University of Edinburgh.	Examination in general education, as far as possible, prior to the commencement of Medical study. Exceptions extremely few. Practice conformable.	Conformable ..	Conformable.	The same as above .. .. .. Not conformable.	Conformable.	Not noticed.
University of Glasgow.	The same as preceding..	Conformable ..	Conformable.	The same as above .. .. .. Not conformable.	Conformable.	Not noticed.
University of St Andrew.	The same as preceding..	Conformable ..	Conformable.	The same as above .. .. .. Not conformable.	Conformable.	Not noticed.
King and Queen's College of Physicians in Ireland.	Examination in general education previous to or within the first two years of professional study.	Conformable ..	Conformable.	Students are recommended to divide their course of study into two periods of two years each. The examination is divided into two parts. Students may be examined in the subjects of the first part at the termination of the first period of study, or in all the subjects of their education on the completion of their Medical studies.	Conformable.	Not required.
Royal College of Surgeons in Ireland.	Conformable, but Regulation suspended.	Conformable ..	Conformable.	Conformable as to division of the examinations, but first examination after three years, and the second after four years' study.	Conformable.	Conformable.

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	Examination in General Education (including Latin) before Commencement of Professional Studies. (Recommendations 1 & 5.)	Commencement of Professional Studies to be at a Medical School. (Recommendation 2.)	Four Years at least of Professional Studies required. (Recommendation 18.)	Professional Examinations to be divided into at least Two Parts; the First to take place after Two Years, the Second after Four Years of Study. (Recommendation 19.)	Twenty-one to be the earliest Age for a Licence. (Recommendation 17.)	Candidates to sign Statement that they have not been rejected within Three Months. (Recommendation 24.)
Apothecaries' Hall, Dublin.	Conformable	The practice conformable, but the Regulation not explicitly stated.	Conformable.	For Licentiates. The examination divided into two parts. First examination may be at the close of the 2nd Winter Session; the second not before the completion of the 4th Winter Session.	Conformable.	Not required. A question as to this is put verbally to the candidate before examination.
University of Dublin.	Conformable	Conformable ..	Conformable.	Conformable.	Not stated ..	Not noticed.
Queen's University in Ireland.	Candidates recommended to pass the matriculation examination prior to entering on the second period of professional studies.	Conformable ..	Conformable.	The first examination may be passed at the termination of the 1st period of curriculum, extending over two years, or at any subsequent period, or simultaneously with the degree examination.	Not stated ..	Not required.

Read the letter from the Royal College of Surgeons of England, referred to the Committee by the Council. (See Minutes No. 48, p. 2.)

Read a memorial from the Medical Officers of the Devon and Exeter Hospital. Also a memorial from the Medical Officers of the West of England Infirmary for the Cure of Diseases of the Eye

3. Moved by Mr. Arnott, seconded by Dr. Acland—"That the memorials from the Medical Officers of the Devon and Exeter Hospital, and from Medical Officers of the West of England Infirmary for the Cure of Diseases of the Eye, be received and entered on the Minutes."—Agreed to.

To the President and General Council of Medical Education and Registration of the United Kingdom.

The Memorial of the Physicians and Surgeons of the Devon and Exeter Hospital,

Sheweth,—That we the undersigned, being Physicians and Surgeons of the Devon and Exeter Hospital, beg most respectfully to represent to the General Council that the Devon and Exeter Hospital was founded, in the year 1741, by the Very Reverend Dr. Clarke, Dean of Exeter, who had previously founded the Hants County Hospital at Winchester.

That the Devon and Exeter Hospital has four Physicians, four Surgeons, and a Resident House Surgeon, Apothecary, besides Consulting Physicians and Surgeons, who were so elected on retiring from the more active duties of Physicians and Surgeons. That it contains 228 beds, and is most liberally furnished with every appliance. That it has a Museum of Natural and Morbid Anatomy, with Lecture and Dissecting Rooms attached. That it has a Medical Library of about 3000 volumes (comprising every branch of Medical literature), derived chiefly from the libraries of Dr. Glasse, Dr. Bartholomew Parr, and the late Samuel Barnes; and that this Library, which is supported by the contributions of the Medical Staff, and most of the Medical Practitioners of Exeter, is open to the students frequenting the said Hospital on the payment of a small annual subscription.

That we further beg leave to state that for more than a century the Devon and Exeter Hospital has been reputed to be an eminent school of clinical instruction. That its apprentices and students have been distinguished in the Metropolitan Schools for their knowledge of Medicine, Surgery, and practical Anatomy as long as Schools of Medicine have existed in the Metropolis.

That notwithstanding that these facts are frankly acknowledged in the chief Metropolitan Schools for Medicine, the number of students, especially of apprentices, has of late so declined, that the General Committee of Governors of the said Devon and Exeter Hospital have passed and sent to us, your memorialists, the following resolution:—"That the Medical officers of the Hospital be desired to consider the great diminution of the number of the pupils that are entered here, and if any, and what remedy can be applied, and report thereon to the weekly board."

To this inquiry we, your memorialists, have replied that the diminished number of pupils has been principally, if not entirely, caused by the gradually prolonged courses of study at Medical Schools enforced on candidates by the various examining and licensing boards, and the consequent neglect of early practical study; and that we are further convinced that the evil will be increased and perpetuated if the General Council, ignoring the valuable means of early education afforded by the Hospitals, Dispensaries, and other Medical Institutions, so numerous in all parts of England, should persevere in their present resolution to confine the commencement and prosecution of Professional study to Medical Schools.

That we further assured the Committee of the Devon and Exeter Hospital, that as the regulations of the General Council diminish the number of pupils throughout the country districts, to the prejudice of Medical education, and serious inconvenience in conducting the business of provincial Hospitals, and other Medical Institutions, we regarded the question as one of importance to the members of the Medical Profession generally, that we therefore should deem ourselves justified in calling attention to this subject, in order that we might take counsel with the Medical officers of other provincial Hospitals in England, which, like our own, though not fully constituted "Schools of Medicine," are recognised as "Clinical Schools" by the Royal Colleges of Physicians and Surgeons.

That we were the more bold in adopting these opinions, and in taking this course, because we believe that the majority of the members of the General Council are by their high position, social and Professional, too far removed from the great body of Medical Practitioners to be intimately acquainted with their habits of life and mode of practice, whilst we, who are largely consulted throughout a very extensive and varied district, presenting every conceivable condition of practice, are intimately acquainted with our Medical brethren at their own homes, and in the houses of our patients.

That we would premise that, in any suggestions we may presume to offer, we do not contemplate the higher rank in Medicine or Surgery, but the great body of general practitioners; the former, after the completion of their collegiate education, can afford for many years to maintain their connexion with Hospitals and other great Medical Institutions, and scarcely commence practice in earnest until they have attained to middle life; whilst the latter, who constitute the more important class of the Medical Profession, enter early upon their full sphere of duty, and must be competent from the outset to act with self-reliance, business habits, and powers of physical endurance.

That the mode of education formerly pursued fulfilled these conditions, it being eminently practical; that it commenced with an apprenticeship nominally of five years, but practically of shorter time, because it usually included the period spent at a Medical School; that it taught from the commencement the daily requirements of the Medical man, trained him to the general duties of private practice, instructed him in Medicine, Surgery, and Pharmacy; and that, where the education was conducted in an Hospital, Anatomy was usually acquired, and the higher doctrines and proceedings of Surgery inculcated under circumstances far more advantageous than they can be in a crowded Hospital attached to a Medical School; that the apprentice then proceeded to a Metropolitan School, where he attended a few short courses of lectures, but was particularly occupied with Dissection and with Hospital Practice, which the knowledge he had already acquired enabled him to comprehend; that, during the summer, he usually returned to his master, and applied in practice the science he had acquired in the school; and thus this practical knowledge, collected day by day, and without exhausting effort, was early associated with a patient self-reliance and self-confidence necessary to its judicious application.

That the system enunciated by the General Council (after some preliminary examination, which implies the possession of a certain amount of general knowledge), begins and ends with lectures in a Medical School, and with Hospital Practice—this occupies nearly four years; that the number of lectures is so considerable, and their topics so varied, that the mind of the student (wholly unfamiliarised, as is assumed, with Medical subjects) is bewildered and exhausted by the continuous strain upon its attention.

That, during this exhausting succession of lectures, Hospital Practice is, indeed, enjoined, but it is performed under all the unfavourable circumstances of a crowd, and that Practical Anatomy is not so diligently cultivated as heretofore.

That this system does not make the practical and ready man, so conspicuously the case in the older plan of a preliminary apprenticeship.

That it provides, by lectures, a full amount of Professional lore, but that it virtually sets aside the practical instruction available throughout the provinces, under the guidance of country Practitioners, and of the Medical officers of provincial Hospitals.

That these important sources of efficient practical instruction, where disease can be calmly studied, and its treatment be understood and appreciated, are now, in a great measure, running to waste; whilst, by returning to the former system of Medical education, they would be utilised for the improvement of Medical education and the public benefit.

That we trust we shall be pardoned if we remind the General Council that there are in England nearly three hundred Provincial Hospitals and Dispensaries, besides clubs and unions, which, however unpretentious, supply a still larger and more important experience in the treatment of acute disorders, all of which are available for clinical instruction, but from which, as we understand, it withholds its sanction.

That, even at the risk of being wearisome, we must again entreat the General Council to be patient and hear us; that, in the former mode of education, a large proportion of young Medical pupils passed their earlier years of study in the country, for the most part under the care of their immediate relations; that the plan of the General Council renders their residence in a large city during the whole period of Medical education obligatory; that this not only injures their morals, but presses heavily on the means of their parents; that it will cast almost insuperable difficulty in the way of Medical Practitioners, country clergymen, and other Professional men, who could formerly educate their sons for the Medical Profession at a moderate expense, and that we conceive the result is already evident.

That we, your memorialists, therefore earnestly entreat that the General Council may have regard to the education of that more numerous and more important class of the Practitioners of Medicine, and no longer seek to compel them to a course of study well suited, indeed, to its own members, and to those whose circumstances justify their aspiring to the exclusive class of Consulting Practitioners, but wholly unsuited to the limited means and toilsome lives of General Practitioners.

J. Shapter, F.R.C.P.	P. C. De la Garde, F.R.C.S.
Sam. Budd, M.D.	John Edye, M.R.C.S., L.S.A.
Augustus Drake, M.B.	Arthur Kempe, F.R.C.S.
W. H. Elliot, M.D.	W. W. James, F.R.C.S.
P. Miller, M.D.	Jno. Haddy James, F.R.C.S.
Fred. Granger, M.B.	

To the General Council of Medical Education and Registration of the United Kingdom.

The respectful Memorial of the Medical Officers of the West of England Infirmary for the Cure of Diseases of the Eye,

Sheweth,—That the said Infirmary was founded in Exeter in the year 1808, and is the oldest provincial Eye Infirmary in England.

That as its means have enlarged its benefits have been more widely extended, and that it derives its patients mainly from the four Western Counties.

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That it is conducted with the utmost liberality, so as to facilitate as much as possible the admission of all persons requiring its aid. That to this end all Clergymen, whether subscribers or not, are privileged to introduce their own poor parishioners as out-patients. That in practice the recommendation to this charity is a bad eye, and that no introduction is required, except when there are strong grounds to suspect imposition. That for an in-patient the recommendation of a Governor (whose right of recommendation is unlimited) is required, but that such patient is supported free of all expense, whatever length of time he may remain, unless by his own admission he can pay a small sum towards the positive expense of his maintenance.

That it had under care during the last year 1874 patients, of whom 78 were in-patients. That since the opening of the Infirmary there have been admitted 42,641 patients; that of these 612 have been cured of blindness from cataract, and 98 an operation for artificial pupil.

That the pupils attending this Infirmary rarely exceed five in number; that they are therefore able to inspect, under the supervision of the Surgeon, the patients resorting thereto, and actually and truly to see the operations and other delicate manipulations, which is impossible when many pupils are collected together; that they have ample opportunities of afterwards watching these cases in which operations have been performed, and know exactly the result.

That we, your Memorialists, believe that this genuine practical instruction is the common characteristic of Provincial Medical Charities, we therefore earnestly pray that the General Council may encourage Medical Students to resort to Provincial Schools of Clinical Instruction, and not limit its recognition of "practice" to the crowded Hospitals attached to "Schools of Medicine."

P. C. De la Garde, John Eddy, } Surgeons.
T. Shapter, M.D., Physician.

Moved by Dr. Andrew Wood, seconded by Mr. Syme,—"That inasmuch as the Regulations of the Royal College of Surgeons of England do not require the commencement of Medical Study to be at a Medical School, they are not in accordance with the recommendations of the Medical Council, and are not such as to secure the possession of the requisite knowledge and skill for the efficient practice of Surgery."

The debate on this motion was adjourned.

Confirmed—Joseph Henry Green.

MINUTES OF MEETING, SATURDAY, MAY 30, 1863.

Royal College of Physicians, London.

Mr. Green, *President*, took the chair at Two o'clock, p.m.

Present—

Dr. Burrows.	Dr. Andrew Wood.	Dr. Corrigan.
Mr. Arnott.	Dr. Fleming.	Sir Charles Hastings.
Mr. Cooper.	Mr. Syme.	Dr. Sharpey.
Dr. Acland.	Dr. Thomson.	Mr. Teale.
Dr. Bond.	Dr. A. Smith.	Dr. Christison.
Dr. Embleton.	Mr. Hargrave.	Dr. Stokes.
Dr. Storrar.	Dr. Leet.	
Dr. Alexander Wood.	Dr. Apjohn.	

Dr. Francis Hawkins, *Registrar*.

The Minutes of the last meeting were read and confirmed.

1. Moved by Dr. Alexander Wood, seconded by Dr. Fleming—"That, whereas the Four-law Commissioners of Ireland require that every candidate for Medical employment under them shall produce a licence in Midwifery, in addition to licences in Medicine and Surgery, it be remitted to a Committee to consider whether such a requirement is legal, and whether the Council should take any step in regard to it.

"The Committee to consist of

Dr. Alexander Wood, Chairman.	Dr. A. Thomson.
Mr. Teale.	Dr. Sharpey.
Dr. Leet.	Dr. Fleming."
Dr. Bond.	

—Agreed to.

On the motion of Dr. Embleton, the Council resolved itself into a Committee on Education.

The adjourned debate was resumed on Dr. Andrew Wood's motion, viz.:—"That inasmuch as the Regulations of the Royal College of Surgeons of England do not require the commencement of Medical study to be at a Medical School they are not in accordance with the Recommendations of the Medical Council, and not such as to secure the possession of the requisite knowledge and skill for the efficient practice of Surgery."

(First Amendment.)

Moved by Dr. Apjohn, seconded by Dr. A. Smith—"That this Council do submit a case to Her Majesty's Attorney-General and Solicitor-General, with the view of ascertaining whether, under the provisions of the Medical Act, this Council possesses the power of issuing Regulations in relation to the general and professional education of Medical students, the enforcement of which will be mandatory upon the different licensing bodies enumerated in Schedule (A) of said Act."

(Second Amendment.)

Moved by Mr. Hargrave, seconded by Dr. Corrigan—"That the second Recommendation of the Report on Education be re-considered, viz.:—That the time of commencing professional studies shall be understood to be the time of commencing studies at a Medical School, and that no qualifying body be held to have complied with the recommendation of the Council which shall allow the examination in general education to be passed after the commencement of professional study."

Question put to the vote—"That the original motion be amended."—Carried.

Dr. Andrew Wood required the majority and minority to be entered on Minutes.

Majority—	*Minority*—
Mr. Arnott.	Dr. Storrar.
Mr. Cooper.	Dr. Alexander Wood.
Dr. Acland.	Dr. Andrew Wood.
Dr. Bond.	Dr. Fleming.
Dr. Embleton.	Mr. Syme.
Dr. A. Smith.	Dr. Thomson.
Mr. Hargrave.	Dr. Leet.
Dr. Apjohn.	Sir C. Hastings.
Dr. Corrigan.	Dr. Sharpey.
Mr. Lawrence.	Dr. Christison.
Mr. Teale.	
Dr. Stokes.	

Second amendment put and negatived.

Dr. Andrew Wood required that the majority and minority be entered on the Minutes.

Majority—	*Minority*—
Dr. Storrar.	Mr. Arnott.
Dr. Alexander Wood.	Mr. Cooper.
Dr. Andrew Wood.	Dr. Acland.
Dr. Fleming.	Dr. Bond.
Mr. Syme.	Dr. Embleton.
Dr. Thomson.	Dr. A. Smith.
Mr. Hargrave.	Mr. Hargrave.
Dr. Leet.	Dr. Corrigan.
Dr. Corrigan.	Mr. Lawrence.
Sir Charles Hastings.	Mr. Teale.
Dr. Sharpey.	Dr. Stokes.
Dr. Christison.	

First amendment put and negatived.

Dr. Andrew Wood required that the majority and minority be entered on the Minutes.

Majority—	*Minority*—
Dr. Embleton.	Mr. Arnott.
Dr. Storrar.	Dr. Acland.
Dr. Alexander Wood.	Dr. Bond.
Dr. Andrew Wood.	Dr. A. Smith.
Dr. Fleming.	Dr. Apjohn.
Mr. Syme.	Mr. Lawrence.
Dr. Thomson.	Mr. Teale.
Mr. Hargrave.	Dr. Stokes.
Dr. Leet.	
Dr. Corrigan.	
Sir Charles Hastings.	
Dr. Sharpey.	
Dr. Christison.	

The original motion was then put, and negatived.

Dr. Andrew Wood required that the majority and minority be entered on the Minutes.

Majority—	*Minority*—
Mr. Arnott.	Dr. Storrar.
Mr. Cooper.	Dr. Alexander Wood.
Dr. Acland.	Dr. Andrew Wood.
Dr. Bond.	Dr. Fleming.
Dr. Embleton.	Mr. Syme.
Dr. A. Smith.	Dr. Thomson.
Mr. Hargrave.	Dr. Leet.
Dr. Corrigan.	Sir Charles Hastings.
Mr. Lawrence.	Dr. Sharpey.
Mr. Teale.	Dr. Christison.
Dr. Stokes.	

Moved by Mr. Teale, seconded by Dr. Stokes—"That the Medical Council, whilst appreciating the great value of the practical opportunities afforded to the student who is a pupil of a regular member of the Profession holding the appointment of Surgeon to a Hospital, General Dispensary, or Union Workhouse; and whilst considering that a year spent in such pupilage might be regarded as one of the four years of Professional study recommended by the Council, is of opinion that such year of pupilage, apart from the practical and systematic study of the elementary and ancillary sciences of Medicine, should not be conducted during the first year, but at some period during the subsequent years of Professional study."—Agreed to.

Moved by Dr. Andrew Wood, seconded by Dr. Embleton—"1. That all students pass an examination in general education, if possible, before they commence their Professional studies. 2. That students may in particular cases be registered for the first time who have passed only a part of their examination in general education, out that that examination must in all cases have been completed previously to the commencement of the second Winter session."—Motion negatived.

Confirmed—Joseph Henry Green.

PROVINCIAL CORRESPONDENCE.

EDINBURGH.

There was a somewhat exceptional interest towards the latter part of the last meeting of the Medico-Chirurgical Society, as Dr. Ramsbotham, of London, was present, and Professor Simpson gave a long and eloquent commentary upon the late case at Chester, of Bromwich *v.* Waters. He particularly dwelt upon the *animus* that was exhibited by the plaintiff, and upon Serjeant Shee being specially retained, and taken off his usual beat because his talents for vilification were thought to be superior to those of other men. Then, having shown that the case against Dr. Waters had entirely broken down at an early stage of the proceedings, Dr. Simpson turned his attention to the Medical witnesses, especially Drs. Lee and Ramsbotham, who had, *par nobile fratrum*, come all the way to Chester to give evidence against a Professional brother, and by all accounts it was not their fault that this laudable object was not carried out. Dr. Lee especially seems to have shone on the occasion, and to have had his memory under that complete control which distinguished the witnesses in a once famous court-martial at Windsor. The general reader may, however, be interested to know that Dr. Lee once doctored Prince Woronzoff, and that the effect on his mind of that distinction was such that he now forgets his own age, the contents of his own book, and does not know what superficial ulceration of the os uteri is. Rather hard,

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too, on one who never spent an idle hour, and never took a holiday. "All work and no play, made, etc.," eh, Dr. Lee.

Dr. Ramsbotham spoke at some length, and with great good humour in reply to Dr. Simpson. We were sorry to see that such a celebrated lady's Doctor was so little of the lady's man, as to lay most of the blame on Miss Bromwich, who is the most obstinate old maid, etc., etc., "ever put breath into," (serve her right for being unmarried, and probably healthy). Dr. Ramsbotham went on to inform the Society what his party had said on the subject at luncheon. Heavens, what a feast! It was in a hotel, so probably their bodies were well cared for; but we, indeed, envy any lover of intellectual conversation who may have been admitted to a repast where seduction, uterine disease, pregnancy, and erotomania were discussed by one toxicologist, two accoucheurs, and a brace of females more inquisitive than fascinating. But Dr. Ramsbotham looked at the business with the catholic eyes of true philanthropy. He saw benefit to himself and also to his banker's account. He declared that he went to Chester to give evidence against Dr. Waters and benefit Miss Bromwich; but with such ingenuity was he to do so, that, in reality, he would be of more benefit to Dr. Waters than to Miss Bromwich; in short, owing to the narrowness of the circumstances, he was to deliver himself of his evidence by *turning*, as then in any case he would land feet first, like Irishmen and cats. Dr. Keiller, however, said very plainly that if Dr. Ramsbotham had really intended to benefit Dr. Waters in the witness-box, he had gone a curious way about it, and, to an ordinary mind, his statements seemed unlikely to benefit the Professional brother for whom he expressed such regard, so we will hope that Dr. Ramsbotham really earned conscientiously his fee, and as Dr. Waters has not to pay it, we trust that fee is as large as himself, and his well-earned reputation. His back is broad enough to bear a little badinage, but an eminent Medical man, whose name is familiar to the youngest student, might surely turn that eminence to better account. If men like Serjeant Shee can hire out their five talents for the use of "the most obstinate old maid who had ever breath in her body," we are sorry, but he cannot help it; in his profession he can no more shrink from such dirt than Dr. Ramsbotham could decline attendance on some London hetaira. But Doctors surely can refuse to be parties to such iniquity, to pander to pruriency, to disseminate through the medium of the newspaper press their ideas on the relative moralities of the various methods of manipulating diseased and disgusting females. If this sort of thing goes on, every boy and girl in the country will be as well acquainted with the signs of virginity—should there happy possessing them left—and the best remedies for hysteria, as the ordinary run of Practitioners in the days of William Hunter or Smellie. Dr. Keith has been doing ovariotomy with success. Dr. Alexander Wood continues his hypodermic injections of sedatives, and I may mention two very interesting cases,—one a severe case of neuralgia of the cord and testicle. The patient, a youth preparing for orders, suffered agony at short intervals, and after one injection has been, it would appear, permanently cured. In the other, a man had ruptured his biceps tendon, and suffered from excruciating cramps. One injection relieved him for some time, and enabled him to work. It is to be hoped that Dr. Wood will furnish the Profession with some more information on this curious but very successful method of subduing pain.

At the last meeting of the Royal Society, Professor Simpson began with a paper on the umbilical cord, and ended with one on a Pictish inscription. As Professor of Antiquities to the Royal Scottish Academy, he refreshes himself now and then with such light reading as is to be found on the monoliths of the east of Scotland.

I am glad to see that Professor Laycock is to resume his classes of practical psychology. It is only such training that will prevent doctors stultifying themselves in the witness-box, signing certificates that have to be repented of and paid for, being useless advisers when for every motive, from friendship to avarice, they would wish their advice to have practical value.

The summer classes in Edinburgh are very pleasant, the weather generally good, the scenery lovely. April showers take the starch out of the collars of academics, and the May sunshine brightens up the wits of even the unhappy enthusiast alluded to by Churchill, who

> "by the taper's light,
> Wearing away the watch of night,
> But reading but with o'charged head,
> Remembered nothing that he read."

Lord Palmerston took his degree here some weeks since, and made a speech, and Dr. John Brown found a sensation old servant, who had preserved a box of tools belonging to his lordship for such a length of years,—I think fifty the papers say. The old woman called his Premiership "Maister Harry," so of course the tools are genuine and not the only ones. Dr. John Brown, he who first popularised the not difficult operation of excision of the mammary gland, as performed on the mistress of Rab and his friends, has not the merit of originality here, as Barnum did the Washington's nurse trick years ago.

Our Royal Infirmary has just had a change made in its Surgical staff, owing to the resignation of Dr. Struthers, who purposes devoting himself entirely to anatomical instruction. Dr. P. H. Watson, who lectures on surgery, has succeeded to the vacant wards, and Mr. A. M. Edwards has been elected Assistant-Surgeon.

The St. Andrew's vacant Chair of Anatomy and Medicine is the next Medical election on the *tapis*, caused by the resignation of Dr. Day. The candidates are Dr. Oswald Bell, who has for some time been acting for Dr. Day; Dr. Clelland, Demonstrator of Anatomy in Glasgow University; Dr. Wilson, Demonstrator of Anatomy, University of Edinburgh; and Dr. Glen, Dundee. The first-named gentleman is likely to be the successful candidate, and as he is well known and respected in St. Andrew's, it will be satisfactory in that quarter if he is appointed; but there is nothing to find fault with in any of the candidates, all of whom are up to the work.

The Secretary of the Anderson's University, Glasgow, advertises the Chair of Medical Jurisprudence vacant by the resignation of Dr. J. B. Cowan, who has accepted the Chair of Practice of Medicine. Candidates are requested to lodge their applications before June 12.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 26, 1863.

Mr. PARTRIDGE, President, in the Chair.

MR. JOHN WOOD read a Paper on a

CASE OF EXTREME DEFORMITY OF THE NECK AND ARMS, TREATED SUCCESSFULLY BY GRADUAL EXTENSION, EXCISION, AND ADJACENT AND REMOTE TRANSPLANTATION.

The subject of the case was a little girl, aged nearly nine years. In consequence of an extensive burn, the chin was drawn down to within an inch of the sternum by a broad and prominent band of hard, tough cicatrix, the mouth distorted, and the head drawn a little towards the left shoulder. The right arm was contracted at the elbow to somewhat more than a right angle. The left wrist was extremely contorted, the hand being turned back upon the fore-arm, so that the fourth and little finger nearly touched its back surface, and the joints of the carpus and metacarpus were inverted by a very prominent, tense, falciform cicatrix, placed opposite the fourth finger, and extending along the lower third of the fore-arm. A large sore still remained at the upper half of the back of the fore-arm; this had been stationary in healing, on account of the great tension of the skin around, which was seamed with cicatrices, and very inelastic. The case was treated by Mr. Wood in King's College Hospital towards the end of the year 1862. The right arm was first extended gradually by the use of a straight splint and graduated pads. On October 4, an operation of transplantation was performed on the neck. A quadrangular flap of skin was taken from the right side of the cicatrix, where the integuments were hollow, loose, and puckered. It was then turned across, and placed in the site of the cicatrix, which had been previously divided by a V-shaped incision, separating the band close to its attachment on the breast-bone. The flap was held in its place by wire sutures. None of the hardened cicatrix was removed by the operation, but was dissected up freely towards the chin, and left to unite to the upper part of the flap. At the lower part of the neck, in the site whence the flap was derived, an open sore remained to heal by granulation. The head was

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kept well thrown back, and the wound dressed with water-dressing. By the end of a month the wounds had nearly healed, the chin remaining elevated, and the motions of the head free. The condition of the left fore-arm, the small quantity of healthy skin remaining, the persistent and extensive sore, the extreme contraction of the lunated cicatrix, and the great retroversion of the carpal and metacarpal joints rendering all efforts at extension fruitless, and precluding any attempt at transplantation of adjacent parts, Mr. Wood resolved to attempt the removal and transplantation of a portion of skin from the abdomen to the arm to supply the want of tegumentary tissue. The part of the abdominal surface chosen for the operation was that on the left side of the navel, in the direction of the superficial epigastric vessels. Upon this region the limb could be comfortably placed, and kept immovable for a sufficient length of time to permit of adhesion, the arm and belly rising and falling together in the movements of respiration, so that relative immobility was secured. A cuirass-splint was first moulded in gutta-percha over the chest and upper part of the belly; to its left border was fixed a scroll splint of the same substance, passing round the upper arm. A flat, straight splint for the fore-arm was attached to the lower border of the breast-plate. This was perforated freely with holes, covered by wash-leather, well padded with cotton wool, and worn comfortably by the patient for twenty-four hours before the operation. On the 5th of November, the patient being under the influence of chloroform, the lunated cicatrix was divided transversely opposite the wrist-joint, and freed by extension and dissection from the subjacent fascia and tendinous sheaths, which were found uninjured. A lancet-shape flap, about two inches and three-quarters long and two inches and a-half wide at its base, with its attached margin or base directed towards the groin, in the course of the superficial epigastric artery, was then raised from the abdomen with a good portion of subcutaneous fat adherent to it. The edges of the wound left by its separation were brought together by pins and wire sutures, supported by adhesive plaster and thick dressing. The fore-arm was then placed upon it, so that the gaping wound produced by straightening the wrist after the transverse incision, was placed opposite to the lancet-shaped flap, the point of which fitted exactly into the angle of the cross cut. The flap was the n secured by wire sutures to the edge of the arm incision. Through the middle of the flap and the upper part of the integuments of the arm were passed two rectangular pins in opposite directions, about an inch apart from each other. The pins were then locked into each other's loops, so as to form a wire parallelogram, the ends of which acted upon the middle of the flap through a pad of lint, thus exercising a lever-like pressure, which could be regulated to the degree of swelling ensuing in the flap. The cuirass-splint was then adjusted and fixed to the body by broad strips of plaster, and to the fore-arm by means of long narrow strips, with a bandage placed over all in such a manner that the wound could be examined without derange the fastenings. November 6.—The flap was uncovered and found in capital position, with evidences of adhesion at the edge nearest the fingers; the pad of lint under the pins readjusted. 8th.—Three of the wire sutures at the upper margin of the flap removed by the House-Surgeon, who thought that they were dragging somewhat. The flap is firm in its place, and evidently adherent by its deep surface, though it has slightly retracted where the sutures were removed. 10th.—The silk thread removed from the pins; cicatrisation completed for about an inch near the fingers. 14th.—The cuirass-splint raised for the first time since the operation for the purpose of examining and cleansing the sore on the body. All the pins and sutures were at the same time carefully removed. The wound was found filled with healthy granulations, no primary adhesions having formed at the edges. Wound dressed with a thick layer of simple dressing; splint readjusted. Two or three fresh points of cicatrisation are observed at the upper edge of the flap. 21st.—Since the last report the splint has been lifted, and all the wounds dressed daily; all the sores are cicatrising rapidly; flap firmly adherent. By the 27th the whole margin of the flap had become cicatrised to the arm, close up to the root. On the 29th, the first step towards the division of the flap from the belly was taken. An incision, about half an inch in extent, was made on each side of the base, in an oblique direction towards the surface of the abdomen, so as to include as much integument as possible on the arm side of the incision, and to indicate the lozenge-shape which the patch was intended to assume when totally severed from the body. Lint was then placed between the cut edges to prevent re-adhesion to the body. The splint was then altogether removed, and the arm kept in its place (removed a little nearer to the navel than before) by straps and bandage. After three more partial sections of the base of the flap on alternate sides at intervals of a week, during which time the hand had been gradually more and more flexed upon the fore-arm, so as to draw from the abdomen as much skin as possible on to the wrist, and the whole arm also shifted more over towards the median line, so as to leave the sore on the abdomen free from pressure, the flap being found partially sensible to the contact of the point of a pin, and in a satisfactory condition of vascularity, the final severance of its remaining attachment to the body (about half an inch in extent) was accomplished on the 3rd of January, 1863. There was free bleeding from the arm side of the cut surface, showing complete vascularity. At this time the sores on the arm and belly were reduced to small proportions, covered with florid granulations, and cicatrising nicely. The arm was now placed on a splint with a hand-piece bent almost double, and flexed freely every day to restore the pliability of the tendons and their sheaths, so long bent backwards and contracted. The small sores which remained healed up speedily and without check. In the mean time, that portion of the scar in the neck in which the old contracting cicatrix had been left in the former operation had begun again to contract. An attempt to stretch it gradually resulted in a partial return of the ulceration. On January 31, Mr. Wood removed the whole of this contracting portion of the cicatrix by two vertical incisions, meeting above and below, carried so deep as to include the whole of the contracting substance, and leaving two opposed even surfaces of healthy tissue. These surfaces were then drawn together by three points of quilted suture, composed of wire and two pieces of flexible catheter, the wire being carried deep into the wound and emerging an inch from its margins. The immediate edges of the incision were united by points of interrupted suture of thin silver wire. The whole was supported by long narrow strips of adhesive plaster. Union by adhesion to the extent of two inches was the result, a small sore remaining above and below it. The quilled and other sutures were withdrawn at the end of a week. The sores were dressed with water and simple dressing, and supported by plaster; and a gorget or collar of gutta-percha was worn to support the chin, and to keep off friction from the sores. These soon healed up, leaving a long linear cicatrix of an inverted L shape, which gradually became an equable curve when the chin was raised to its full extent. The case was illustrated by drawings of the neck and arm taken before and during the several stages of the foregoing operations. The little patient also was exhibited to the Fellows of the Society, as a practical illustration of the benefit derived from the treatment, more satisfactory than casts or drawings, however truthful. The present condition of the parts operated on is as follows:—The chin can be thrown backwards quite to the normal extent, and the head bent freely from side to side. The linear cicatrix left by the operations describes a regular curve, rendered more open and a little more prominent by extreme extension. All deformity of the mouth is removed, and when viewed in profile from the side opposite to the cicatrix, the neck and chin have a regular and normal curve. On the left side of the neck and front of the breast-bone the cicatrices resulting from the burn and operations are visible, but not prominent or irregular at the surface. The right arm can be extended to a straight line, without any rising of the cicatrix at the elbow. The left arm presents, on the back surface of the wrist, a lozenge-shaped patch of skin, rather paler, yellower, and more elevated than that of the surrounding parts. The patch is about three inches long, and an inch and three-quarters wide. The cicatrix enclosing it is linear and small. All the sores are completely healed, the arm being covered with cicatrices, except a small portion over the radius. The fingers can be closed upon the palm by the action of the flexor muscles, and the wrist bent well forwards. A little tendency of the third and fourth fingers to spring backwards still exists. The furrows and grooves on the palm and front of the wrist are restored, and the knuckles are normally prominent. The patient can grasp and hold things with great power and facility.

The President said that most surgeons had had experience in cases of severe burn, and hoped that the gentlemen present would give their opinions on the case just read.

Mr. Curling remarked that Mr. Wood gave the best reply

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to the Surgical writer whom he quoted as opposed to all operations for the cure of deformities from burn because they always ended in failures, and as advocating the treatment by extension, in the case which had been related that evening. Complete success had attended well-planned and skilful operative treatment. No doubt much good might be effected by extension, and slight cases of contraction might be remedied by it, for a cicatrix is a yielding material. But we could not by extension get rid of deformity; we might stretch, but we could not remove large projecting flaps in the neck and in the arms. Judging from the drawing of the contraction in the neck of Mr. Wood's patient, arising from a band about an inch in width, Mr. Curling considered it one which could be remedied without much difficulty. The chief interest of the paper consisted in the revival of the Taliacotian operation, and great credit was due to Mr. Wood for the ingenuity with which he had successfully dealt with the contraction at the back of the hand, by transferring a portion of skin from the abdomen to that part. Such an operation, however, was of very limited application. It was well adapted to remedy deformities about the hand, but was quite inapplicable to the more serious and more common contractions met with in the neck. In the worse cases of such contractions, where the lower lip was everted, the lower jaw drawn down and elongated, and the teeth projecting like tusks, owing to extensive destruction of the skin, he believed there was no other mode of completely obviating the frightful deformity but by transplanting portions of skin from the shoulders—the American operation. Mr. Curling briefly alluded to a case which he had successfully treated in this way. He stated that the failure of many of the attempts for remedying contractions from burn arose from under-cutting the cicatrices. These parts were lowly organised, and derived their blood-vessels chiefly from the parts beneath, and not from the surrounding healthy skin. By forming flaps of the cicatrices the circulation was cut off, and sloughing ensued.

Mr. Hilton, referring to some observations of Mr. Curling regarding the necessity for transplantation of skin as a means of removing by operation cicatricial contractions in the neck after burns, said that he had succeeded in remedying several instances of extreme and broad contractions by simply dividing transversely the whole of the contracted structures, and dissecting them up sufficiently to enable the deformity to be at once corrected, leaving, of course, a very large raw surface to heal by granulation. All subsequent contractions were prevented by the patient lying continuously flat upon his back, with the nape of the neck resting on a small sandbag, so as to throw the head backwards, and maintain the wound on the front of the neck in a state of extension. Such an operation brought the patient's state to that which existed at the period when the raw granulating surface followed the burns; and no doubt that was the time when by adopting decided and well-considered means of extension and counteraction the subsequent formidable contractions might be prevented almost with certainty if persevered in. Indeed he had no hesitation in stating his conviction that if this view were appreciated and acted on with the determination on the part of the Surgeon to succeed, and not to allow any difficulties to divert him from his purpose, then these contractions requiring operation for their cure would diminish both in number and severity. It should not be overlooked that time is an important remedial element, necessarily so because in deep burns the skin had to be reproduced by the surrounding margin of healthy skin; and further, when the whole surface of the wound is covered with young skin, it is not perfect or mature skin; it has to undergo a further process of integral organisation, liable to be accompanied and perverted by contraction, which must be guided and controlled by the prolonged use of mechanical appliances capable of defying effectively the tendency to contraction. There were at Guy's Hospital numerous drawings of patients, exemplifying the pertinency of these observations in relation to the treatment of contractions following burns. Admiring the ingenuity of the method of proceeding, and gratified by the success of Mr. Wood's transplantation of skin to fill up the gap upon the patient's arm made by the burns, yet, seeing the small size of the transplanted skin, the small extent of new skin required for the occlusion of the wound, he would offer this interrogatory remark, whether the same amount of good might not have been obtained by proceeding on the plan just referred to; in other words, after the cicatrix had been extensively and carefully dissected from the subjacent tendons, so as to displace or destroy all deformity, whether, had a splint been applied to the hand and fore-arm in order to anticipate and prevent contraction, nature, young and energetic, with wonderful reproductive powers at the age of this patient, would not have succeeded in filling up the gap without the aid of the skin from the abdominal walls? He was disposed to think that the result might have been as successful as that which had been seen that night from the hands of the Author.

The President said, in reference to the contraction following burns, that it occurred often after the completion of the cicatrisation. When at Birmingham he had seen many cases of very severe burn, and could bear testimony to the great advantage of continued and slow extension. The natural position of the limb should be maintained for some time after cicatrisation

Mr. Ferousson regretted that the author of the paper had treated of two subjects together—one of very common, the other of very uncommon occurrence. It was desirable in the discussion not to lose sight of the really important point in Mr. Wood's case—the successful performance of a Taliacotian operation. Some doubt had been thrown upon the operation of Taliacotius—that is, the successful removal of a portion of the body to supply a deficiency in a distant part. But here was an instance in which a portion of the integuments of the abdomen were successfully transferred to the wrist. This was the really important feature in Mr. Wood's case.

Mr. Wood said that he considered himself fortunate in having been able to elicit the opinions of gentlemen whose eminence entitled them to much consideration, and for whose judgment he entertained so much respect, upon the case he had brought forward. He, however, felt bound to say that he differed from Mr. Hilton in the opinion that the cicatrix could in any sense be considered as healthy. Containing no sebaceous or sweat glands—structures which conduce to the softness, elasticity, and extensibility of true skin—and having an inevitable tendency to contract indefinitely, he could not conceive how the production of a new cicatrix by incision only could guarantee the case from a return of deformity, so effectually as the interposition of a sufficient portion of true skin by transplantation. The great obstacle to slow extension met with in the case was the speedy recurrence of ulceration in the cicatrix under tension. In the arm, the presence of a large and persistent sore in the line of extension rendered such treatment impossible, and necessitated the adoption of the method of transplantation from a remote part, which constituted the chief and novel feature of the treatment. He should also mention that much good had resulted from freely lubricating the cicatrices with oil during the progress of the treatment. The oil he conceived to supply in some measure the want of the sebaceous secretion in the cicatrix, and rendered it more pliant and tractable. He thanked the President and Fellows of the Society for the favourable manner in which his paper had been received, and for the flattering remarks made upon the case.

OBITUARY.

DEATH OF MR. F. WAKEFIELD SKEY, M.R.C.S.

(*From a Correspondent.*)

It is with great regret we record the death of this estimable member of the Profession, who expired on Friday week, under the following melancholy circumstances:—The deceased had long suffered from a severe neuralgic affection, from which he was only able to obtain relief by constant recourse to chloroform; and to so great an extent did he sometimes carry it, that on more than one occasion he has been found insensible. When filling the office of House-Surgeon to St. Bartholomew's Hospital, he had carried the anæsthesia so far that considerable difficulty was experienced in recovering him, notwithstanding the use of galvanism, artificial respiration, etc., and on this occasion he faithfully promised his afflicted parents never to have recourse to it without advice. He religiously kept his promise until the afternoon of Friday week, when an unusually severe paroxysm came on; and, having an important engagement, he had recourse to his old, and, on this occasion, fatal remedy. How long he had succumbed to the active and subtle agent is not known, but

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he was found in his chamber kneeling at a chair with a handkerchief to his face which had contained the chloroform. He immediately received every attention, but too late; the vital spark could not again be recalled. The deceased, who received his elementary education at the Charterhouse School, and his Professional at St. Bartholomew's Hospital, was only 31 years of age, and, as Honorary Surgeon to the Royal Artillery Company, his loss is severely felt by the members of that ancient corps, as a most generous comrade, one who, like Sheridan, "could keep the midnight table in a roar." Mr. Skey was an accomplished musician, an excellent poet, painter, and well-educated and high-toned gentleman. The Profession deeply sympathises with his grief-stricken and honoured father.

M. Renault, the celebrated veterinarian, formerly Professor and Director of the Veterinary School at Alfort, and, at the time of his death, General Inspector of Veterinary Schools, has just died, at the age of 58. He had been dispatched by the Government to investigate the peripneumonia now raging amongst the cattle in the Pontine Marshes, and was recently reported to be suffering from pernicious fever at Bologna. It is now, however, stated that his fatal illness has been due to contagion of the peripneumonic disease raging amongst the cattle.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following Members of the College, having undergone the necessary Examinations, were admitted Licentiates in Midwifery at a Meeting of the Board on the 27th inst.:—

Robert Johnson, Bellaghey, Co. Derry, diploma of Membership dated June 28, 1833; Frederick George Lawrence, Malmsbury, Wilts, April 30, 1861; Bartholomew Lumley, Corbridge, Northumberland, June 4, 1861; John Ellerton, M.D. St. Andrew's, and L.R.C.P., Wakefield, Yorkshire, January 28, 1862; James Tily, Hitchin, Herts, April 25, 1862; Henry Seekamp Ward, L.S.A., Horncastle, Lincolnshire, July 31, 1862; Thomas Moore, Wilmslow, near Manchester, November 18, 1862; Robert Lloyd Jordison, L.S.A., South Ockendon, Essex, November 18, 1862; John Reynolds, L.R.C.P., Truro, Cornwall, April 21, 1863; John New Moore, Mormond-in-the-Marsh, April 22, 1863; Hugh Richard Duncan Mackintosh, L.R.C.P. Cheltenham, April 22, 1863; Fitzherbert Dermott, Melbourne, Australia, April 24, 1863; Adolphus Burnell Great Rex, M.D St. Andrew's, L.R.C.P., Holborn-hill, April 24, 1863; William John Aitkin, Denton, near Manchester, May 6, 1863; William Adolphus Frederick Bateman, Richmond, Surrey, May 8, 1863; Cornelius Benjamin Fox, Truro, Cornwall, May 7, 1863; Arthur John Watts, Harrow-road, November 18, 1862.

The names of the Members of the College who underwent the Examinations on Tuesday, Wednesday, and Thursday last for the Fellowship will not be published until the same shall have been confirmed by the Council.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, May 28, 1863:—

James Barmer, Somerville, Bicswich, Staffordshire; Edward Cooke Houseman, Clint, Ripley, Yorkshire; Thomas Page, Newcastle-on-Tyne; Bartholomew Lumley, Corbridge, Northumberland.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Beales, Robert, M.D. St. And., has been appointed Justice of the Peace for the Borough of Congleton, Cheshire.

Boulton, A. E., L.S.A., has been appointed House Physician to King's College Hospital.

Bowring, G., M.R.C.S. Eng., has been elected Medical Officer to the Workhouses of the Manchester Township.

Evans, George F., M.D. Cantab., has been appointed Hon. Physician to the Magdalen Asylum, Edgbaston, Birmingham.

Fleming, John Gibson, M.D. Glasg., has been elected Representative of the Faculty of Physicians and Surgeons, Glasgow, in the General Council of Medical Education and Registration.

Gibb, Dr., has been elected Assistant-Physician to the Westminster Hospital.

Rokitansky, Professor. This distinguished man has just been appointed Referee for Medical and University Education to the Austrian Ministry.

Scanzoni, Professor. The celebrated Würzburg accoucheur has received a "call" to Baden-Baden, where he will early next year assume the direction of an obstetrical establishment to be founded there.

Toller, Ebenezer, M.R.C.S., of St. Luke's Hospital, has just been elected Medical Superintendent of the Gloucester County Asylum.

Yeo, J. B., M.R.C.S. Eng., has been appointed House-Surgeon and Secretary to the Hants County Hospital, Winchester.

DEATHS.

Angus, Alexander, of 66, Frith-street, Soho, W., at Huntingdon, on May 31, aged 58.

Barnett, Lysander Hooker, L.S.A., at 72, Fore-street, Limehouse, on May 30, aged 35.

Berkeford, Charles, M.R.C.S. Eng., at Langharne, Carmarthenshire, on May 25, aged 32.

Bracken, Isaac, F.R.C.S.I., at Ballymahon, Co. Longford, Ireland, on May 24.

Brown, Rev. William, M.D., Secretary of the Scottish Missionary Society, on May 15, aged 79.

Budd, James Herbert, M.R.C.S. Eng., at Wickham Market, Suffolk, on May 29, aged 39.

Casson, Edwin, L.R.C.P. Edin., at Pannal, near Harrogate, on May 23.

Darley, Henry, M.D., at No. 7, Kildare-street, Dublin, on May 30.

Duncan, Wm. Henry, M.D. Edin., at West Park, Elgin, N.B., on May 23, Medical Officer of Health for the Borough of Liverpool.

Kelly, Edward, M.D. Edin., at Castle-street, Ballyshannon, Ireland, on May 22.

Lester, James P. P., L.F.P.S. Glasg., at Kirkpatrick, Durham, Kirkcudbrightshire, on May 16, aged 39, formerly of St. John's, New Brunswick.

Lever, John G., M.R.C.S. Eng., at Culworth, Banbury, Oxon, on May 9, aged 70.

Oliver, Richard, M.R.C.P. Lond., at Bicton Heath, Shrewsbury, on May 26, aged 63.

Skey, Francis W., M.R.C.S. Eng., at Coleman-street, London, E.C., on May 29, aged 31.

The College Lectures.—Professor Gulliver, F.R.S., resumed his course of lectures on Tuesday last, and will deliver six discourses on the Blood, Chyle, and Lymph, and will be followed, on the 16th inst., by Professor Solly, F.R.S., who will also deliver six lectures on the Brain and Spinal Cord, and some of their Diseases.

The Case of Alleged Poisoning at Ballymena.—Dr. Courtenay, the Medical man who was acquitted of the charge of having administered poison to a young lady, has obtained leave to file a criminal information against Mr. Hunt, the resident or stipendiary magistrate at Ballymena.

Royal College of Surgeons in Ireland.—At a meeting of the College, held on the 1st inst., the following gentlemen were elected officers for the ensuing year, viz.:—William Colles, *President*; Josiah Smyly, *Vice-President*; Edward Hutton, *Secretary. Council*—Arthur Jacob, William Hargrave, Robert Adams, James Barker, Hans Irvine, Edward Hutton, Robert Pentland, Richard G. H. Butcher, Samuel G. Wilmot, Awly P. Banon, Peter Shannon, Rawdon Macnamara, Hamilton Labatt, Benjamin M'Dowel, Edward Ledwich, William Jameson, Alexander Carte, William Healy, and James H. Wharton.

Anthropological Society of London.—May 26.—Sir Charles Nicholson, Bart., V.P., LL.D., D.C.L., in the chair. A paper was read by Professor G. Busk, F.R.S., on "Human Remains from so-called Brick Earth near Chatham." The remains were, Professor Busk demonstrated, not derived from the brick earth, but merely from surface soil, and showed evidence of having been killed by sabre-cuts. Professor Busk entered into the general question of the prehistoric crania of the British Islands, and was inclined to divide them into three categories, the characters of which he gave in detail. He also entered into many interesting particulars respecting the chemical characters of fossil bones. A long discussion took place respecting the authenticity of the human jaw from Moulin-Quignon, which was joined in by Professor Busk, Mr. Carter Blake, Mr. Charlesworth, Mr. Hogg, and the President.

The Lord Chancellor has confirmed the appointment by Dr. Lankester of Dr. William Hardwicke to be his Deputy as Coroner for the County of Middlesex.

Academy of Sciences, Paris.—In the Section of Physics, in the room of the late M. Despretz, M. Edmund Becquerel, son of the celebrated *savant* of that name, has been elected by forty-two out of fifty-five votes. M. Leon Foucault, whose name is European in connexion with the pendulum demonstration, and other scientific investigations, received nine votes. This *savant*, to whom the doors of the Academy have been so long and so unaccountably closed, declined on this occasion becoming a candidate, and the nine votes were therefore merely complimentary.

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ACADEMY OF MEDICINE, PARIS.—Professor Rokitansky has been elected a Foreign Associate by forty-two out of fifty-three voters present. The other candidates were Virchow, Frerichs, and Magnus Huss.

GEOLOGICAL SOCIETY.—Perhaps the most crowded meeting of this Society which has taken place for many years was that of Wednesday, the 3rd inst., when a paper was read by Joseph Prestwich, Esq., F.R.S., on the "Section at Moulin-Quignon." An animated discussion ensued thereon between Dr. Falconer, Messrs. John Evans, Busk, Godwin-Austen, Brady, Charlesworth, Huxley, Tyndall, and Prof. Ramsay (President). The result of the opinion of the meeting, so far as it could be ascertained, at the late hour at which it terminated, being to affirm that the majority of the flint implements found in the "black band" at Moulin-Quignon were spurious, and to assign to the "black band" an antiquity coeval with that of the deposition of the "high-level gravels."

ST. THOMAS'S HOSPITAL.—The Governors of St. Thomas's do not appear to be a bit nearer than ever obtaining a site for their new Hospital. The Governors of Bethlehem are quite impracticable. £150,000 have been offered by the former to build a new Bethlehem, and contemptuously rejected by the latter, who require a *carte blanche* to buy an estate and plunge into bricks and mortar to any tune they may think proper. Meanwhile, there has been a public meeting at Southwark to bring pressure to bear on the governors of St. Thomas's, and to demand that the Hospital be rebuilt as near as possible to its old site, certainly not farther from it than Bethlehem Hospital, the site near Newington Church, or the Surrey Gardens. Lastly, the Physicians and Surgeons of St. Thomas's have held a meeting in consequence of a communication from the Treasurer, in which they adhere to the principle expressed in their memorial that the Hospital should be as near as possible to the centre of the Metropolis, and state their opinion that the usefulness of the Hospital has been greatly diminished by its temporary establishment at the Surrey Gardens. If ever there were an illustration of the vulgar adage of "too many cooks," etc., we have it in the fortunes of St. Thomas's.

QUININE IN INDIA.—The experimental cultivation of Chinchona plants in India has met with a success which has exceeded the most sanguine expectations. Specimens of bark grown in India have been received in England, and are now undergoing analysis by Mr. Howard, the eminent quinine manufacturer. He has obtained a first and second crystallisation of very white sulphate of quinine from bark of only two years' growth, besides chinchonine and chinchonidine. Meanwhile the plants are multiplying rapidly; five Government plantations are established in the Neilgherry hills, and natives, as well as Europeans, are undertaking the cultivation in all parts of the hill districts of India.

A FORMIDABLE OPERATION.—According to the *Gazette Médicale de Strasbourg*, Dr. Kœberlé has just performed one of the most extraordinary operations ever undertaken in Surgery. While removing through an opening made in the abdomen a fibrous tumour of the uterus of a considerable size, he determined, in consequence of the changes which the uterus and ovaries had undergone, to extirpate the whole of these organs, leaving only the vaginal portion of the cervix uteri. The operation was performed on April 20, and the patient suffered from no untoward consequence, being five weeks after the operation quite convalescent.

THE GORILLA.—The suggestion which was thrown out by an eminent zoologist about two years ago that we should have gorilla skins speedily a drug in the market, has not yet been realised. A magnificent skin of an old male gorilla, with the skull, has, however, been brought from the Gaboon by Mr. Winwood Reade, the adventurous explorer, who has followed in the footsteps of Du Chaillu, and has by him been deposited in the museum of the Anthropological Society of London during the past week. The specimen has been placed in the hands of the taxidermist, and will, most probably, when stuffed, equal in dimensions the old male gorilla in the British Museum. Although the epidermis has peeled in patches from parts of the breast, one of the arms, and the back and crown of the head, those who are aware of the condition in which the Museum specimens were put into the stuffer's hands, will have no fear but that Mr. Winwood Reade's specimen will equal them in faithfully reproducing, so far as possible, the contour, colour, and size of the great ape.

FOOD AND MEDICAL COMFORTS FOR PAUPERS.—Dr. Cameron, "Public Analyst" to the city of Dublin, having been employed by the South Dublin Board of Guardians to examine the brandy and sugar supplied to the workhouse, has sent in a startling report. The so-called French brandy he found to be a spurious article, consisting of spirits of wine, flavoured with some such fruit as prunes, and coloured with burnt sugar. The sugar he found extremely damp, containing a very large proportion of treacle, and a considerable amount of such impurities as spores of fungus, particles of cane, albumen, and starch granules. It contained also in great abundance a species of acarus, or mite, closely resembling in appearance and nature the insect which, by burrowing in the skin, produces itch. "It is no exaggeration," says Dr. Cameron, "to affirm that there cannot be less than 100,000 of these insects in every pound of sugar. In ten grains weight I estimated 500, most of which were so large as to be distinctly visible to the naked eye." Such sugar is not only detrimental to health, but the least economical kind that can be employed, from its defective sweetening power. On the motion of Alderman Bonsell, seconded by Mr. Caldbeck, it was unanimously resolved that the contractors should be prosecuted.—*Dublin Correspondent of Times.*

COLLEGIATE ELECTIONS.—The annual nomination of Fellows of the Royal College of Surgeons of England for seats in the Council of that body will take place at the College on Thursday, July 2, when three vacancies will be declared, caused by Mr. Cæsar Henry Hawkins and Mr. Thomas Tatum going out in rotation, and by the resignation of Mr. William Coulson. The two first named gentlemen will, it is stated, offer themselves for re-election; the Fellows will therefore have to appoint a successor to the last-named gentlemen; and perhaps it will be necessary to inform the electors that the names of eligible candidates on the prescribed official forms must be sent into the Secretary's office within ten days from the publication of the announcement in the *London Gazette*, and as the advertisement appeared on Tuesday, the 26th ult., it is apparent that the said notice must be lodged on or before Wednesday next. The following are the terms and conditions of the nomination, viz.:—"2. Every Fellow desirous of a seat in the Council shall, within ten days from the publication of the *London Gazette*, in which the day of meeting for the election shall be announced, transmit or deliver to the Secretary of the College, or person acting for him, a notice and declaration signed by himself in the following terms:—I, A. B., of C., Fellow of the Royal College of Surgeons of England, do hereby declare that I am a Candidate for a seat in the Council of the said College; that I am in the *bonâ fide* practice of the Profession of a Surgeon, and that I do not practise as an Apothecary. Together with a nomination signed by six Fellows of the College in the following terms, viz.:—We, the undersigned Fellows of the Royal College of Surgeons of England, do hereby certify that A. B., of C., is in our estimation a fit and proper person to be a member of the Council of the said College; and we do hereby nominate him a Candidate for a seat in the said Council. And also a certificate, signed by three Fellows, in the following terms, viz.:—We, the undersigned Fellows of the Royal College of Surgeons of England, do hereby certify, on our own personal knowlege, that A. B., of C., is in the *bonâ fide* practice of the Profession of a Surgeon, and that he does not practise as an Apothecary." The following are the names of the Fellows who have been mentioned as coming forward:—

Mr. Bishop, F.R.S., ex-member of the Council.
Mr. Turner, of Manchester.
Mr. Lane, of St. Mary's Hospital.
Mr. Curling, of the London Hospital.
Mr. Hancock, of the Charing Cross Hospital.

IRISH MEDICAL ASSOCIATION.—The tenth annual meeting of this body was held on Monday, June 1, in the College of Surgeons, Dublin; Dr. Jacob in the chair. The annual report, which was read by Dr. Quinan, alluded to the proceedings of the Association with respect to a number of legislative measures affecting the Profession. The exertions of Dr. Mackesy, in reference to the Registration Bill, were thankfully acknowledged. The appointment of Dispensary Medical officers under that Bill had, it was stated, been secured; the fee for the registration of each case had been doubled, and an objectionable penal clause, for compelling certificates of the cause of death, had been abandoned. On the motion of Dr. Harvey, of Cork, seconded by Dr. Darby, of Bray, a

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esolution was passed declaring that the minimum salaries of Poor-law and Dispensary Medical officers should be £100 a year. Resolutions were also carried respecting the remuneration of Medical witnesses in courts of law, retiring allowances to Poor-law Medical officers, Parliamentary representation of the Medical Profession, &c.

MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.—The annual meeting of this Society was held on Monday, the 1st inst., in the Royal College of Surgeons, Dublin, when the chair was taken by Dr. Mackesy, of Waterford, President of the College. The chairman, in the course of an eloquent speech, stated that the members of the Society, desirous to perpetuate the memory of its benevolent founder, had very generally subscribed for the purpose of having two portraits of the late Dr. Kingsley, painted by the eminent artist, Mr. Catterson Smith, and that it was arranged that one of these portraits should be placed in the College of Physicians, the other in the College of Surgeons. Dr. Mackesy added that he considered himself fortunate that it had fallen to his lot to preside at the meeting at which one of these memorials was to be inaugurated. The annual report was read by Dr. Wharton, Honorary Secretary. Dr. Benson, in moving the adoption of the report, complained of the apathy of many members of the Profession in not supporting the Society. Nevertheless, he considered that the Society was making progress; they had £6000 in the funds, and they expected in a short time to receive an additional sum of £4500.

BOOKS RECEIVED.

Infant Feeding, and its Influence on Life. By C. F. H. Routh, M.D. Second Edition. London: John Churchill and Sons. 1863.

Physiological Researches. By John Davy, M.D., F.R.S. London: Williams and Norgate. 1863.

Annual Report of the Committee of Visitors of the County of Warwick Pauper Lunatic Asylum. 1862.

The First Report of the London Missionary Society's Chinese Hospital at Peking, under the care of W. Lockhart, F.R.C.S. 1863.

The Sixteenth Annual Report of the Chinese Hospital at Shanghai, under the care of James Henderson, M.D. 1863.

The Australian Medical and Surgical Review. No. 1, March, 1863. Melbourne: F. F. Baillière.

The Progress of Ophthalmic Surgery from the Invention of the Ophthalmoscope (in 1851) up to the Present Time. By John Zachariah Laurence, F.R.C.S. London: H. Mitchener. 1863.

Report on the Probable Duration of Life of the Men in the City Police Force. By G. Borlase Childs, F.R.C.S.

Report of the Committee of Visitors of the Lunatic Asylum for the North and East Ridings of Yorkshire. York: H. Sotheran. 1863

On the Causes and Treatment of Closure and Immobility of the Jaws. By Christopher Heath, F.R.C.S. Dublin: John Falconer. 1863.

Pharmaceutical Journal for June, 1863. London: John Churchill & Sons.

Edinburgh Medical Journal for June, 1863. Edinburgh: Oliver and Boyd.

The Englishwoman's Journal for June, 1863. London: Kent and Co.

Edinburgh Veterinary Review for June, 1863. Edinburgh: Maclachlan and Stewart.

Transactions of the Epidemiological Society of London. Vol. I., Part 3. London: J. W. Davies. 1863.

The Dental Review for June, 1863. London: J. W. Davies.

Dictionary of Chemistry and the Allied Branches of other Sciences. By Henry Watts, B.A., F.C.S. Part IV. London: Longman and Co. 1863.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Vincit qui se Vincit.—Not according to the Medical Act.

The following Papers are in the hands of the printer:—Dr. W. S. Kirkes, "On Chorea, its Relation to Valvular Disease of the Heart, and its Treatment;" "Surgical Inquiries (No. 1.)," by J. Ferneaux Jordan, M.R.C.S., etc.; "On Latent Syphilis, etc.," by Langston Parker, F.R.C.S.; "Clinical Midwifery," by Dr. Ramsbotham.

VACCINO-SYPHILITIC INOCULATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Your last number contained a letter from my friend Mr. Hine, of Nottingham, on the subject of the case I lately reported in your columns He gives expression to facts so clearly stated by Mr. Hutchinson, and so universally known, that my respect for your space prevented me, in my report, from answering his objections by anticipation. I hoped your readers would give me credit for not overlooking considerations so entirely obvious.

My own experience, and, as far as I can learn, that of other observers, furnish no instances of inherited disease as severe as that which I described and yet as late in its appearance, even in the eldest child, especially when the mother has had no abortions, and no symptoms of syphilis even in her pregnancy, and when the father and the remaining children are absolutely free from any trace of the disease. In cases much less severe, I have usually found an earlier manifestation of the cachexia, and the second child, if born after only a short interval, always more or less affected.

Of course there are several possible explanations. The child may be the fruit of pre-nuptial intercourse with an infected person. As I have said, a single case proves nothing, but I think my explanation the most probable among those that occur to me; and the question it raises is certainly too important to be hastily disposed of.

Stroud, Gloucestershire. I am, &c. ROBERT B. CARTER.

FOREIGNERS IN THE ARMY MEDICAL SERVICE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you do me the favour to inform me whether it is possible for a foreigner (young Prussian military Physician) to enter the Medical service of the English army? I am, etc.

London, June 1. M.D. Berlin.

[The law forbids it, unless the applicant be naturalized.—ED.]

THE THREE PHYSICIANS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have heard the old comic song of the "Three Physicians" sung many and many a time in my youth, but never saw it in print until last week in your journal. Perhaps you will let me supply a missing verse, which is essential to connect the substitutions of the chambermaid with the complaints subsequently made by the Doctors.

"Soon a dame, grown with plethora red in the face,
Called these three Doctors in to consult on her case;
They retired with much pomp, saying 'Hang it, let's cup her,
But what news since we last met at Newark at supper?'
Derry down, etc."

The version I have heard of the two last stanzas is as follows:—

"Says Isaac, 'My friends, pray don't say dis is sham,
For you see, my dear brøders, how dirty I am.
I don't know vat it ish, but I can't pash a shlough,
But I roll myshelf in it, just like an old show.'
Derry down, etc.

"Now here's to the learned of famed Warwick-lane,
Let them ne'er think their trade by our verse we profane.
Doctors' great eyes and hands are good emblems well taken,
And hog's liver and crow, you know, oft save our bacon.
Derry down, etc."

I am, &c.

7, Compton-terrace, N., May 30. EDWARD BALLARD.

THE DISCOVERY OF THE PROPERTIES OF THE CALABAR BEAN.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have read with pleasure the very interesting papers which have been recently communicated to the various Medical journals, on the myositic action of the Calabar bean, proving the interest taken in the subject by eminent men in various quarters. My satisfaction has, however, been slightly shaded with a degree of disappointment that the circumstance of my having had the fortune to discover this action has received an extremely meagre and doubtful acknowledgment.

I have to regret that the investigation on the Calabar bean, which formed the subject of my inaugural thesis, publicly defended on July 31, 1862, has been delayed in its publication, in a printed form, for so long a time. In the meantime, however, I had informed an enthusiastic Ophthalmic Physician, Dr. D. Argyll Robertson, of the discovery, forgetting that by so doing I incurred the risk of losing the advantage of being the first to announce what was my proper discovery.

My letter is not written for the purpose of claiming any disputed honour. My right is distinctly admitted by Dr. Robertson, in the introductory remarks to his first paper, read before the Medico-Chirurgical Society of Edinburgh, and afterwards published in the *Edinburgh Medical Journal* for March, 1863; and Professor Balfour, in the discussion at the Society, which followed the reading of Dr. Robertson's communication, said he was anxious that Dr. Fraser "should have the credit of having first discovered its action on the pupil" (*Edinburgh Medical Journal*, March, p. 861). The reality of this claim will be more fully shown by the publication of my thesis, which will be commenced in the *Edinburgh Medical Journal* for July.

A young writer will be excused, in the meantime, for expressing his chagrin to find paper after paper written on the ophthalmic applications of the ordeal bean, in only the first of which allusion is made to the discoverer, while in all the others he is ignored. I am, &c.

THOMAS R. FRASER, M.D. Edin.

Materia Medica Laboratory, University of Edinburgh, May 26.

THE TREATMENT OF PSORIASIS INVETERATA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—As the few remarks I made on this disease in the *Medical Times and Gazette* of January 24, have been so favourably noticed, I am (on account of the apparent interest attached to this class of case) induced to give a short reply to the letters of Drs. Gaskoin and Sadler.

Dr. Gaskoin has misunderstood my statement regarding the treatment I adopted. I never intended to intimate that Fowler's solution and quinine would prove effectual in all cases. I found those drugs useful in my own practice, and have no doubt but many others found them useful in similar cases. I agree with Dr. Gaskoin in thinking that this disease is not apparently confined to any particular kind of constitution; yet, on investigation, I believe we will be able to find some trace of a scrofulous constitution, either "hereditary" or "acquired." When this does not exist, we must then adopt a different treatment from that which may be dogmatically stated to be useful. In that type which is the result of syphilitic impregnation, mercury must first of all be given, and finally Fowler's solution, the use of which has been found to be more beneficial than any of the other compounds of arsenic. I have every reason to believe that quinine will be found a useful adjuvant in every case, especially if any dyspeptic symptoms exist.

Although the remarks on the use or introduction of the liquor arsenici

chloridi are intended for me, I may yet be permitted to offer a few words of remark on its use, and to state that I neither know nor heard of any Practitioner who has ordered this preparation, which at best is of doubtful utility. Some of the oldest and ablest Practitioners, both here and in other places, state to me that their experience is in accordance with my observations. This compound has been omitted from most of our Pharmacopœias, and Mr. Beasley, in his book of prescriptions, merely mentions the dose of this preparation. We may add that most of the compounds of the chlorides are in disuse, and I expect they will, later on, form some of the fashionable remedies of Veterinary Surgeons.

I have here with grateful feelings to thank Dr. Sadler for his kindness in sending me all the published accounts of the Purton Spa. I have no doubt but its use may be beneficial. Together with being sceptical regarding the virtues of spas in general, I must remark that all that has been said in praise of this water cure, its wonder-working good, and indiscriminate use, seems to border on a kind of puff. That class of lepra and psoriasis, the result of syphilitic impregnation, is, as far as I have observed, produced by the repeated application of caustics to the chancres, while no internal remedies had been administered. I will reserve for another time any remarks I may make on the mercurial and non-mercurial treatment of syphilis.

I am, &c.

Limerick, May 10. T. B. Moriarty, A.B., M.D., &c.

Poor-law Medical Relief.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Permit me again to trespass on the pages of your Journal to inform the Poor-law Medical officers that since my last communication with them I have employed much time in superintending and directing the preparation of an extensive series of tables, placing side by side the number of parishes, area in statute acres, population, number of Medical officers, and their salaries at different periods, also the amount of extra Medical fees, and in a final column the total Medical expenditure, the dates commencing in the year 1842, and terminating in 1861; the evidence accompanying this will, I trust, convince the most sceptical of the justice of our complaints, and the incorrectness of some of the material points in Mr Cane's statements last session. This evidence I intend to lay before the Select Committee as soon as it shall be reappointed. I have, however, been informed, through the medium of a member of parliament, "that the delay in the reappointment of the Committee arises from pressure of business at the board, owing to distress in the north, and that a continuance bill for the year is likely to be brought in." In this I trust my informant may be mistaken, as it is not long since I had a letter, in reply to one I addressed to the Right Hon. C. P. Villiers, promising me "a communication as soon as the appointment is made," which leads me to believe that it was then at least intended to move the reappointment of the Committee; but as it is possible, that even when they meet, it may only be for the purpose of drawing up a report, and not to receive further evidence, I think it most desirable to be prepared for that event, and put into print a part at least of the evidence I have drawn up, in order that the Committee may be in possession of certain facts, and come prepared to recommend to Parliament resolutions which will tend to improve the system of Medical relief to the poor.

The great drawback in placing my evidence in the printer's hands is the want of money, having already expended about £25 more than I have received; it must therefore now rest with the Poor-law Medical officers themselves whether I am to proceed or stand still. I believe we have arrived very near the termination of our up hill labours; I therefore advise we should go on a little further and crown the summit of the hill; the old adage, "faint heart never won fair lady," is not inapplicable to our case.

No great cause has ever been carried in the House of Commons without much trouble and some expense; and as ours is a great cause, involving annually the welfare of one million and a quarter of the sick poor of this kingdom, I do trust my Medical friends will not shrink from a little further exertion.

I am aware it is considered by many a hopeless task to fight against a public board, but I feel convinced that we have only to prove the soundness of the views we advocate to insure the present President of the Poor-law board following in the footsteps of the Right Hon. J. Sotheron Estcourt, and aiding us in the reform so much needed. Since the commencement of the present year I have received but £19 10s., and part of this is from gentlemen unconnected with union practice—a sum but little over the cost of the postage of the last issue of circulars sent to the 3073 Poor-law Medical officers. I trust I have but to name the circumstance of the want of money to arouse my friends to the very little exertion required to place a few shillings' worth of postage stamps in a letter and forwarding them to me.

Whilst addressing the Poor-law Medical officers on a public question, permit me a little further space to say a few words on a subject personally affecting myself. The facts are briefly these:—Many years since an orphan in very delicate health was placed under my care, the general opinion being that he would never attain his majority; he, however, not only accomplished this, but afterwards proceeded on a tour to Australia, America, and India, and died at Futtehghur in March last, leaving all his property to me, subject to certain annuities, which will absorb the greater part of the present income. There is, however, a small estate in Chancery which he was trying for at the time of his death, and if I can establish his legal claim to it, that property will be mine; but, in order to do this, I must prove that he was the heir-at-law, and for this purpose I require the date of the birth of his father, Charles Henry Miller Lolley, and his uncle, John Hopkinson Lolley, sons of William Martin Lolley by his first wife, Ann Swaine, to whom he was married in Liverpool in 1802, and from whom he was divorced in Scotland in 1812. Search has already been made to discover their place of birth, but in vain; I have therefore thought it just possible some one of my Medical friends who possess Medical ledgers for the years 1800 to 1813 might by simply turning to the index of their books, and running down the letter L, by chance discover the name of Lolley, and thus give me a clue to the dates of these births, and assist a brother in either obtaining a few hundred pounds, or in preventing him needlessly expending money in a Chancery suit. The births most probably took place either in or near Liverpool, the father having been a wine and spirit merchant there. In Wales also they had relatives, as the property in Chancery belonged to a Mrs. Allen, of the Glen, near Llangollen, Denbigh, but as the divorce took place in Scotland, the births might possibly have been there. This, it will be said, is rather a wide field, but as your Journal is read in all those places, it is not improbable some one of your readers may be found who can assist me.

I am, &c.

12, Royal-terrace, Weymouth, June 1. Richard Griffin.

COMMUNICATIONS have been received from—

Dr. Graily Hewett; Mr. George Newton, R.N.; Mr. Robert B. Carter; M.D., Berlin; Mr. C. Carter Blake; Dr. James Arnott; Dr. E. Lankester; Dr. Septimus Gibbon; Mr. James Robertson; Royal College of Surgeons, Edinburgh; A Subscriber and Constant Reader; Messrs. G. Van Abbott and Co.; Apothecaries' Hall; Dr. James Adams; The Rev. Professor Haughton, M.D.; Dr. A. W. Foot; Mr. Henry Lee; Mr. J. Keene; Mr. W. Biggs; Mr. Le Gros Clark; Mr. C. H. Battersby; Mr. James R. Lane; Dr. G. E. Wright; Council of Medical Education and Registration; Mr. T. R. Fraser; Dr. T. B. Moriarty; Dr. J. W. M. Miller; Mr. Richard Griffin; Royal Institution; Dr. J. Tasker Evans; Mr. Langston Parker; Dr. R. Harland Whiteman; Dr. W. S. Whylock; Dr. J. W. Tripe; Society of Arts; Royal Medical and Chirurgical Society; Dr. Kirkes; Mr. G. W. Grabham; "Vincit qui se Vincit;" Messrs. M. Salt and Son; A Constant Reader.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 30, 1863.

BIRTHS.

Births of Boys, 1005; Girls, 992; Total, 1997.
Average of 10 corresponding weeks, 1853-62, 1609·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	649	647	1296
Average of the ten years 1853-62	529·4	506·4	1035·8
Average corrected to increased population..	..	..	1139
Deaths of people above 90	..	..	2

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	8	15	6	1	9	2	8
North ..	618,210	19	9	16	3	6	7	4
Central ..	378,058	9	6	17	2	8	7	..
East	571,158	18	2	23	1	11	17	2
South ..	773,175	14	7	16	1	14	13	3
Total.. ..	2,803,989	68	39	78	8	48	46	12

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·978 in.
Mean temperature	55·4°
Highest point of thermometer	79·7
Lowest point of thermometer	35·9
Mean dew-point temperature	47·8
General direction of wind	N.E. & W.
Whole amount of rain in the week	0·00 in.

APPOINTMENTS FOR THE WEEK.

June 6. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Lock Hospital, Dean-street, Soho, 1 p.m.

Royal Institution, 3 p.m. Prof. William Thomson, F.R.S., "On Electric Telegraphy."

8. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.

9. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

Anthropological Society of London, 7½ p.m. R. S. Charnock, Esq., F.S.A., "On the Science of Language."

Royal Medical and Chirurgical Society (Ballot at 8), 8½ p.m. Mr. Spencer Wells, "On Ovariotomy twice performed on the same Patient." Dr. R. Lee, "On Induction of Premature Labour." Mr. Beaumont, of Toronto, "New Iris Forceps." Dr. Harley, "On the Calabar Bean."

10. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.

11. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

12. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

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Year.	Number of New Policies issued.	Sums Assured thereby.	Annual Premiums therefrom.	Total Accumulations from all sources.
		£	£ s. d.	£ s. d.
1856	603	294,451	6,597 18 3	202,110 7 2
1857	572	221,122	7,735 9 5	238,055 1 7
1858	658	235,350	8,562 0 9	274,797 15 4
1859	812	294,495	10,172 19 6	309,444 5 2
1860	902	336,290	11,312 15 9	360,530 2 0
1861	1,115	361,060	12,868 3 11	414,231 5 9
1862	1,007	375,197	12,562 7 9	*484,976 11 0

JESSE HOBSON, F.L.S., Secretary.

* Since this Report was closed, the Accumulated Fund has so increased as to raise it above Half-a-Million.

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ORIGINAL LECTURES.

PROFESSOR HUXLEY'S LECTURES
AT THE
ROYAL COLLEGE OF SURGEONS.

THE LECTURES ON THE VERTEBRATE SKULL.

[The account of the structure and development of the vertebrate skeleton, which was announced as the subject of the latter part of Professor Huxley's course, resolved itself, practically, into a discussion of so much of that subject only, as is involved in the study of the structure, development, and morphological relations of the skull. Partly on this ground, partly because the exigencies of an oral demonstration demand a method and style of exposition which are not those best fitted for descriptive writing, the Lecturer has determined on preserving only the substance of his discourses, and the general arrangement of the matter which he adopted. Henceforward, therefore, the lectures will not be numbered, but the subject matter will appear in successive sections.]

I.—*The Structure of the Human Skull.*

The human skull is by no means one of the simplest examples of a vertebrate cranium which can be studied, nor is the comprehension of its structure easy; but, as all vertebrate anatomy has started from the investigation of human organisation, and the terms osteologists use are derived from those which were originally applied to definite parts of the organism of man, a careful investigation of the fundamental structure of the human skull becomes an indispensable preliminary to the establishment of anything like a sound comparative nomenclature, or general theory, of the vertebrate skull.

Fig. 1.

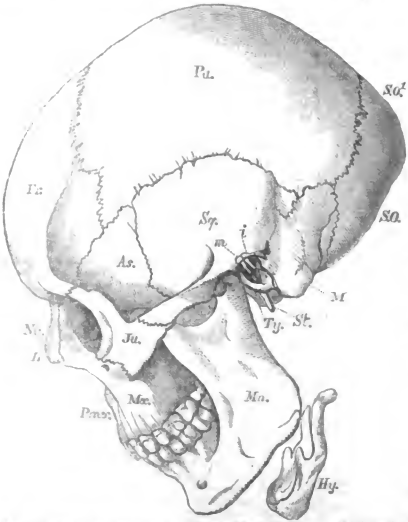

Fig. 1.—Diagrammatic side view of a Human Skull. *Fr.* Frontal. *Pa.* Parietal. *S.O.* Supra-occipital. *S.O¹.* *Squama occipitis* above the *torcular Herophili* and lateral sinuses. *As.* Alisphenoid. *Sq.* *Portio squamosa* of the temporal bone. *M.* Mastoid process and *pars mastoidea*. *Ty.* Tympanic. *St.* Styloid. *Na.* Nasal. *L.* Lachrymal. *Ju.* Jugal, or Malar. *Pmx.* Premaxilla. *Mx.* Maxilla. *Mn.* Mandible. *Hy.* Hyoid. *m.* Malleus. *i.* incus. [These letters will bear the same signification throughout the series of figures of crania.]

Viewed from without (Fig. 1), the human cranium exhibits a multiplicity of bones, united together, partly by sutures, partly by anchylosis, partly by moveable joints, and partly by ligaments; and the study of the boundaries and connexions of these bones, apart from any reference to the plan discover-

Fig. 2.

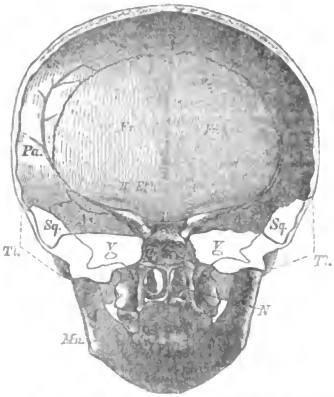

Fig. 2.—Anterior half of the skull of a young person (six or seven years of age) transversely bisected. The temporal bone (*Tl*) on each side is left in outline, and the contour of the alisphenoid is supposed to be seen through it. *II.* optic foramina between the roots of the orbitosphenoids; *V*, *foramen ovale* for the third division of the trigeminal; *N* indicates the nasal chamber; *Mx* is placed in the buccal chamber.

able in the whole construction, is the subject of the topographical anatomist, to whom one constantly observed fact of structure is as valuable as another. The morphologist, on the other hand, without casting the slightest slur upon the valuable labours of the topographer, endeavours to seek out those connexions and arrangements of the bony elements of the complex whole which are fundamental, and underlie all the rest, and which are to the craniologist that which physical geography is to the student of geographical science.

Perhaps no method of investigating the structure of the skull conduces so much towards the attainment of a clear understanding of this sort of architectural anatomy, as the study of sections, made along planes which have a definite relation to the principal axes of the skull.

If a vertical and transverse section be taken through the skull, in such a manner, that the plane of the section shall traverse both external auditory meatuses, the skull will be divided into two unequal portions—an anterior, larger, and a posterior, smaller. The former, if viewed from behind, will present the appearance represented in Fig. 2.

A stout median floor (*BS*) whence lateral continuations (*AS*) are prolonged to meet an arched roof (*Pa*), divides a capacious upper chamber, which, during life, lodged a part of the brain, from a lower chamber, formed by the bones of the face. This lower chamber itself is again separable into two parts, an upper, divided into two by a median septum (*Vo*)—the *nasal passages*; and a lower, the *oral cavity*.

The posterior portion of the bisected skull (Fig. 3) presents, in like manner, a strong floor (*BO*) and a large upper chamber for the lodgment of parts of the brain; but the lower chamber seems at first to be absent in the skeleton, being represented, in fact, only by the styloid processes (*Sty*) the so-called stylo-hyoid

ligaments, and the hyoidean bone (*Ey*) which is suspended by these ligaments to the skull.

Fig. 3.

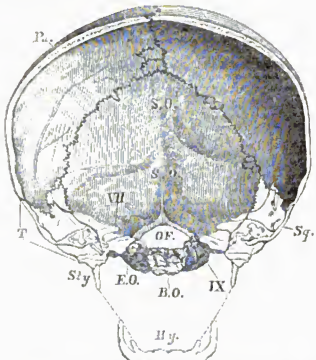

Fig. 3.—The posterior half of the transversely bisected skull, Fig. 2. *B.O.*, the basi-occipital; *E.O.*, *E.O.*, the exoccipitals; *T.* the temporal bone left in outline; *O.F.*, occipital foramen; *VII.*, canal for the portio dura and portio mollis; *IX.*, foramen for the ninth or hypoglossal nerve.

Fig. 4.

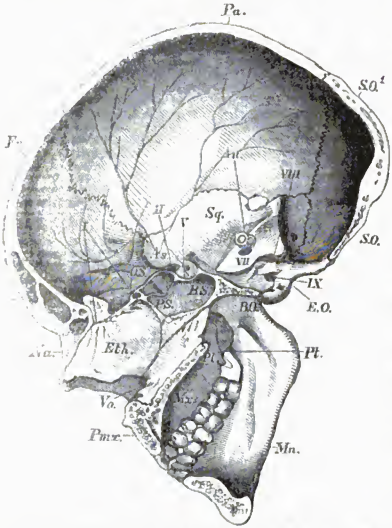

Fig. 4.—Longitudinal and vertical section of a Human Skull. * The *sella turcica*. *An.* The position of the superior and posterior vertical semicircular canals. *I.*, *II.*, *V.*, *VIII.*, *IX.* The exit of the olfactory, optic, third division of the fifth eighth, and ninth nerves.

Fig. 5.

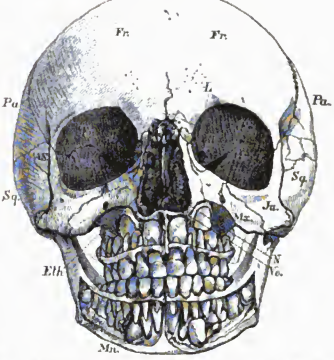

Fig. 5.—Front view of the skull, the halves of which are shown in Figs. 2 and 3. *N*, nasal chamber; *Or*, orbit. The nasal bones are removed, and so much of the upper and lower jaws as is necessary to show the permanent teeth.

A longitudinal and vertical section of the skull (Fig. 4) enables us to observe the same relations of the parts from another point of view. The central bones (*BO*, *BS*, *PS*, *Eth.*, *Vo*), which lie between the arches of the brain-case above and the arches of the face below, are, in such a section, found to constitute a continuous series, from the occipital foramen to the anterior extremity of the nasal passage, which, as it forms the common centre or axis, not only for the bones of the brain-case or cranium proper, but also for those of the face, may be termed the *Cranio-facial axis*.

It will be useful to divide this axis into two portions,—a posterior *basi-cranial* (*BO*, *BS*, *PS*), which forms the centre of the floor of the proper cranial cavity; and an anterior, *basi-facial* (*Eth. Vo.*), which constitutes the axis of the front part of the face.

Three pairs of chambers, destined for the lodgment of the organs of the higher senses, are placed symmetrically upon each side of the double bony box thus described. Of these, two pair are best seen in a front view of the skull (Fig. 5), the inner pair being the *olfactory*, or *nasal chambers* (N), the outer pair, the *orbits* (*Or*). The other pair are better displayed in the transverse sections, Figs. 2 and 3, and are formed by the temporal bones of anatomists (*T*), and especially by the petrous and mastoid portions of those bones.

There is an obvious difference between the relations of these sensory chambers to the contained sensory organ, in two of these chambers as compared with the third. The sensory apparatuses of the nose and of the ear are firmly fixed to, or within, the bony chambers in which they are lodged. That of the eye, on the other hand, is freely moveable within the orbit.

An axis, upper and lower arches, chambers for the sensory organs,—such are, speaking generally, the components of the skull. The special study of these components may be best commenced from the cranio-facial axis. Viewed either from above (Fig. 6) or from below (Fig. 7) the cranio-facial axis is seen to be depressed, or flattened from above downwards, behind, and thick and nearly quadrate in the middle; while, in front, it is so much compressed, or flattened from side to side, that it takes the shape of a thin vertical plate. In such a young skull as that from which the Figures 7 and 8 are taken, the depressed hindermost division of the axis is united with the rest, and with the bones *EO*, *EO*, only by synchondroses and is readily separable, in the dry

skull, as a distinct bone, which is termed the *basi-occipital* (*BO*). The basi-occipital furnishes the front boundary of the occipital foramen, and its postero-lateral parts, where they abut against the bones *EO*, contribute, to a small extent, to the formation of the two occipital condyles. In the adult skull the *basi-occipital* anchyloses completely with the ex-occipital on the one hand, and with the next bone of the basi-cranial axis on the other, so that the saw must be called to our aid in order to demonstrate the bone.

FIG. 6.

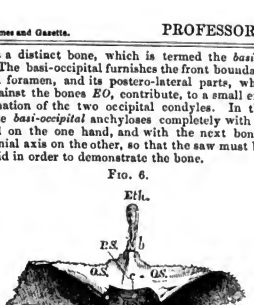

FIG. 6.—Cranio-facial axis and lateral elements of the superior arches of a human skull viewed from above. *a*, the spheno-occipital synchondrosis; *b*, the ethmo-sphenoid synchondrosis; *c*, the *tuberculum sellæ*, indicating the line of demarcation between the basi-sphenoid and the presphenoid; *d*, the *lingulæ sphenoidales*.

FIG. 7.

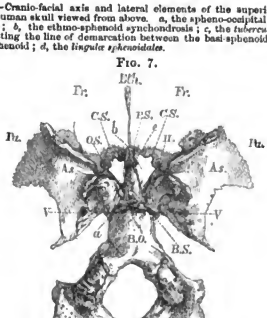

FIG. 7.—Cranio-facial axis and lateral elements of the superior arches (as in Fig. 6), with the pterygoid bones, and without the vomer, viewed from below. *c*, junction of the basi-sphenoid and presphenoid with the internasal cartilage; *C.S.*, *cornua sphenoidalia*, or bones of Bertin.

From the synchondrosis *a* to the point *b*, in even so young a skull as that here represented, the basi-cranial axis is formed by one continuous ossification, excavated superiorly (Figs. 4 and 6) by a saddle-shaped cavity, the *sella turcica*, which lodges the pituitary body,—an organ of no great physiological moment, so far as we know, but of first-rate morphological significance.

On each side of the hinder part of the *sella turcica*, the basi-sphenoid presents a groove for the internal carotid artery, and this groove is completed in front and externally, by an osseous mass, tapering from behind forwards, the *lingula sphenoidalis*, which lies between the basi-sphenoid and ali-sphenoid. At the front part of the *sella*, separating it from the depression for the optic commissure, there is a transverse ridge, the *tuberculum sellæ*.(a) The region between the sychondrosis and the tubercuium is the upper surface of the *basi-sphenoid*. Its under surface (Fig. 7) exhibits a median wedge-shaped portion, terminating abruptly at the point *c*, on each side of which are stuck on, as it were, two delicate bones, shaped somewhat like sugar bags, with their wide and open ends directed forwards and their apices backwards. These are the bones of *Bertin*, or *cornua sphenoidalia*, which do not properly belong to the basi-sphenoid, but coalesce with it in the course of growth.

From the *tuberculum sellæ* (*c*) to the point (*b*) in the upper view (Fig. 6), and from the point *c* to *b* of the lower view (Fig. 7), the middle region of the cranio-facial axis belongs to a third bone, the *presphenoid* (*PS*) which terminates the basi-cranial axis.

I say *terminates* the basi-cranial axis, because the appearance of a continuation forwards of that axis by the *crista galli*, or upper margin of the *lamina perpendicularis* of the ethmoid, is altogether fallacious, depending, as it does, upon a special peculiarity of the highest Mammalian skulls, which arises from the vast development of the cerebral hemispheres. In the great majority of *Mammalia* below the Apes, in fact, the free edge of the *lamina perpendicularis* is not horizontal, but greatly inclined, or even vertical; and in these cases the whole *lamina* plainly appears to be, what it really always is, beyond, or anterior to, the floor of the brain-case; while the true basi-cranial bones are parts of the floor of the brain-case.

During fœtal life, the basi-sphenoid and presphenoid are united only by synchondrosis, traces of which may even be discovered (as Virchow has shown) as late as the thirteenth year, or later. Even before birth the two bones become anchylosed superiorly, their junction being marked by the *tuberculum sellæ*, and the remains of the synchondrosis extend obliquely from this spot downwards and forwards to the point *c* on the under surface of the axis, where its cartilage becomes continuous with the osseo-cartilaginous internasal septum.

It is this osseo-cartilaginous septum between the two nasal cavities, the upper free edge of which constitutes the *crista galli*, while the lower free edge supports the *septum narium*, which constitutes the *basi-facial axis*.

All the upper and middle part of this septum is formed by a thin osseous plate, the *lamina perpendicularis* of human anatomy, or true *Ethmoid* (*Eth.*), which abuts, in front, upon the frontal and nasal bones; behind, upon the presphenoid; and below, upon a rod-like mass of cartilage, which becomes connected with the *septum narium* and the premaxillary bones anteriorly and inferiorly, and is obliterated with age.

The inferior and posterior part of the septum is constituted by a bone with a gutter-like upper and anterior boundary, which embraces the whole rounded inferior and posterior edge of the cartilage in question, and thus extends from the under surface of the basi-sphenoid, posteriorly and superiorly, to the middle of the roof of the bony palate anteriorly and inferiorly. This bone is the Vomer (*Vo.*).

Thus there are three bones in the *basi cranial axis*,—the basi-occipital, basi-sphenoid, and presphenoid; and there are two bones in the *basi-facial* axis,—the ethmoid and the vomer; and the essential difference between these two sets of bones is, that the former constitute the middle part of the floor of the brain-case, while the latter are altogether excluded therefrom.

We may now turn to the upper arches of the skull, or those bones which form the walls and roof of the brain-case. In the young skull from which the figures 6 and 7 are taken, the postero-lateral margins of the basi-occipital are united only by synchondrosis with the rest of the occipital bone. The parts of the latter which are thus united with the basi-occipital, and which limit the sides of the great occipital foramen, are primitively distinct bones,—the *Exoccipitals* (*Eo.*); while the squamous part which bounds the posterior segment of the foramen is known as the *Supra-occipital* (*So*, *So'*). All these bones, eventually becoming anchylosed together, form the occipital bone of the human anatomist; or what we may term the first, posterior, or *Occipital segment* of the skull.

From the sides of the *basi-sphenoid*, external to the *lingulæ*, two wide processes, well known as the "greater wings of the sphenoid" or *Aliisphenoids* (*AS*) spring, and unite suturally with the great expanded parietal bones (*Pa*), which form the dome-like crown of the skull, and unite in the middle line in the sagittal suture. In this way a second, middle, or *Parietal segment* of the skull is distinguishable.

In like manner, the presphenoid passes, on each side, into

(a) Where the terms employed in our ordinary handbooks of Human Anatomy do not suffice for my purpose, I employ those used by Henle in his classical "Handbuch der Systematischen Anatomie des Menschen," now in course of publication.

the smaller processes, the "lesser wings of the sphenoid," *ala minores*, or wings of Ingrassias; which, on account of their relations to the orbits, have been well named the *orbito-sphenoids* (O S). And these, externally and anteriorly, unite by suture with the arched and expanded frontal bones (*Fr*), originally double, and separated by a median frontal suture, which ordinarily early disappears. These bones not only meet in front, but send in processes which roof over the orbits and unite with the free anterior edges of the orbito-sphenoids, thus leaving only a long and narrow vacuity on each side of the *crista galli*, and in front of the presphenoid.

The presphenoid, the orbito-sphenoid, and the frontals are the constituents of the third, anterior, or *Frontal segment* of the skull.

It will be observed, however, that this enumeration of the bones of the three great segments of the skull does not account for all the distinct osseous elements which enter directly and indirectly into its boundaries. If all the bones mentioned are put together there still remain four considerable vacuities, two small, already mentioned, in the proper front wall of the skull, on each side of the *crista galli*; and one on each side, posteriorly, between the occipital and parietal segments, of very much larger size, and extremely irregular form. The anterior vacuities are filled up by those spongy osseous masses, united with the *lamina perpendicularis* in the adult skull, which are called "lateral masses of the Ethmoid," or "superior and middle spongy bones," and more immediately by the perforated cribriform plate, which allows of the passage of the filaments of the olfactory nerve, and connects these lateral masses with the *lamina perpendicularis*, or proper ethmoid. Looking at the bones which form the immediate walls of the upper and middle part of the nasal chambers, with reference only to the olfactory organs, we might say, in fact, that the anterior vacuity of the cranium proper is stopped by the ossified walls of the olfactory sacs, consisting of the ethmoid and vomer in the middle line, of the superior and middle spongy bones (or so-called lateral masses of the ethmoid) supero-laterally, of the inferior turbinal bones infero-laterally. And to these ossifications must be added, as members of the olfactory group, the bones of Bertin posteriorly and superiorly, and the nasal bones anteriorly and superiorly.

The great posterior vacuity on each side is filled up by the *Temporal bone*, which consists of a very considerable number of distinct elements, only distinguishable by dissection and by the study of development in Man, but which remain permanently distinct, and undergo very strange metamorphoses in many of the lower vertebrates. Some of these constituents of the temporal bone, such as the squamous portion or *squamosal* (*Sq.*), and the *malleus*, *incus*, and *stapes*, are discriminated by the student of ordinary human anatomy; but there are many others which he is not in the habit of regarding as distinct osseous elements. Thus the bony "external auditory meatus" is primitively a distinct bone, termed *Tympanic* (*Ty.*) on account of its affording the frame in which almost the whole of the tympanic membrane is set. The *styloid* process (*Sty.*) is originally a distinct bone. And, lastly, the *pars petrosa* and *pars mastoidea* of human anatomy are, in reality, made up of three distinct ossifications, of which I shall have to say more presently, but which I shall speak of for the present under the collective name of the *periotic* bones, because they immediately surround the organ of hearing.

Not merely the periotic, but also the squamosal and tympanic bones are so closely related to the auditory organ, that the postero-lateral apertures of the cranium may be said to be stopped by the osseous chambers of the auditory organ in the same way as the anterior apertures are closed by the osseous chambers of the olfactory organs. As the eye is contained only in a mobile fibrous capsule, the sclerotic, the apertures which lead to the orbit—the spheno orbital fissures and the optic foramina—are not closed by any special bones pertaining to the sensory organ lodged therein.

Thus the brain-case may be said to be composed of three superior arches connected respectively with the three divisions of the basi-cranial axis, and of two pair—an anterior and a posterior—of bony sense capsules interposed between these arches. A middle, third pair of sense capsules is not represented by bone in the cranial walls.

At the Thames Police Court, last week, two persons were fined for neglecting to have their children vaccinated. In both cases the children had contracted small-pox.

LECTURES
ON
ECZEMA,
(INCLUDING ITS IMPETIGINOUS, LICHENOUS, AND PRURIGINOUS VARIETIES,)

DELIVERED AT THE

Dispensary for Skin Diseases, Glasgow.

By T. McCALL ANDERSON, M.D., F.F.P.S.

Physician to the Dispensary for Skin Diseases; Physician to the Deaf and Dumb Institution, etc., Glasgow.

LECTURE II.(a)

(Continued from page 557.)

Ætiology.—Eczema attacks by preference those of the lymphatic temperament, the scrofulous, and the debilitated, these states of system constituting some of the predisposing causes, the exciting being usually some external nor internal irritant. The disease, however, often attacks persons in the most robust health, in whom neither external nor internal irritation is apparent. These cases must be referred to some idiosyncrasy,—the "Dartrous diathesis," as the French call it, which is certainly a convenient word to cloak our own ignorance of its nature. Improper, insufficient, or bad food is very apt to call it forth. The most familiar illustration of this is to be met with in infants whose mothers have a deficient or unhealthy secretion of milk, or who insist upon nursing their children for eighteen months or even two or three years. On the other hand, though not nearly to the same extent, a too liberal diet, and too stimulating food and drink, predispose to, but rarely are the exciting causes of, eczema. Mental excitement seems to operate somewhat in the same way as excessive quantities of nutriment.

Eczema is apparently an hereditary disease, as there are numerous instances of parents and their offspring being affected, several of which are at present under my observation. Devergie says, and very likely correctly, that eczema is probably not, strictly speaking, hereditary, but only the constitution which favours the development of an eczema. This is, however, a distinction without much difference.

Infants and females seem, *cæteris paribus*, to be more liable to it than males, being more excitable and their skins more sensitive. In the former, deficient lactation, as above mentioned, gastro-intestinal disturbance, and dentition; in the latter, derangement of the uterine organs operate frequently as exciting causes.

Atmospheric vicissitudes may give rise to an eruption of eczema, as alternations of heat and cold, a moist atmosphere, a variable climate, etc. The eruption makes its appearance much more commonly in summer and winter than in spring or autumn. Thus Devergie's statistics show that of 384 cases, 60 commenced in spring, 127 in summer, 28 in autumn, and 169 in winter; that is to say, 296 in summer and winter, and only 88 in spring and autumn.

A varicose condition of the veins, keeping up a constant hyperæmia of the parts, as we meet with most frequently on the legs and about the anus, is a powerful predisposing cause; so also are tumours pressing upon the trunks of veins, and producing congestion of those parts from which the ramifications of the trunk are derived. It is in this way that uterine tumours, masses of impacted fæces, etc., predispose to eczema of the genital organs and anus.

While females are more liable to be attacked by eczema than males, the latter are more exposed from the nature of their occupations to the exciting causes. Those whose calling exposes their skin to the action of acrid substances or great heat, are often attacked, *e.g.*, cooks, grocers (hence the term "grocer's itch," the hands being the parts affected), bakers, smiths, bricklayers, etc. The heat of the sun sometimes produces eczema on the exposed parts of the skin (hence the term "eczema solare"). The use of hot and mineral baths, though often beneficial, sometimes calls out or aggravates an existing attack of the disease. Its occurrence is also favoured by working so as to heat the body much and produce perspiration, especially on those parts which are in contact with one another, also by exposure to cold and by the use of cold water in the form of baths, or cloths wrung out of cold

(a) These Lectures have been carefully revised, and many alterations and additions made.

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water. Other irritants may likewise produce it, *e.g.*, the friction of thick flannel underclothing, the friction of opposed surfaces of skin, aided by the habitual moisture of the parts in some persons as we meet with between the hips, in the axillæ, on the flexor surfaces of many of the joints, etc.

The application of stimulating liniments may call it forth, as croton oil liniment; likewise ointments, as antimonial ointment, blisters, the preparations of mercury (hence the term "eczema mercuriale"), sulphur, and iodine, alkalies, acids, parasitic fungi, and animal parasites, *e.g.*, lice, fleas, bugs, and lastly, and most important of all, the itch-insect; for almost all aggravated cases of scabies are complicated more or less with eczematous eruptions. This is owing to the scratching which the irritation of these parasites induces.

The irritation of the razor, especially when blunt, and irritating discharges from the nostrils, meatus, mouth, anus, and genital organs are fruitful sources of eczema.

I have known patients affected by sleeping with those who were labouring under the disease, and I quite agree with Wilson in the opinion that this is often owing to the discharge from the eczematous eruptions acting as an irritant to the skin of the healthy person, though not always, for the cause is to be looked for, not unfrequently, in their being exposed to the same predisposing and exciting causes, as bad food, unwholesome dwellings, pediculi, etc.

Internal irritation may give rise to eczema, as that from teething, disordered stomach and bowels, ascarides, tapeworm, fistula, hæmorrhoids, stricture of the urethra, etc. Certain internal medicines may call it forth, *e.g.*, copaiva and turpentine, producing an erythema, which, by scratching, may advance to eczema. The internal administration of arsenic sometimes causes intolerable itching, and the scratching thus occasioned may call forth an eczematous eruption.

The *diagnosis* of most cases of eczema is by no means difficult, if you bear in mind those symptoms which I have endeavoured to impress upon you as being the most prominent and least variable. The itching, the infiltration, the exudation on the surface of the skin, the formation of crusts, and the punctated appearance of the exuding surface, are features which, though not invariably present, should be always kept in view when examining a supposed eczematous eruption with a view to its diagnosis. You must also remember what I have, I hope, convinced you of, that vesicles are by no means essential to the eruption, but that the principal elementary lesion may be either an erythematous state of the skin, a vesicle, a pustule, a papule, or a fissure, and that there is often a mixture of several or of all of these lesions on an eczematous surface. It will be apparent, from what has been said with regard to the causes of eczema, that the state of the system generally, however much it may guide us in treatment, affords a very small clue indeed to the diagnosis of the disease, and we must consequently rely almost solely upon its local manifestations.

Erythema can never be mistaken for eczema, if you understand what is meant by the word, and keep in view the fact that it is merely the first stage of an eczema, particularly of that form of it which I have described to you as eczema erythematodes, and that most eczematous eruptions terminate in an erythema. You must therefore be prepared to find patches of erythema mingled with patches of typical eczema in cases of this disease.

Erythema is distinguished from eczema by exhibiting itself in the form of simple redness of the skin, accompanied in the second stage by exfoliation of the epidermis (pityriasis), by the itching being usually more moderate, by the absence of any appreciable infiltration, by the total absence of exudation on the surface of the skin, of vesicles, pustules, fissures, and crusts.

I have known cases of eczema mistaken for *erysipelas*, an error which should rarely be committed, as they differ from one another in very many important respects. Thus, in erysipelas the disease tends to creep over the skin and continuously to invade new surfaces; the face and the lower extremities are the parts usually attacked; the redness of the skin is uniform, not punctated as in eczema; the edge of the eruption is abrupt, and the swelling often great. Again, while bullæ occasionally form on the erysipelatous ground, neither vesicles, papules, nor pustules are to be seen; there is no exudation on the surface of the skin (except from the rupture of bullæ), and burning heat, pain, and tension are invariably complained of in the advancing stages, rather than itching, which is only felt in the stage of desquamation. Lastly, erysipelas is usually an acute affection, which runs its course in a week or two, being preceded and accompanied by feverish symptoms of a low type.

Some of the varieties of *herpes* (I do not allude to herpes zoster, which can never be taken for it) may be mistaken for the vesicular form of eczema; but in the former the vesicles, which are arranged in clusters, are much larger, remain intact much longer, run their course in a few days, are not replaced by fresh crops, are not accompanied by infiltration of the skin to any extent, and itching is almost completely absent, being replaced by a sensation of burning heat.

The affection which is most liable to be mistaken for eczema is *Scabies*,—the disease due to the presence of the *Acarus Scabiei*; not a recent case, however, but a chronic one which, owing to the long continued and severe scratching, is complicated with eczematous eruptions. If the case is one of scabies, you will usually have a history of the disease being communicated by contagion, and, as far as my experience goes, persons sleeping in the same bed with the patient for any length of time are sure to be affected likewise. Then you will find in most cases, in different parts of the skin, but most readily about the hands or wrists, the little canals which the itch-insects form in the skin, the recent ones containing the acarus and its eggs in various stages of development. On scraping the garments which the patient wears next the skin, and placing the matter on a glass slide, you may sometimes detect the *débris* of acari and their eggs with the microscope. The above symptoms, when present, are conclusive as to the case being one of scabies. But the seat and character of the eruptions in scabies sometimes serve of themselves to clear up the diagnosis. Eczematous eruptions on the nipples of the female, or the penis of the male, or about the hands or umbilicus, are always very suspicious, and so are pruriginous eruptions, which are most abundant on the lower part of the abdomen, the inner aspect of the thighs, and the front of the fore-arms. If ecthymatous pustules on the hands, feet, and hips be superadded, the case is almost certainly one of scabies. But be careful not to let yourselves be led into error by looking upon patches of eczema of the hands as proof positive of the presence of the itch-insect, unless several of the above symptoms are present also, as simple eczema often attacks, and is limited to, these parts. In doubtful cases, we should treat the patient as if he were labouring under scabies at first (d), when the itching will be at once moderated if it is a case of scabies, but only slightly ameliorated if one of eczema. It must, however, be borne in mind that, although the itching does not entirely disappear under the use of sulphur, we must not conclude too quickly that it is not a case of scabies, for the treatment may not have been efficiently carried out, and even if it has been, the eczematous eruptions which have been called forth by the scratching in a case of scabies, may be a source of itching long after the acari have been killed. Cases, therefore, of scabies complicated with eczematous eruptions, are very liable to be mistaken for eczema; but if we are on our guard, the error is not likely to occur, unless there is no history of contagion, and unless we fail to detect the furrows of the acarus and the insect itself.

A typical case of *psoriasis* can never be mistaken for a typical case of eczema, but when patches of the former have lost their characteristic silvery scales, and when itching is complained of, as sometimes happens, they may be mistaken for eczema. But, in psoriasis, the patient's account of the appearance of the eruption at an earlier stage, the more dusky colour of the inflamed parts, the absence of that punctated appearance of the surface so often met with in cases of eczema, and of all moisture, the occurrence of characteristic patches of the disease on other parts of the body, the detection of the eruption on the elbows or knees, and the history of the case in general, should prevent error. And this leads me to state that very many cases are diagnosed incorrectly from confining the examination to one or two patches of eruption, when, by exposing a larger surface and more patches, quite a different picture of the disease is obtained. I think it of great importance, in the diagnosis of all skin diseases, to see the whole, or as much as possible of the skin, even although the patient says that there is no eruption, except where he has indicated, as I have often found such statements to be either knowingly or unwittingly wrong.

Pemphigus foliaceus may be mistaken for eczema, and, indeed, some dermatologists hold that it is not a variety of

(d) For the treatment of scabies, see my work on the "Parasitic Affections of the Skin," p. 140. London: Churchill. 1861.

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pemphigus at all, but of eczema, an opinion in which I cannot coincide. In pemphigus foliaceus the eruption usually commences on the front of the chest; when fully developed it covers the whole body, without leaving intervals of sound skin; it is almost always fatal; bullæ are usually to be detected at some period of the disease; the infiltration of the skin is not great; itching not usually excessive; the scales and crusts are very large. In eczema, on the other hand, the eruption has no particular tendency to commence in the front of the chest; it never covers the whole body without leaving intervals of sound skin: it is never fatal; bullæ are not to be detected except in a few cases, and then on the soles and palms only, owing to the thick cuticle preventing the bursting of the vesicles; the infiltration of the skin is often great, the itching excessive, and the scales and crusts are not so large as in pemphigus foliaceus.

The disease first described by Devergie as *Pityriasis rubra*, (e) and later by Hebra (f) may be taken for eczema; and, like pemphigus foliaceus, is regarded by some as a variety of that disease. I have seen three or four cases of this rare affection, one of which is carefully recorded by my lamented friend, Dr. McGhie, (g) and the points which are most characteristic of it, in my opinion, as distinguishing it from eczema, are the uniform redness of the eruption terminating abruptly at the edges, but gradually extending till the entire cutaneous envelope is evolved; the exfoliation of epidermic scales, which are easily detached, the masses separated being very large (often several inches in diameter), and so numerous that a basket full may often be removed in the morning; the burning heat; the very slight itching; the absence of infiltration and exudation to any extent, and the complete absence of that punctated appearance of the skin so often met with in eczema, and of vesicles, pustules, or papules.

That rare form of skin disease described by Hebra(h) under the name of *Lichen ruber*, and not referred to, as far as I am aware, by any other author, presents many symptoms in common with eczema. In lichen ruber, however, the eruption consists of papulæ only, and in no case do we meet with either vesicles or pustules. Then, again, when the eruption becomes confluent, while there is redness and infiltration of the skin and epithelial desquamation, as in cases of eczema, there is no exudation whatever, nor formation of crusts, and the itching is only slight. And, lastly, when fully developed, the eruption covers the whole body, without leaving the smallest interval of sound skin, and it is almost invariably fatal in the long run, being preceded by marasmus. These are quite unknown occurrences in cases of true eczema.

Some forms of *syphilitic eruption*, and more especially eczema syphiliticum, may be mistaken for non-syphilitic eczema. But, in the diagnosis of the syphilitic affection, we are assisted by the history of the case, by the occurrence of the eruption after the contraction of a hard chancre, which was accompanied by induration of the glands in the neighbourhood; by its coincidence with other manifestations of syphilis, as engorgement of the posterior cervical glands, syphilitic headache, and rheumatism, burning heat of skin at night, ulceration of the mucous membrane of the mouth, tongue, and fauces, and falling out of the hair. In addition to this, you will often notice several forms of eruption in the skin at one time in the syphilitic disease, as eczema, roseola, condylomata, etc.

But you may have all these symptoms, and yet the eczematous eruption may be non-syphilitic, for there is no reason why a syphilitic patient may not be affected with non-syphilitic eczema. You will be prevented from falling into error, however, by finding out whether or not the eczema appeared simultaneously with other syphilitic manifestations, and by carefully examining the eruption itself. If it is syphilitic, it is most apt to occur near the orifices of the body (about the nose, mouth, etc.), though it is by no means confined to these parts. It has a great tendency to assume the circular form, and to exhibit a coppery tint. Its edge is usually elevated. The ulcers, when present, are larger, deeper, more unhealthy-looking, and have perpendicular edges, and itching is not usually complained of.

(e) "Traité Pratique des Maladies de la Peau." Ed. II., p. 442.

(f) "Handbuch der Speciellen Pathologie und Therapie. Dritter Band. Acute Exantheme und Hautkrankheiten," von Hebra. Zweites Heft, p. 521. Erlangen, 1862.

(g) *Glasgow Medical Journal*, January, 1858, p. 421.

(h) For a detailed description of lichen ruber, see "Handbuch der Speciellen Pathologie und Therapie. Dritter Band. Acute Exantheme und Hautkrankheiten." Zweites Heft, p. 315 Erlangen, 1862.

There is just one other caution which I must give you, and it is this, that non-syphilitic eczema occurring on the legs has a tendency to exhibit a decidedly coppery tint and large ulcers with perpendicular edges and unhealthy bases. This is owing to the continued congestion to which these parts are subjected, owing to their distance from the centre of the circulation, to their dependent position, and to their being frequently the seat of a varicose condition of the veins.

If you are still in doubt, treat the eruption by means of localised mercurial vapour baths, when, if it is syphilitic, it is sure to vanish.

There are several other forms of skin disease which you may mistake for eczema, but I prefer alluding to them when I bring under your notice the local varieties of eczema, in which place their diagnosis can be studied to better advantage.

ORIGINAL COMMUNICATIONS.

SURGICAL INQUIRIES.—No. I.

ON LIGATURE OF THE COMMON CAROTID ARTERY AS A REMEDY FOR PROGRESSING COMPRESSION OF THE BRAIN CAUSED BY EXTRAVASATION OF BLOOD FROM INJURY TO THE HEAD.

By FURNEAUX JORDAN,

Professor of Descriptive and Surgical Anatomy at Queen's College; Assistant-Surgeon to the Queen's Hospital; Senior Surgeon to the Eye and Ear Hospital, Birmingham.

The varieties of compression of the brain resulting from injury are few and well marked. The symptoms of compression from depressed bone (or foreign bodies) occur instantaneously, and continue without increase or diminution. In compression from extravasated blood, the most valuable indication is gradual increase of the severity of the symptoms. Occasionally the symptoms of compression are deferred for a short time—it may be minutes or hours. Compression of the brain from the presence within the skull of the products of inflammation cannot, of course, occur before the development of the inflammatory process.

Intra-cranial extravasation of blood may occur external to the dura mater, within the arachnoid, under the pia mater, and into the cerebral substance or ventricles. External to the dura mater the hæmorrhage is almost invariably from the large middle meningeal artery, its trunk, or main branches. Within the arachnoid and in the other localities enumerated the hæmorrhage usually takes place from some branch of the internal carotid.

As a general rule, it cannot be doubted that compression from extravasated blood admits of diagnosis from concussion. The present state of our knowledge, however, compels the admission that a small class of cases exists in which the various forms of pressure from effused blood cannot be diagnosed from concussion or from each other. It may be in such cases that pressure is inconsiderable, and that concussion is severe and complicated.

To say that in all cases of concussion there is a physical change, is simply a corollary to the indisputable conclusion of modern science that there is no functional disease. In all cases, except the most slight and transient, there is structural lesion, contusion, laceration, or cerebral hæmorrhage. Such lesion may be apprehended when the symptoms of concussion are protracted, or of a mixed, or of an apparently irregular ("apparently," for in science nothing is irregular), character. The very existence of doubt between concussion and compression should be regarded, I think as diagnostically in favour of concussion complicated with obvious or makroscopic injury. In the slighter cases the injury is subtler—microscopic, hyper-microscopic, or dynamic.

The incontrovertible fact remains, that, of injuries of the head, one of the most common and the most fatal is extravasation of blood from rupture of the large meningeal artery. Of the various kinds of compression from extravasated blood it is undoubtedly the most severe, the most extensive, the most fatal, and the most easily recognised. Its historical landmarks are not readily to be mistaken. Typical cases are numerous, and every Surgeon has seen them. An injury is inflicted on the head by a fall or a blow, which may or may not be followed by concussion; if there is concussion, it is

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usually transient. After a longer or shorter interval of consciousness, symptoms of coma appear, which, although slight at first, gradually and surely advance to the common termination—death.

It is necessary that I should examine somewhat closely the phenomena which ensue upon rupture of the large meningeal artery. I shall first describe those symptoms which indicate the earlier stages of compression.

Commencing, partial, and progressing compression from blood which is being poured out from the large meningeal artery, may be recognised by the following symptoms:—After a severe injury to the head, as has already been stated, there may or may not be concussion. If symptoms of concussion are present, they either disappear quickly, or they diminish in intensity. (Should they remain unchanged, there is probably marked cerebral lesion). In either case there shortly ensue very different and very peculiar symptoms. Of these the most conclusive is partial paralysis, showing itself in the side opposite to the injury; in the iris it appears as diminished sensibility, with a tendency to dilatation; in the soft palate it gives rise to slight stertor. The breathing and the pulse become slow and regular. If there has been an interval of consciousness, incoherence of speech and drowsiness, which together frequently resemble intoxication, will usher in the symptoms just recounted. The face is also flushed, and the skin warm—conditions of importance, as showing that reaction has set in; for it is only when reaction from the shock of the injury occurs, that the circulation in the meningeal artery acquires sufficient vigour (as Mr. Fergusson well puts it) to separate the dura mater from the skull and thrust it inwards upon the brain.

It cannot be too strongly insisted upon that the slight coma, slight hemiplegia, slight stertor, and the other symptoms referred to, gradually increase in intensity, and we have, after hours of constant bleeding from the large meningeal artery, all the phenomena of

Complete compression, namely, complete hemiplegia, intensely loud stertor, "whiffing" at the corner of the mouth, a largely dilated and quite insensible pupil. Paralysis of the rectum and bladder, as evinced by the spontaneous evacuation of fæces, and retention of urine (a) is also present. The spontaneous escape of fæces, however, when the rectum is loaded, is a sequence of other states of the nerve centres, attended by temporary muscular depression, apart from that of physical compression. Unconsciousness is also a condition by no means peculiar to compression of the brain; but, allied with other symptoms, it has at least a negative value, and when it comes on gradually, after partial or complete recovery from concussion, it is justly attributed to extravasation of blood. An excellent observer, Mr. Bryant, records a singular case, which he entitles "relapsing concussion." I cannot but think that the relapsing unconsciousness was due to a slight cerebral hæmorrhage, occurring with reaction—a condition frequently recovered from. Mr. John Adams appears to agree with Abernethy, Brodie, and Guthrie in attaching great importance to slowness of the pulse (36 to 40 in adults, 50 in children) as an indication of compression.

Hæmorrhage from any source, except the large meningeal artery, in sufficient quantity to produce compression, is exceedingly rare. The effusion of blood in small quantities, as one of our best observers in this province of Surgery, Mr. Prescott Hewett, has fully shown, is not infrequent. When compression does occur, as indicated by its characteristic signs, the hæmorrhage is usually from one of the larger branches of the internal carotid, and is seated opposite the middle fossa of the base of the skull, where, from obvious anatomical conformations, the severest cerebral lacerations take place. Anatomical peculiarities also prevent, as a rule, laceration of the cerebellum or posterior lobe of the cerebrum, hence the extreme infrequency of hæmorrhage from the branches of the vertebral artery. Effusion of blood from a sinus is a still more exceptional circumstance. Mr. Adams, an eminent authority, apparently regards it as highly improbable. That the passively flowing venous blood in a canal separated from the bone by a wall of dura mater is capable, when that wall is ruptured, of separating the dura mater from the bone and driving it into the brain, seems almost incredible, when a comparatively large, strong, and vigorous artery like the middle meningeal takes hours, occasionally very many hours, to tear the dura mater from its firm osseous attachment—an attachment, too, which becomes more intimate the closer we approach the base of the skull, as in the locality of the lateral sinus. It is much more probable that a rupture being produced in that layer of the dura mater which forms the inner wall of the sinus, copious hæmorrhage should occur into the arachnoid. A case, however, is recorded by Mr. Prescott Hewett, where extravasation, with compression, occurred from the lateral sinus. Mr. Hewett also considers that in such cases concussion merges into an immediate and severe compression. Thus, according to this able observer, the extremely infrequent accident in question differs materially in locality, in history, and in symptoms, from rupture of the large meningeal artery.

I have now given a brief summary of our knowledge of compression of the brain from sanguineous effusion. The propositions I have made, while they certainly represent my own experience, accord also, I believe, in the main with the views of our best and most modern observers—Prescott Hewett, John Adams, Bryant, Fergusson, Erichsen, and Syme.

Having shown that among injuries to the head one of the most common, severe, fatal, and, in its several stages, the most easily recognised lesion is rupture of the large meningeal artery, I now propose a remedy that shall arrest the hæmorrhage in its earlier stages, and consequently save both brain and life. The remedy alluded to is the application of a ligature to the common carotid artery. Bearing in mind the known effects of the operation, and the nature of the changes it is proposed to arrest, such a proceeding is at once suggested by the facts of anatomy, the laws of physiology, and the principles of surgery.

Commencing and progressing compression from rupture of the large meningeal artery can, in a certain number of cases, as every authority admits, be undoubtedly recognised. If, then, at the commencement of the hæmorrhage, a ligature be placed on the common carotid artery of the same side (and opposite to the hemiplegia), the flow of blood will as certainly be stopped as when a ligature is applied to the carotid for a wound of the tonsillitic artery, or a wound of the internal carotid in the pharynx, or for an aneurism in the orbit.

In such an accident as hæmorrhage from the meningeal artery, the most delicate organisation in the body and life itself are at stake. For this very injury, however—the most terrible and fatal in surgery—there is practically no treatment.

The views of modern authors on the use of the trephine in compression from extravasated blood are so generally unfavourable that I do not misrepresent them at the same time that I express my own opinion when I say that the trephine is practically useless in the injury under consideration.

The most that can be said for the operation of trephining is that it is a little less severe and a little less fatal than some of the accidents in which its use is resorted to. The following statement will approximate sufficiently near to the truth (and probably it favours the trephine) to afford a conception of the relative gravity of the operations of trephining and deligation of the common carotid artery. In ten adults to whom the trephine is applied, nine die from the operation; in ten cases of ligature to the common carotid, one dies from the operation. The objections to the trephine in compression of the brain from extravasated blood are so overwhelming that, not only is it rarely resorted to, but it is everywhere taught that its use should be avoided until death itself is close at hand. In all cases the removal of the clot is extremely difficult, and, in most, impossible. In a large number of cases the coagulum is formed at the floor of the cranial cavity, in all other cases the blood descends towards the base, and in most instances it reaches it. At the same time the clot is very widely diffused, is very hard, and is remarkably adherent to the dura mater. If very diffused, the trephine is utterly inadequate to its removal; if not diffused, its locality is variable, and can rarely even be guessed at (for in most cases of rupture of the meningeal artery the fracture is simply a crack or fissure, and

(a) Very conflicting views are taught in explanation of the circumstance that in paralysis affecting both rectum and bladder the contents in the one viscus escape, and in the other are retained. I submit that clinical experience, physiology, and the anatomical disposition of the organs in question point to the following interpretation:—The rectum discharges its contents only when loaded. Now, when the rectum is loaded, more muscular force is required to retain than to expel the fæcal accumulation. In the bladder an opposite condition prevails; here more force is needed to expel than to retain the fluid contents. When the bladder is distended to the utmost degree which its physical strength permits, the urethra becomes distended also, and the bladder runs over. There is no incontinence. When the healthy bladder is distended, discomfort arises from prolonged efforts to refrain from expulsive action. When the healthy rectum is distended, discomfort arises from the endeavour to maintain contraction of the sphincter.

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affords no external indication of its locality, and, in extremely rare cases, rupture of the large meningeal artery may occur without fracture), hence in a few cases the trephine has been applied at one spot, and the coagulum has been elsewhere.

If the objection be made that the diagnosis of the source of hæmorrhage cannot be so accurately established as to justify the application of a ligature to the common carotid, I reply, that while the objection militates powerfully against the use of the trephine, the presumed uncertainty illustrates the advantage of the proposed remedy, for if in the hours which succeed to a serious injury to the head there appear symptoms of pressure on the brain, in ninety-nine cases in a hundred blood is being poured out of some branch of the external or internal carotid arteries.

As compression occurs with or follows reaction and vascular activity, there is not only no danger of syncope—which in the uncompressed brain occasionally follows the application of a ligature to the common carotid—but a prospect of actual relief from the compression, apart from the great object of the proceeding, namely, the prevention of further hæmorrhage. To diminish the aggregate quantity of blood circulating in a compressed cerebral hemisphere must certainly diminish the compression. Physical laws and logical deduction alike necessitate the conclusion that, to diminish the bulk of the compressed body is to diminish, possibly to remove, the compression. In this way may be explained the apparent and temporary benefit which has been occasionally observed after a justly discarded proceeding—venesection—in the various forms of compression.

Cases of compression from extravasated blood are frequently under supervision from first to last, and consequently great facility is presented for the adoption of the treatment now put forward. Unfortunately, however, no remedial measure has ever been proposed for any human ailment which is not too frequently powerless, because the appropriate cases come too late.

The advance of physiological science will every day enable us to diagnose with increasing certainty the various lesions to which the encephalon is subject. Moreover, if the remedy which I submit to the impartial consideration of Surgeons be regarded as one offering a means of prolonging life, it will tend to stimulate to closer observation and improved diagnosis of cranial injury.

The progress of pathology already suggests a means of increasing the safety of the operation of applying a ligature to the common carotid artery. The occurrence of embolism best explains almost all the more serious evils (cerebral inflammation and softening, and pulmonary affections) which occasionally follow deligation of the common carotid. As the dislodgment of coagula giving rise to this condition is greatly influenced by motion, I should, for several days after the operation, immovably fix the head, neck, thorax, and shoulders by appropriate apparatus.

Whether, in consequence of the degenerative changes in the cerebral vessels, deligation of the common carotid could secure any advantages in apoplexy is for Physicians to determine. Such determination will be influenced by certain questions: Is there any form of apoplexy in which sanguineous effusion admits of accurate diagnosis? Are the seats of extravasation regular or ascertainable? In a given case are the causes exceptionally severe or unlikely to recur?

I have already so closely condensed the conclusions put forward in this paper, that they do not admit of a shorter recapitulation. I would, however, earnestly draw the attention of the reader to the following reiterations:—1. That compression of the brain from extravasated blood is a common and a very fatal form of injury. 2. That in a large number of cases it is recognisable in all its stages. 3. That hitherto no treatment has afforded relief. 4. That in the earlier stages (not necessarily the earliest) brain and life may be saved by the application of a ligature to the common carotid artery.

A Bon-mot.—A lady applied to one of the most celebrated Parisian Surgeons, complaining of a severe pain in the region of the rectum, requesting him to fix a time to come and visit her at home. Having done so, he inquired her address, which she gave as "*Avenue du Cocys.*" "*Avenue du Cocys,*" replied our surprised *confrère;* "but where in the world is that?" "Leading out of the *Rue St. Lazare.*" "Oh, I understand now, *Avenue du Cog, No.* 6."

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Medical Times and Gazette.

SATURDAY, JUNE 13.

THE PROCEEDINGS OF THE MEDICAL COUNCIL.

Our Medical Parliament has met, held its session, and prorogued itself till next year; it sat nine days, or rather afternoons, and, judging from the length of the printed minutes, got through a considerable quantity of work; indeed, the matters discussed, and the motions made, with or without one or more amendments, were so numerous that we do not wonder that the Council felt a generous pity towards its clerks, and voted them each a gratuity of ten guineas "for their extraordinary labours." The number of speeches made, their average length, the prevailing style of oratory, who are the Gladstones, the Palmerstons, the Whallys, of our little senate, whether or no it contain a Rupert of debate, all these things are hidden from us by the vote which still refuses a reporters' gallery; a refusal to ourselves "in mercy sent" we think; but, whether it be so or not, we are not likely to enjoy it long. The system of "Annuals," so successfully cultivated in "another place," has taken root in our Council chamber also; and, as the motion for the admission of the press, which last year counted only six supporters, was this session lost by only the casting vote of the President, we may be certain of its reappearance next year with increased probability of success. But though we cannot have the pleasure of reading the eloquent speeches by which, no doubt, the requirements of the times, the feelings of the Profession, etc., were enforced, we have the satisfaction of criticising the individual voters. Any member can require that the names of the majority and minority of any division be hung up for public inspection,—a gibbeting privilege, which accordingly one member did exercise on this, and, indeed, on many other occasions; and it is somewhat curious to observe that on this question the majority is nearly entirely composed of the English representatives, the Scotch and Irish members almost exclusively forming the minority. Shall we confess that, thinking sadly of debates in "another place," this fact by no means tends to lessen our respect for the astute *amour propre* of the majority.

We have been careful to mention the quantity of work the Council has apparently achieved, because we are anxious to give it all possible praise, and it evidently places a high value on mere quantity. We must, on this account, regret that we cannot follow the example of its Pharmacopœia Committee, and give numerical details of work done. Would that we could do justice to the members, by recording the exact number of attendances—the daily and total number of hours and minutes spent in the Council chamber—the total and individual number of speeches made, and votes given, and so on; but we must content ourselves with a general acknowledgment of the severe industry of the Council, and proceed to consider the quality of its work. In our last number we noticed the

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praiseworthy vigour shown by the Council in casting out from the Register the black sheep of the Profession, but we gave them more credit than they deserve. We stated that they had erased Robert Jacob Jordan's name from the Register; this was a mistake; they only erased "his qualification as a member of the College of Surgeons of England." We are forced to suppose that they did not consider the pandering to the public taste for erotic anatomy amounted to "infamous conduct in a Professional respect," or why did they not mete out to him the same measure of punishment as to Samuel La'Mert? We are curious to know how the representatives of the College advised in Council on this subject; the College can rule the Council in other matters, why not have incited it to more vigorous and courageous action here? or does that which is "flat blasphemy" in Lincoln's-Inn-Fields wear a lighter hue in Pall-Mall?

The Council of the College of Surgeons has written a letter to the General Council, containing some touching and very original remarks on the blessings of domestic life and associations, and the dangers of exposing ingenuous youths to the temptations of the Medical Schools, and stating that they mean to continue to do what they like, and are not going to be fettered by the recommendations of the General Council. We know that there are those who have looked with fear and trembling at the Ajax of the examining boards defying the lightning of the Council, and who have innocently believed that the latter body would exercise its power by reporting to the Privy Council that "the regulations of the College of Surgeons of England are not in accordance with the recommendations of the Medical Council, and not such as to secure the requisite knowledge and skill for the efficient practice of Surgery;" that, consequently, the examining halls of the College would become a howling desert, and the palace in Lincoln's-Inn-Fields be reduced to a library and a show-shop for Hibernian giants and the products of natural selection. Nothing of the sort occurred. The College knew what hands held the bolts, and complacently felt secure. The Council is content to record that many of the examining boards are very fairly good and obedient, and that in their "opinion" it would be nice if all were as pretty-behaved; and there the matter rests,—a very encouraging result for the restive boards, and one likely to bring forth much fruit. The College of Surgeons of Edinburgh, fearing for its fees, has already suspended one of its regulations, made in accordance with the recommendations of the Council, and so has lowered itself again to the level of the English College, and we may expect to see other bodies follow its example. Lacking confidence in the wisdom of its own recommendations, or lacking courage to attempt to enforce them, the Council proposes to throw on the Privy Council the responsibility of making "regulations respecting the education and examination of Practitioners in Medicine, Surgery, and Pharmacy." The Medical Council will, indeed, venture to draw up regulations, but they are not to be obligatory till they have been endorsed by the Privy Council. This happy device for increasing the dignity and usefulness of the Medical Council is to be contained in an amended Act, which may perhaps be obtained some day. Meanwhile, the Council will exercise and train its talents in drawing up regulations, which the Universities, Colleges, etc., will adopt or not, just as they please.

As the suggestions for amendments of the Medical Act are not to be considered in Council until next year, it is not worth while our discussing them now. The new Section—LVII.—will certainly never be carried; it would seriously lessen, if not entirely destroy, the Government trade in patent Medicines, and is therefore a hopeless suggestion.

We are glad to see that the Council propose to take steps providing for the education and examination of all chemists and druggists; but any measures for this purpose will require great care and consideration, or they will only serve to confuse the public and foster the druggist's counter practice.

If a chemist can announce that he is a "certificated compounder of Medicine of the Apothecaries' Company, or the Pharmaceutical Society according to the Medical Act," how are the public to distinguish between him and the Licentiate in Medicine of the former body? The Council passed the motion that "the Licentiates of the Apothecaries' Company in Dublin are, as Apothecaries, entitled to practise Medicine in Great Britain and Ireland."

In reply to an inquiry from the Army Medical Department, the Council, in accordance with the decision of the law officers of the Crown, confirmed their previous decision, that the College of Surgeons of Ireland has not the power to grant a licence in Medicine.

No decision, however, was come to about registering licences in midwifery; we are naïvely informed that the Executive Committee had refused to register certain licences in midwifery conferred by the Colleges of Physicians and Surgeons in Ireland; but that a solicitor's letter, "couched in peremptory terms," made them at once draw in their horns, and yield the request; and, with an acknowledgment that the present state of things regarding these licences is very inconvenient and unjust, all further consideration of the matter is deferred to the next meeting of the Council.

The opinion of the Chief Justice of the Common Pleas in the case of Turner *v.* Raynell does not appear to have been noticed by the Council. According to that decision it would seem that a Medical firm can recover for services rendered by any of its members, so long as any one of them is registered. Any one may therefore evade payment of the registration fee by entering into partnership with a registered Practitioner. This is certainly entirely contrary to the spirit of the Medical Act, and is, we should have thought, in both a legal and a financial point of view, eminently worthy of the consideration of the Council.

The Council adopted a simplified form of registration of Students—a form which appears to us scarcely capable of further pruning; but, with the want of confidence in themselves which characterises all their acts, they afterwards passed a motion to refer "to the branch Councils to report to the next meeting of the General Medical Council as to the simplest mode of registering Medical students."

The Council actually had the courage to enunciate the proposition "that the overloading of the curriculum of education, whether as to the number of courses, or of lectures in particular courses, must be followed by results injurious to the students," a self-evident proposition, some may think; but let us be thankful for any real decision by our Parliament. We are happy to say they also expressed a positive opinion "that the number of courses of lectures required to be attended" by the several licensing bodies "might be reduced with advantage, so as to give the student a larger amount of time for self-education;" and they resolved to "take into consideration, at the next meeting, the propriety of recommending a reduction in the number of courses of lectures," so that any student Utopian enough to imagine that the licensing boards will meekly follow any of the recommendations of the Council, may indulge in dreams of "a good time coming." We defer our consideration of the proceedings relative to the new Pharmacopœia to a future occasion.

THE WEEK.

ERUPTIVE FEVERS DURING PREGNANCY.

The *Edinburgh Medical Journal* for June contains an amusing account of Arab Surgery by Mr. P. K. Varban, L.R.C.S. Edin., who is settled at Nazareth; it likewise gives an account of an interesting discussion on eruptive fevers in pregnant and parturient women. Dr. Simpson laid down what we believe to be the law, that they may attack pregnant women who may recover; not so parturient women. It will be interesting if an account can be taken of the pregnant women who

suffer from small-pox during the present epidemic in London, and of the results.

EFFECTS OF MERCURY ON SHEEP.

PROFESSOR JOHN GAMGEE, in the June No. of the *Edinburgh Veterinary Review* draws attention to the mischiefs arising from the reckless use of mercurial ointment as a dressing for scabby sheep. Sheep, he says, and ruminants are more readily poisoned by mercury than any other domestic animal; and in some instances, mercury appears to be the cause of death *directly*, by its effects on the blood; in others it seems to kill by the varnish with which it covers the skin, which hinders the exhalations from that organ, and engorges the lungs; in others, again, it seems to produce an enfeebling of the digestive powers, so that a change to a better diet proves fatal. Severe salivation and loosening of the teeth are common occurrences.

RABIES IN SHEEP.

THE same Review gives an extract from the *Albany Country Gentleman* of a series of cases of rabies in pregnant ewes, which were bitten by a mad dog, December 24, 1862. The wounds healed rapidly. The disease was noticed on January 12, 1863. The number of cases was seven; the period of incubation varied from nineteen to twenty-six days; the average duration eight days. All fatal. The first symptom was extraordinary and unnatural salacity, in which the manner, and gestures, and sounds of the *male* were closely imitated; followed by unhealthy appetite, swallowing wood, straw, dung, etc.; no thirst, and no dread of water; intense pugnacity and frenzy; *reopening of the wound;* debility and prostration; neither stupor, paralysis, nor convulsions.

PARLIAMENTARY.

THE Vaccination Bill (Ireland) was read a second time in the House of Lords on Friday, June 5.

On the same evening, the case of Sergeant-Major Lilley, a non-commissioned officer of the 6th Dragoons, serving in India, whose death was caused by illegal confinement, was brought before the House of Commons by Mr. D. Fortescue. We need not allude to the circumstances under which Lilley was ordered under arrest by the officer commanding his regiment, Colonel Crawley. It is sufficient that the Judge-Advocate pronounced them entirely condemned by law, and the Commander-in-Chief in his memorandum, and speaker after speaker in the House proclaimed their cruel injustice. No Medical man will doubt that Lilley's death was as directly caused by his imprisonment as those of the prisoners in the Black Hole of Calcutta. Himself, his wife—dying of phthisis complicated by diarrhœa—and two other sergeant-majors, were closely confined during several weeks in a single room in a bomb-proof building, formerly used as cavalry stables, which has since been pulled down as unfit for occupation. The room was literally an oven, for its roof could not get cool,—the fall of temperature at night not being sufficient to carry off the heat collected during the day. A sentinel was placed over the sergeant-major, with injunctions to keep him constantly in sight, and not to permit him to receive any communications from without. In consequence of a sergeant's wife having attempted to communicate with the sick woman Lilley, Colonel Crawley ordered the sentry to be stationed inside the room, and there, in the presence of strange men, renewed from day to day, and posted three feet from her bed, all the functions of nature had to be performed by this dying woman. After four weeks' imprisonment, Sergeant-Major Lilley died. No inquest or committee of inquiry, which would be in India equivalent to an inquest, was held, but a *post-mortem* examination was made by the regimental Surgeon, who certified that the cause of death was apoplexy, brought on by his sedentary life, and the peculiar circumstances in which he was placed. One of the other sergeant-majors confined was on his release found to be delirious, and was immediately conveyed to the Hospital, where he was discovered to be suffering from brain fever. An attempt was made after Lilley's death to prove that it had been caused by excessive drinking, and a sutler's bill for wine and spirits, supplied under Medical orders to the sick wife, was offered as evidence. Sergeant-Major Lilley's character has been, however, completely cleared from this allegation,—a fact which has been acknowledged in the Memorandum of the Commander-in-Chief. Notwithstanding the atrocity of the case, the authorities at the War Office have determined to retain Colonel Crawley in his command. The Commander-in-Chief has contented himself with reprimanding him in company with two or three other officers of the regiment, amongst whom is the Surgeon—the last on the ground that he had shown some disapprobation of his commanding officer before a younger member of the corps! Discipline, no doubt, is the first necessity of existence in an army, but it is certainly an estimate of guilt peculiar to the Horse Guards to punish a man for a deed of tyranny which produced the death of an innocent and meritorious soldier, and another for expressing disapprobation of the former's conduct by reprimands, if not verbally identical, yet written in the same official tone, and contained in the same Circular. From the speech of the Marquis of Hartington, it appears that Colonel Crawley had obtained the sanction of his two commanding officers, Generals Sir W. Mansfield and Farrell, for placing Lilley under close arrest. It is clear, however, from the expression of opinion in the House, that this horrible tragedy must be submitted to further investigation.

On Monday, Mr. Gregory's resolution that the Royal Botanical Gardens of Edinburgh should be open to the public after the hours of Divine service on Sundays, as is the case of other botanical gardens supported by Parliamentary grants, was negatived by a narrow majority of sixteen, in deference, it would appear, to the strong views on the subject held in Scotland, and expressed by the Lord Advocate, Mr. Mure, and Major Hamilton.

In the House of Lords on Tuesday, the Security from Violence Bill was read a second time without a division.

In the House of Commons, Mr. Ferrand gave notice that he would, on Thursday next, ask the Secretary of the Home Department whether it was his intention to introduce a Bill this Session to limit the hours of labour for children in potteries and paper-tube factories.

MEDICAL BOOKS AND THEIR TITLES.

THE propositions that a title which merely expresses the subject of the work is no more matter of property than the subject itself, and that in a general subject there can be no copyright, seem to be of such an obvious and elementary nature, that our readers will probably be surprised at our deeming it necessary to draw attention to them. It is the undoubted privilege of every man to publish a book upon any subject he pleases; and, having done so, most authors would not have much hesitation in calling the publication by its right name, without troubling themselves to ascertain the titles of previous works treating on the same matter. Suppose the laws or ethics of literature to have enforced the observance of a contrary rule, and then imagine the position of an author who should be enterprising enough to add one to the number of existing English dictionaries. Those already published would of necessity have been called by different names, and "Dictionary," "Vocabulary," "Lexicon," "Thesaurus," "Alveary," Word-book, every available Latin, Greek, and Anglo-Saxon derivative having been exhausted, human ingenuity must fail inventing a new name which would indicate the nature of the work. The author would be compelled by the operation of such a law either to suppress

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his book, or to give it to the world destitute of a title. Lord Macaulay, in publishing his "History of England," would have been involved in still greater difficulties by the application of so rigorous a code of literary morality. The rule that we are deprecating has lately been impliedly enunciated to its fullest extent by two members of the Medical Profession, the referees in the questions between Dr. Mayne and Dr. Fowler, as to their works respectively published under the title "Medical Vocabulary." These gentlemen, while wholly acquitting Dr. Fowler of the charge of plagiarism, expressed an opinion that the title of his work was derived from Dr. Mayne's, and that the appropriation was not justified so long as the copyright of the "original" work existed. It is almost needless to state that in the reports of legal decisions on matters of copyright no case can be found in which mere identity of title proceeding from the common adoption of a general subject has been even alleged to involve an infringement of copyright. The marginal note to the report of one case decided by Lord Eldon is to the effect that copyright exists in an individual work, but not in a general subject, though from its nature the consequence may be close resemblance and considerable interference. That to another case determined by Lord Erskine contains these words, "Though copyright cannot exist in an East India calendar as a general subject, any more than in a map, chart, series of chronology, etc., it may in the individual work" However, in neither of these cases had the doctrine in question been alleged by either side to be law. In fact, the referees, Dr. Peacock and Dr. Meadows, would appear to be the originators of the idea of property in such a title as the one they speak of; and a moment's reflection will convince our readers that no such principle is acted on or recognised in the literary world, in reference to Medical or any other works.

LOCAL REPORTS ON SMALL-POX.

(Continued from page 567.)

XX. *Small-Pox and Vaccination in Putney and Roehampton.* By Dr. Harland Whiteman, Medical Officer of Health for Putney.

Until December of last year small-pox had for a long series of years been absent from this parish and adjoining hamlet. The first of about a dozen cases noted between the latter part of 1862 and the present time, occurred to an unvaccinated labouring man, who had just before removed into the parish. This case proved fatal in the Small-Pox Hospital, to which institution the patient was removed shortly after the appearance of the disease, and the death was, of course, registered there. The remains of the poor man, however, were brought from the Hospital to be buried in this neighbourhood. A brother of the deceased living in Putney attended the funeral, and contracted the disease; but having accidentally heard that this man was also unvaccinated, I persuaded him, although symptoms of the malady were then plainly visible, to submit himself at once to the operation, and a more decided proof of its protective power I could not have received. The two diseases—the vaccine and the varioloid—went through their course together, and presented all the characteristic phenomena of each, but the one so modified the other, that the patient recovered without a bad symptom.

The only other fatal case of which I am cognisant occurred to an unvaccinated nurse-child, nine months old, who it appears was not born in the parish, and whose unprotected condition was therefore unknown and unsuspected until too late to remedy the evil. Two other persons residing in the same house in which this infant died, viz., a boy of 12 and a girl of 16, shortly afterwards took the disease. Whilst attending the infant, I noticed this boy and girl looking very ill, and, suspecting the cause, I urged the performance of vaccination on them both. The boy submitted, being then unprotected, and he had the varioloid disease very slightly, and made a good and speedy recovery. Not so, however, the girl, who, relying on the efficiency of her vaccination in infancy, (though I had great doubts whether the operation had ever been performed,) was greatly opposed to its performance, and the consequence has been she has experienced a prolonged and painful convalescence, and will, doubtless, carry about with her to her latest hour the most unmistakable facial indications of the virulence of the malady from which she has suffered.

I could cite many cases of a like kind from the records of a practice of nearly thirty years, during the greater part of which time I have performed the functions of a public vaccinator, but the above are referred to as having recently afforded to my own mind strong evidence that vaccination, submitted to even at the eleventh hour, does largely protect against the virulence and fatality of small-pox, if it accomplishes nothing more. My own experience is that, when properly performed, carefully inspected on the eighth day, and pronounced by a skilled operator to have put on all the characteristic appearances of the true vaccine vesicle, as described by Jenner, it may be relied on as a perfect protection through life, in a large majority of cases; but since there are so many exceptions, and as it is an undoubted fact that many persons do take small-pox, though the most efficient vaccination has been accomplished in infancy, the question of re-vaccination becomes one of serious import to Medical men, to whom the public are just now looking for advice and direction upon so debatable a point.

The absolute infallibility of primary vaccination few practical men of the present day will be found to maintain, any more than they will the uniform action of the best established remedial agents. Persons of particular habits or idiosyncrasies there always will be in whom the most careful administration of well-known drugs will be followed by the most extraordinary and unlooked-for results, and it is not likely that cow-pock inoculation will be found uniformly exempt from all departures from its ordinary issues.

Whenever appealed to by the sceptical or the hesitating as to the desirability of re-vaccination, my reply is, that as the occasional introduction of genuine and well-selected vaccine lymph into the arms of young persons and adults is, with very few exceptions, attended by no other inconvenience than a slight and bearable irritation, and the most trifling constitutional disturbance, most Medical men are disposed to look upon it as a very simple, but at the same time very valuable test of the efficiency, or otherwise, of previous vaccinations; for should such re-vaccination fail to produce a perfect vesicle, what, I usually ask, can be more satisfactory than to feel assured that the protection afforded by the operation in infancy remains, in all probability, unimpaired? On the contrary, should it result in the production of the perfect vesicle, is it not something to feel more secure than before against the virulence of the disease, and the fatality so frequently attending it when occuring in the unprotected? This kind of reasoning I generally find suffices to remove the scruples of those of my patients who are really capable of being reasoned with on such a subject. The unreasonable, the ignorant, and the prejudiced are, I think, much better left to be persuaded or frightened, as the case may be, out of their scepticism by the cautionary handbills and other notices that have been very judiciously issued by both the Board of Works and the Board of Guardians of the district in which this parish is situated. I am pleased to add that the latter authority appears to be fully alive to the necessity of adopting measures for the isolation of the poor suffering from small-pox, and that the fact of suitable conveyances being placed at the disposal of the public, to secure the easy and speedy removal of all sufferers desiring such isolation, has been extensively advertised throughout the district.

By such measures, and by persevering exertions in the prosecution of vaccination, I indulge the hope of soon seeing the dreaded enemy, with which we have for some months past been doing battle, driven from its strongholds in this locality.

XXI. *Report on the Small-Pox Epidemic in the Hackney District.* By J. W. Tripe, M.D., Medical Officer of Health.

The present epidemic differs from the outbreaks in 1855 and 1856 by being more general and more fatal. In the outbreaks of 1855 and 1856, I was able to trace it to an importation of the disease from other parts of London, but in this I have failed in doing so. The district has, during my appointment, been unusually free from the disease, as the table appended shows, which I attribute to the comparative sparseness of the population (about 88,000 in 3949 acres), the absence of over-

crowding, except in a few portions of the district, and the satisfactory manner in which vaccination is generally performed. Some time since I made a personal inspection of the children attending, not only the parochial, but all the large schools, and was surprised to find so large a number presenting good marks. The present epidemic has been far more fatal than any other. as 22 deaths have been registered this year, against 16 in the year 1855, and 13 in the year 1856. I have made inquiries at each house in which a fatal case occurred, and, so far as I could learn, no child had died who had been vaccinated; but, as the parents in some instances had moved out of the house directly after the funeral, I could not ascertain this for certain. In some houses I was informed that every inhabitant had taken the disease, in others that one only had had it. This I attribute to want of care, or want of room to properly isolate the patient, for in my own practice I have rarely had more than one case in a house; in the first place, because I always re-vaccinate all above twelve years of age, and secondly, because I advise good ventilation, isolation of the patient, and the wearing of washing dresses by all the females who enter the apartment. Of course with poor persons these precautions cannot be carried out, and in these cases removal should be strictly inforced, if practicable.

I am glad to say that the Guardians have erected in their grounds a small iron Hospital for small-pox and fever cases, so as to be independent of the special Hospitals, and have also provided a carriage for the conveyance by any parishioner of patients suffering from infectious diseases.

Deaths from Small-pox, 1855-63.

	1855.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.
Stoke Newington ..	..	..	..	..	..	1	..	..	1
Stamford-hill ..	..	5	5	..	..	..	..	1	..
West Hackney ..	3	7	..	..	1	..	1	..	6
Hackney	12	1	1	..	5	1	1	..	5
South Hackney ..	1	..	..	..	..	..	..	..	10
Total deaths ..	16	13	1	0	6	2	2	1	22
Population ..	67303	69638	71973	74699	77557	80567	83570	86729	88800

The population was calculated for July 1 in each year except 1863.

GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

MINUTES OF MEETING, MONDAY, JUNE 1, 1863.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

MR. GREEN, *President*, took the chair at Two o'clock, p.m.

Present—

Dr. Burrows. Dr. Andrew Wood. Dr. Corrigan.
Mr. Arnott. Dr. Fleming. Sir Charles Hastings.
Mr. Cooper. Mr. Syme. Dr. Sharpey.
Dr. Acland. Dr. Thomson. Mr. Lawrence.
Dr. Bond. Dr. A. Smith. Mr. Teale.
Dr. Embleton. Mr. Hargrave. Dr. Christison.
Dr. Storrar. Dr. Leet. Dr. Stokes.
Dr. Alexander Wood. Dr. Appjohn

Dr. FRANCIS HAWKINS, *Registrar*.

The Minutes of the last meeting were read and confirmed.

Dr. AQUILLA SMITH presented the Report on the publication and distribution of the Register.

Report.

The Committee appointed to consider and report on the publication and distribution of the Register, and also on the expediency of accepting a proposal for the insertion of advertisements in the Register, with a view to diminish the expense of publication, beg leave to report as follows:—

1. Considering that advertisements are inserted in publications more or less analogous in nature and purpose to the *Medical Register*, and issued under the authority of public departments, it does not appear to the Committee that there would be any impropriety in the admission of advertisements, under proper restriction, to be bound up with the *Medical Register*. Considering, however, the practical difficulties that would probably occur in exercising a censorship on advertisements which might be offered for insertion, even were they restricted to advertisements of books, and the risk of offence from what might be deemed undue admission or unfair exclusion in particular cases, the Committee do not think that it would be expedient to accept the proposal. The Committee feel the more confident in arriving at this conclusion as the loss incurred in the publication of the Register is now much reduced; and as the inducement to select the Register as a medium of advertising would probably be lessened by the consideration that the Council could not guarantee that advertisements would be bound up with the copies supplied in sheets to the stationery office.

2. Respecting the recommendation to be made as to the distribution of the copies to be supplied to the Government, the Committee submit the following list of public offices and functionaries among which the 2000 copies supplied may be advantageously allotted. It will be observed that Registrars of Births and Deaths are not included, and simply because their number in Great Britain amounts to 3206.

List of Distribution.

England and Wales:	
County Courts	569
Coroners	353
Law Courts (various)	149
Poor-Law Board	1
Home Office	1
Lunacy Commission	1
Directors-General of the Army and Navy Medical Departments	2
Registrar-General	1
Emigration Commissioners	1
Registrar of Friendly Societies	1
Total for England	1070
Scotland:	
Sheriff Substitutes	56
Principal Clerks of Court	4
Justiciary Clerks	2
Clerks and Deputy Clerks of the Peace	52
Procurators Fiscal	80
Registrar-General	1
Lunacy Commission	1
Town Clerks' Offices, for public reference	79
Board of Supervision of the Poor	1
Total for Scotland	277
Ireland:	
Chancellor, Master of the Rolls, Masters in Chancery, and Chancery Lunacy Offices	7
Courts of Queen's Bench, Common Pleas, Exchequer, and Recorder	4
Chairman of Quarter Sessions and Clerks of the Crown, or Town Clerks	90
Clerks of the Peace in Counties and of Petty Sessions in Boroughs	40
Coroners	100
Petty Sessions' Courts held in various Counties	346
Magistrates' Courts, Dublin	3
Poor-Law Board	1
Total for Ireland	591
Total for England 1070	
Total for Scotland 277	
Total for Ireland 591	
1938	

AQUILLA SMITH, *Chairman*.

1. Moved by Dr. SHARPEY, seconded by Dr. STORRAR—"That the Report on the Publication and Distribution of the Register be received and entered on the Minutes, and that the recommendations therein made be adopted by the Council."—Agreed to.

2. Moved by Dr. ACLAND, seconded by Dr. A. SMITH—"That the Executive Committee be directed to print annually in the Register a statement of the distribution of the copies of the Register as approved by the Government."—Agreed to.

Dr. CORRIGAN presented the Report of the Committee on Amendments of the Medical Act.

Report.

The course the Committee have adopted is to go through the sections of the Medical Act *seriatim*, and to append to each section such proposed amendments as seemed fit to be submitted for consideration.

The Committee do not propose that the General Council should at present express an opinion on the proposed amendments, nor are the Committee unanimous in some of the amendments suggested.

The Committee suggest that the present course might properly be, that the General Council, without expressing any opinion on the proposed amendments, should give instructions to the Executive Committee to have a bill drawn up, embodying the proposed amendments; that the Bill thus drawn up should be transmitted to the several licensing bodies mentioned in Schedule (A) for their consideration, and that the amended Bill, with any alteration suggested by the several licensing bodies, should be submitted for consideration at the next annual meeting of the General Council.

There remains one point on which the Committee have not been able to suggest a satisfactory amendment—the licence in midwifery. The difficulty has arisen from the charters of the several Colleges differing in power in regard to this licence. The College of Physicians of London, the College of Physicians and Surgeons of Edinburgh are not authorised to issue separate licences in midwifery, while the College of Physicians in Ireland and the Colleges of Surgeons of England and Ireland are empowered to issue such separate licences. This appears to maintain an inequality of privilege that ought to be removed.

THE MEDICAL ACT.

ANNO VICESIMO PRIMO ET VICESIMO SECUNDO VICTORIÆ REGINÆ, CAP. XC.

ORIGINAL ACT.	PROPOSED AMENDMENTS.
Title	
An Act to Regulate the Qualifications of Practitioners in Medicine and Surgery.	A Bill to Amend the Medical Acts.
Preamble.	
Whereas it is expedient that persons requiring Medical aid should be enabled to distinguish qualified from unqualified Practitioners. Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in the present Parliament assembled, and by the authority of the same as follows:—	Whereas it is expedient that persons requiring Medical aid should be enabled to distinguish qualified from unqualified Practitioners; and whereas it is moreover necessary for the safety and protection of the public towards securing adequately educated Practitioners in the several departments of Medicine, Surgery, and Pharmacy: be it therefore enacted, etc., etc.
SECTIONS	
X. The General Council shall appoint a Registrar, who shall act as Secretary of the General Council,	For Sect. X.—Substitute the following:— The General Council shall appoint

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and who may also act as Treasurer, unless the Council shall appoint another person or other persons as Treasurer or Treasurers; and the person or persons so appointed shall likewise act as Registrar for England; and as Secretary and Treasurer or Treasurers, as the case may be, for the Branch Council for England; the General Council and Branch Council for England shall also appoint so many clerks and servants as shall be necessary for the purposes of this Act; and every person so appointed by any Council shall be removable at the pleasure of that Council, and shall be paid such salary as the Council by which he was appointed shall think fit.

XIII. All moneys payable to the respective Councils shall be paid to the Treasurers of such Councils respectively, and shall be applied to defray the expenses of carrying this Act into execution in manner following; that is to say, separate accounts shall be kept of the expenses of the General Council, and of those of the Branch Councils; and the expenses of the General Council, including those of keeping, printing, and publishing the Register for the United Kingdom, shall be defrayed, under the direction of the General Council, by means of an equal percentage rate upon all moneys received by the several Branch Councils; returns shall be made by the Treasurers of the respective Branch Councils, at such times as the General Council shall direct, of all moneys received by them; and the necessary percentage having been computed by the General Council, the respective contributions shall be paid by the Treasurers of such Branch Councils to the Treasurer or Treasurers of the General Council; and the expenses of the Branch Councils shall be defrayed, under the direction of those Councils respectively, out of the residue of the moneys so received as aforesaid.

XIV. It shall be the duty of the Registrars to keep their respective Registers correct in accordance with the provisions of this Act, and the Orders and Regulations of the General Council, and to erase the names of all registered persons who shall have died, and shall from time to time make the necessary alterations in the addresses or qualifications of the persons registered under this Act; and to enable the respective Registrars duly to fulfil the duties imposed upon them, it shall be lawful for the Registrar to write a letter to any registered person, addressed to him according to his address on the Register, to inquire whether he has ceased to practise, or has changed his residence, and if no answer shall be returned to such letter within the period of six months from the sending of the letter, it shall be lawful to erase the name of such person from the Register; provided always, that the same may be restored by direction of the General Council, should they think fit to make an order to that effect.

XX. In case it appear to the General Council that the course of study and examinations to be gone through in order to obtain any such qualification from any such College or body are not such as to secure the possession by persons obtaining such qualification of the requisite knowledge and skill for the efficient practice of their Profession, it shall be lawful for such General Council to represent the same to Her Majesty's Most Honourable Privy Council.

XXI. It shall be lawful for the Privy Council, upon any such representation as aforesaid, if it see fit, to order that any qualification granted by such College or body, after such time as may be mentioned in the a Registrar, who shall act as Secretary of the General Council, and may act as Treasurer, unless the Council shall appoint another person or other persons as Treasurer or Treasurers. The General Council shall also appoint so many clerks and servants as shall be necessary for the purposes of this Act; and every person so appointed shall be removable at the pleasure of the Council, and shall be paid such salary as the Council shall think fit.

Clause XIII. and proposed amendments, with observations of Scotch Branch Council of No. 27, 7th Feb., 1863, to be referred back to solicitor for observations.

For Sect. XIII. — Substitute a Section to the following effect:—

Separate accounts shall be kept of the expenses of the General Council, and those of the Branch Councils. The expenses of the Branch Councils shall be defrayed, under the direction of those Councils respectively, out of the moneys received by them. Returns shall be annually made by the Treasurers of the respective Branch Councils of all moneys so received and expended by them; and the said Treasurers shall, as soon as possible, transmit the balance remaining in their hands to the Treasurer of the General Council; and the expenses of the General Council, including those of keeping, printing, and publishing the Register of the United Kingdom, shall be defrayed, under direction of the General Council, out of the fund arising from the contributions of the Branch Councils, as well as from all other sources, to be called the General Council Fund.

Sect XIV.—Insert the following after the words "his residence:"—

And if any person registered shall notify to the Registrar that he has ceased to practise, and wishes to withdraw his name from the Register, the Registrar shall have power to erase his name.

For Sect. XV.—Substitute a Section to the following effect:—

It shall be lawful for the General Council to lay down such regulations respecting the education and examination of candidates in Medicine, Surgery, and Pharmacy, as may appear to them fitted to insure adequate knowledge and skill in the several departments of the Profession; and the said General Council shall then submit such regulations to Her Majesty's Most Honourable Privy Council; and the said regulations, if sanctioned by the said Privy Council, shall then be obligatory upon all Universities, Colleges, and other bodies enumerated in Schedule (A) to this Act.

For Sect. XXI.—Substitute the following:—

And it shall be lawful for the Privy Council, upon its being represented to them that any University, College, or other body enumerated in order, shall not confer any right to be registered under this Act: provided always, that it shall be lawful for Her Majesty, with the advice of her Privy Council, when it is made to appear to her, upon further representation from the General Council or otherwise, that such College or body has made effectual provision, to the satisfaction of such General Council, for the improvement of such course of study or examinations, or the mode of conducting such examinations, to revoke any such order.

XXVII. The Registrar of the General Council shall in every year cause to be printed, published, and sold, under the direction of such Council, a correct register of the names in alphabetical order according to the surnames, with the respective residences, in the form set forth in schedule (D) to this Act, or to the like effect, and Medical titles, diplomas, and qualifications conferred by any Corporation or University, or by Doctorate of the Archbishop of Canterbury, with the dates thereof, of all persons appearing on the General Register as existing on first day of January in every year; and such register shall be called "The Medical Register;" and a copy of the Medical Register for the time being, purporting to be so printed and published as aforesaid, shall be evidence in all courts and before all Justices of the Peace and others that the persons therein specified are registered according to the provisions of this Act; and the absence of the name of any person from such copy shall be evidence, until the contrary be made to appear, that such person is not registered according to the provisions of this Act; provided always, that in the case of any person whose name does not appear in such copy, a certified copy, under the hand of the Registrar of the General Council, or of any branch Council, of the entry of the name of such person on the general or local register, shall be evidence that such person is registered under the provisions of this Act.

XXIX. If any registered Medical Practitioner shall be convicted in England or Ireland of any felony or misdemeanour, or in Scotland of any crime or offence, or shall after due inquiry be judged by the General Council to have been guilty of infamous conduct in any Professional respect, the General Council may, if they see fit, direct the Registrar to erase the name of such Medical Practitioner from the register.

For Sect. XXIX.—The clause, as suggested by Mr. Ouvry, and printed in the Tabular Statement approved of, viz.:—

The Council may refuse to register any person who may have been convicted, in England or Ireland, of any felony or misdemeanour, or in Scotland of any crime or offence; and if any registered person shall be so convicted, or shall, after due inquiry, be judged by the General Council to have been guilty of infamous conduct in a Professional respect, whether before or after registration, the General Council may, if they see fit, direct the Registrar to erase the name of such person from the register.

Sect. XXXI.—Every person registered under this Act shall be entitled, according to his qualification or qualifications, to practise Medicine or Surgery, or Medicine and Surgery, as the case may be, in any part of her Majesty's dominions, and to demand and recover in any court of law, with full costs of suit, reasonable charges for Professional aid, advice, and visits, and the cost of any medicines or other Medical or Surgical appliances rendered or supplied by him to his patients: provided always, that it shall be lawful for any College of Physicians to pass a byelaw to the effect that no one of their Fellows or Members shall be entitled to sue in manner aforesaid in any court of law, and thereupon such byelaw may be pleaded in bar to any action for the purposes aforesaid commenced by any Fellow or Member of such College.

XXXIV. After the first day of January, one thousand eight hundred and fifty-nine, the word "legally qualified Medical Practitioner," or "duly qualified Medical Practitioner," or any words importing a person recognised by law as a Medi-

Schedule (A) does not comply with such regulations, to declare that any qualification granted by such University, College, or body, shall not confer any right to be registered under this Act. Provided always, etc.

To Sect. XXVII.—After the words "provisions of this Act," add the words as proposed in the Tabular Statement, viz.:—

"And that he is not possessed of any qualification which would entitle him to be registered in accordance with the provisions of this Act."

To Sect. XXXIV.—The following words to be added:—" According to his qualification or qualifications."

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cal Practitioner or Member of the Medical Profession, when used in any Act of Parliament, shall be construed to mean a person registered under this Act.

XXXVI. After the first day of January, one thousand eight hundred and fifty-nine, no person shall hold any appointment as a Physician, Surgeon, or other Medical officer, either in the Military or Naval Service, or in emigrant or other vessels, or in any Hospital, Infirmary, Dispensary, or Lying-in Hospital, not supported wholly by voluntary contributions, or in any Lunatic Asylum, Gaol, Penitentiary, House of Correction, House of Industry, Parochial or Union Workhouse or Poorhouse, Parish Union, or other public Establishment, Body, or Institution, or to any Friendly or other Society for affording mutual relief in sickness, infirmity, or old age, or as a Medical Officer of Health, unless he be registered under this Act: provided always, that nothing in this Act contained shall extend to repeal or alter any of the provisions of the Passengers Act, 1855.

XXXVII. After the first day of January, one thousand eight hundred and fifty-nine, no certificate required by any Act now in force, or that may hereafter be passed, from any Physician, Surgeon, or other Medical Practitioner, shall be valid unless the person signing the same be registered under this Act.

XL. Any person who shall wilfully and falsely pretend to be, or take or use the name title of a Physician, Doctor of Medicine, Licentiate in Medicine and Surgery, Bachelor of Medicine, Surgeon, General Practitioner, or Apothecary, or any name, title, addition, or Description implying that he is registered under this Act, or that he is recognised by law as a Physician, or Surgeon, or Licentiate in Medicine and Surgery, or a Practitioner in Medicine, or an Apothecary, shall, upon a summary conviction for any such offence, pay a sum not exceeding twenty pounds.

XLVIII. It shall, notwithstanding anything herein contained, be lawful for Her Majesty, by Charter, to grant to the Royal College of Surgeons of England power to institute and hold examinations for the purpose of testing the fitness of persons to practise as Dentists who may be desirous of being so examined, and to grant certificates of such fitness.

LV. Nothing in this Act contained shall extend or be construed to extend to prejudice, or in any way to affect, the lawful occupation, trade, or business of Chemists and Druggists and Dentists, or the right, privilege, or employment of duly licensed Apothecaries in Ireland, so far as the same extend to selling, compounding, or dispensing medicines.

For Sect. XXXVII.—Substitute the following:—

After the first day of January, one thousand eight hundred and fifty-nine, no certificate required by any Act now in force, or that may hereafter be passed, from any Physician, Surgeon, or Apothecary, or other Medical Practitioner, shall be valid, unless the person signing the same be registered under this Act.

On and after the day of 186, it shall not be lawful for any person, unless registered under this Act, to pretend to be, or take or use the name or title of Physician, Doctor of Medicine, Licentiate in Medicine or Surgery, Master in Surgery, Bachelor of Medicine, Doctor, Surgeon, Medical or General Practitioner, or Surgeon Apothecary or Accoucheur, or Licentiate or Practitioner in Midwifery, or any other Medical or Surgical name or title, and any unregistered person so offending shall forfeit and pay a sum of not exceeding £20, to be recovered in a summary way before the Justices of the Peace.

Sect. XLVIII.—Amend by introducing the words, "Ireland and the Faculty of Physicians and Surgeons," after "England."

Sect. LV.—Omit the words, "Chemists, Druggists, and."

Sect. XXXVI.—Insert after "Surgeon" in fifth line.

A section to the following effect to be added:—

Sect. LVI. It shall not be lawful for any person to keep open shop for the compounding of Physicians' and Surgeons' prescriptions, unless he be a Licentiate of the Apothecaries' Hall of England or Ireland, or shall have received a certificate of competency to compound medicine, from either of the above bodies, or from the Pharmaceutical Society, or from other body authorised in England, Ireland, or Scotland, by the General Medical Council, to institute the necessary examination, and to grant such certificate, and at such rate of fee as the General Medical Council, with the approval of the Privy Council, may sanction; and any person keeping open shop for the compounding of medicine, unless qualified as aforesaid, shall, upon a summary conviction for any such offence, before any Justice of the Peace, pay a sum not exceeding £20; and, for the better protection of the public, and to ensure the carrying out of the provisions as aforesaid, it is hereby enacted that the Medical Council may appoint from time to time one inspector for England, one for Ireland, and one for Scotland, whose duties it shall be to inspect, as often as may be required, all shops where medicines are compounded, and to carry into effect the provisions of this Act in regard to such shops; and that such inspectors be paid such salaries out of the Consolidated Fund as the General Council, with the approval of the Lords Commissioners of Her Majesty, may from time to time determine.

A Section also to be added as follows:—

Sect. LVII.—No patent quack or other medicine shall be sold unless a sworn certificate of its composition be lodged with the Registrar of the General Council, and a copy thereof be open for inspection in the shop or place in which such medicine is sold; and any person or proprietor of a shop selling any secret remedy shall, on summary conviction, for each such offence, be liable to a penalty not exceeding £20.

May 29, 1863. D. L. Corrigan, *Chairman.*

2. Moved by Dr. Corrigan, seconded by Dr. Burrows—"That the Report be received and entered on the Minutes."—Agreed to.

Dr. Christison presented the Report of the special Pharmacopœia Committee.

Report of the Special Committee appointed by the General Council on May 27, 1863, relative to the Pharmacopœia.

The Committee appointed "to take into consideration, and to report what further steps it is desirable for the General Council to take in reference to the Pharmacopœia," have carefully considered various matters which have been put before them and the Council by the Chairman of the Pharmacopœia Committee. They have to report that several of these matters are of great importance, and require the attention of the Council before its present meetings come to an end; and they recommend that these be all settled now, so that as little as possible of the business connected with the Pharmacopœia shall be left over to another Session of the Council.

1.—The first subject to which the Committee have turned their attention is the expense attending the preparation and publication of the Pharmacopœia, and the mode and terms of payment.

Every member of Council was, or might have been, aware that a Pharmacopœia, which was to be an amalgamation of three national Pharmacopœias, could not be prepared without a large expenditure. During the first Session of the Council there seemed to have been a general understanding that, unless for the services of Professional Chemists and others, to whom the several branches of the Pharmacopœia Committee might find it necessary to entrust a part of their duty, the Council would escape any outlay on account of those engaged in preparing the work. The labour required of the Sub-Committees, however, soon proved to be so great in prospect, that it was impossible to expect that so many Professional men should surrender their time without some compensation. Accordingly it was stated by the Chairman of the Pharmacopœia Committee, at the Session of Council in 1859, that provision would have to be made for a charge on this account. No idea could be formed at that period, however, of the probable charge, under any possible arrangement, which the Pharmacopœia Committee or the Council could then have proposed.

This Committee are confident, that no one unversed in the practical difficulties which surrounded the task committed to the Pharmacopœia Committee will suppose that any part of the work they have gone through was superfluous, or has been the cause either of delay or of expense which might have been avoided. It may be added, that the extra expenditure occasioned by the delay which originated in the question settled by the Council last October, relative to weights and measures, has been inconsiderable.

The mode of payment of all charges on account of the Pharmacopœia has been clearly understood by its Committee; but little appears on the subject in the Minutes of the Council, which seems to be a guide to the present Committee. The understanding was, that the Council should advance from the registration fund such money as might be required for current expenses, the payment of which could not be justly postponed; that these advances should be repaid from the proceeds of the sale of the Pharmacopœia; and that the other charges, including especially compensation to members of the Sub-Committees for their time and services at Sub-Committee meetings, must depend on the amount of these proceeds. Accordingly, the advances made by the Council, on account of the Pharmacopœia, were applied to remuneration for much chemical, botanical, and pharmaceutic advice and experience; for the attendance of some members at two delegations, one in London and another in Edinburgh; and for lesser current expenses. But the remaining charge, which relates to the services of secretaries and clerks, to some certain chemical investigations, and to attendance on Sub-Committee meetings, is still open for consideration; and this Committee are of opinion that all these charges ought to be settled, as far as possible, by the Council, before its present meetings terminate.

The Committee of Council beg here to observe, that the Council, in advancing at different periods sums from the registration fund, for the current expenses of the Pharmacopœia Committee, does not appear to have given any special authority, or instructions, as to the particular items of current expense which should be paid from those advances. The chairman of the Pharmacopœia Committee made certain statements on that head to the Council from time to time; and he considered himself entitled to endorse, and the treasurer of the Pharmacopœia Committee to pay the expense mentioned, as in conformity with the statements made in Council. It might have been better had the instructions of the Council been more specific. But this Committee submit that the attempt

to make them so would probably have involved frequent delays, on account of the necessity, under such instructions, of references from the Pharmacopœia Committee to the General Council at times when the Council might not be sitting.

The Council should keep in view, before providing for the payment of attendance on Sub-Committee meetings, that a large proportion of the fund accruing from the sale of the Pharmacopœia will be required to replace what has been advanced from the registration fund, and to defray the cost of printing and publishing the work, and remuneration still due for chemical investigations, and to secretaries and editors.

The terms on which the charges thus remaining due should be paid, have received the most earnest attention of this Committee.

Two distinguished chemists were requested jointly to undertake together extensive investigations essential for the chemistry of the Pharmacopœia. These gentlemen devoted their whole time for many days to these investigations, and one of them had to leave his professional duties at Edinburgh in order to meet the other at Dublin. The chairman of the Pharmacopœia Committee informs us that these labours were undertaken on the footing that, in all probability, those who conducted them would be paid by the Council an allowance at the same rate as members of the General Council for attending its meetings; and that this allowance would be very much under the usual fees received by chemists in the like circumstances.

The duties of the secretaries being over, or very nearly so, the Committee are able to come to an opinion under that head of expenditure; and they recommend that the sum of £100 be paid to each of the secretaries of the Edinburgh and Dublin Sub-Committees; and the sum of £150 to the secretary of the London Sub-Committee, who has acted also as general secretary of the whole Committee.

The duty of the editors has only now begun. The Committee have been informed that this duty will last four months; and as two of the editors reside at a distance, one in Edinburgh and the other in Dublin, the labour of all three must be considerable. The Council should also be informed that it has no claim on these gentlemen, originating in membership of the Council; for none of them is a member of this body. The Committee are therefore of opinion that the Edinburgh and Dublin editors ought to be awarded for their trouble a sum of £50 each, and the principal editor in London a sum of £75.

The payment to Members of the Sub-Committees is a different question. If the Committee look only to the Professional position of most of the gentlemen who compose the Pharmacopœia Sub-Committees, and to the time and knowledge which they have given to the duty undertaken by them at request of the Council, this Committee could scarcely hope to compensate them for their services by an adequate remuneration. The Committee therefore recommend that £500 should be voted as an Honorarium to each Sub-Committee The sum of all the Sub-Committee meetings has been during four years 407; and the sum of attendances of all the Members has been 1851. But even these numerous attendances give no idea of the amount of labour of the Sub-Committees, not a few of whose Members have given much of their private and individual leisure to the business of the Pharmacopœia.

II.—The next subject brought before the Committee relates to the form or forms in which the Pharmacopœia ought to be published. After the statements put before the Council at the meeting of Council on the 26th instant, it is merely necessary for this Committee to report their opinion, that on the whole it is advisable that two editions be published contemporaneously, an octavo and a duodecimo edition, as proposed by the Executive Committee of the Council. The Committee find that the duodecimo edition may be sold at the low price of 5s. a copy, and the octavo at 7s. 6d., without involving the Council in any eventual loss, although a portion of the advances made by the Council may be for some time undischarged.

The Council will recollect that the price of the work must receive the sanction of the Lords of her Majesty's Treasury.

III.—The third question submitted to the Committee is, whether it may not be advisable that the publication of the Pharmacopœia be preceded by some explanation of its composition, the principles of its construction, the changes introduced, and the necessity under which the Members of the several branches of the Medical Profession will lie of making themselves acquainted with the British Pharmacopœia, and of discarding all those which it is to supersede. The Committee are of opinion that a measure of this kind may prove not only acceptable to the Medical Profession at large, but likewise very serviceable for preventing inconvenient and even dangerous errors. The Committee do not think it necessary that the General Council should themselves prepare and authorise a publication of this nature. But the Chairman of the Pharmacopœia Committee has expressed his readiness to publish such a document, if agreeable to the Council.

IV.—The next subject for the Committee's consideration regards the means which may be taken by the present Council for supplying their Members with the experience which the Council has gained as to the most suitable machinery for preparing future editions of the Pharmacopœia, and publishing them with the least possible delay and expense.

It appears to have been thought by some Members of the Council, that the number of persons who have been engaged in preparing the British Pharmacopœia, and consequently the expense, might have safely been less than on the present occasion. The Pharmacopœia Committee might indeed have consisted of a smaller number of Members, had the Council not had to reconcile three Pharmacopœias, and the members of the Medical Profession in the three divisions of the kingdom, who have been long accustomed to use them. Without a large representation in Committee from the several bodies concerned in those works, serious jealousies and obstacles would have arisen, which it would have been highly undesirable to provoke. But the Council is now the sole authority, and alone incurs public responsibility, in regard to the Pharmacopœia. It may henceforth adopt without reserve the measures which seem most suitable for subsequent editions.

The Committee, on considering what measures may be now recommended to the Council, have been impressed with the recommendation of the Chairman of the Pharmacopœia Committee, that the improvements in Medicine and Pharmacy ought not to be allowed to accumulate long without being introduced by authority to the Medical Profession at large; and that therefore either a supplement, or new edition, of the Pharmacopœia, ought to be brought out every five years on an average; and that, for this purpose, a charge should be given by the Council to one or more competent persons to keep up the necessary information for the Pharmacopœia on a level with advancing knowledge from month to month; so that the requisite changes might be supplied to the Council within a very short period after demand.

To this end the Committee advise that—

1. In each capital of the three divisions of the kingdom respectively the Branch Council should appoint a person to undertake this duty who is a Medical Practitioner, acquainted with the natural history and chemistry of Pharmacy.

2. That it should be an instruction to these gentlemen to invite information as to improvements in the Pharmacopœia from the Medical, Surgical, and Pharmaceutical bodies of the several divisions of the country.

3. That, under the sanction of the Executive Committee, the treasurer be empowered to pay to each of these gentlemen a sum not exceeding £20 annually for charges for scientific and practical inquiries.

4. That they should intercommunicate their results half-yearly.

5. That they should be ready every five years to give, at the request of the General Council, their conjoint opinion as to the changes they consider advisable for a new edition, or a supplement, of the Pharmacopœia.

6. That the Executive Committee should have charge of editing and publishing such new edition or supplement, after approval by the General Council.

V.—The last subject to be referred to by this Committee is the recent introduction of a bill into the House of Commons, for altering the weights and measures of the kingdom to the metrical decimal system of France and many other countries. The bill contemplates that, if passed, the Act shall be permissive for three years, and then compulsory. Pharmacy is expressly included. The House of Commons takes up the second reading of the bill on July 1.

The Council will observe that it is quite otherwise circumstanced in respect to this bill, than when it came to a decision last October on the question whether the French metrical system of weights and measures should be adopted at that time as the system of Pharmacy in this country. The Committee, therefore, beg to call the attention of the Council to the approaching proceedings in Parliament. But they leave it to the Council itself to decide whether any, and what steps should be taken by the Council in the present position of this important question.

R. Christison, *Chairman.*

4. Moved by Dr. Christison, seconded by Dr. Andrew Wood,—"That the Report of the Special Pharmacopœia Committee be received, and printed in the Minutes."—Agreed to.

Dr. Alexander Wood presented the Report of the Committee appointed to consider the recognition of Foreign or Colonial Degrees or Examinations.

Report.

The applications are three in number.

1st.—One from McGill University of Montreal, dated 22nd August, 1862, and craving to have its degree recognised for Registration.

The Committee submit the correspondence between the Dean of the Medical Faculty of McGill University and their Registrar, feeling that they cannot add anything to the excellent letter of the latter, which fully explains the position of the Council.

"McGill University, Montreal,
"22nd August, 1862.

"Sir,—I beg leave to make application, through you, to the General Council of Medical Education on behalf of the Medical Faculty of McGill University, to have its degree recognised for registration.

"McGill University, as will be seen from the calendar herewith sent, holds a Royal Charter, and is in full operation in all its Faculties. The Medical Faculty more especially, has been very successful, 159 students having attended its lectures during last Session.

"From its commencement as a Faculty, it has required a high standard of excellence in its Professional Examinations.

"It has also earnestly endeavoured to elevate the Preliminary Examination to as high a standard as the educational institutes of the country would permit.

"As will be seen in the printed Abstract of its Regulations, a competent knowledge of Latin, and of either English or French composition, is required, and after the 1st of May, 1863, a Students' Medical Education will be held, to commence from the date of his passing this Preliminary Examination.

"By referring to the Regulations of the College of Surgeons of England, it will be found that the Council of the College has recognised our Preliminary Examination, and accepts certificates of attendance upon our Courses of Lectures and Hospital.

"This question has been recently brought before our Faculty by Dr. Elkington, one of the Assistant-Surgeons of the Grenadier Guards, who recently applied to the Medical Registration Office to have his McGill degree registered; this was refused, in conformity with Rule II. Section (A) of the printed Regulations of the Council.

"Several Army Surgeons, after attending lectures, obtained degrees in course of May last from this University, and as the Director-General of the Medical Department of the Army will not recognise any Professional title until registered, our Faculty has instructed me, as its Dean, to make this application for recognition to the Council of Medical Education and Registration. "I have the honour to be, Sir,

"Your most obedient servant,
"Geo. W. Campbell, A.M., M.D.,
"*Dean of the Medical Faculty of McGill University, Montreal.*

"To Dr. Francis Hawkins, *Registrar, Medical Council.*"

"General Council of Medical Education and Registration of the United Kingdom,
"32, Soho-square, London, W. September 3, 1862.

"Sir,—I have had the honour to receive your letter, dated 22nd ult., and shall take the earliest opportunity of laying it before the General Medical Council.

"In the meantime, I beg to refer you to the Medical Act, 1858 (a copy of which is bound up with every copy of the Medical Register), from which you will perceive that the Medical Council has no power to order the Registration of any Foreign or Colonial degree, unless it were obtained after regular examination, and before the passing of the Medical Act. The truth is, that the Medical Act was not intended to legalise Foreign, or even Colonial degrees, within the United Kingdom, except so far as was necessary to prevent the Act from having a retrospective effect on persons already practising on such degrees within the United Kingdom.

"The right of registration was to be given by the Act only to the degrees and diplomas of the Universities and Colleges of the United

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Kingdom, which are enumerated in Schedule (A) to the Act, and over which bodies the Medical Council can exercise, under the Act, certain visitorial powers.

"But it is clear that the Act could not give such powers to the Council, or, at least, that the Council could not exercise them over Foreign or even Colonial Universities and Colleges.

"It is open, however, to those Universities and Colleges to make arrangements for the recognition of their degrees and diplomas with the bodies mentioned in the Schedule (A) above referred to.

"These bodies may be considered as portals to the Medical Register.

"For the attainment, therefore, of the object for which your letter of the 22nd of August appears to have been written, I would venture to refer you to the Universities, and the Colleges of Physicians and Surgeons of the United Kingdom.

"I have the honour to be, Sir, your most obedient Servant,

"FRANCIS HAWKINS, *Registrar of the General Medical Council.*

"GEO. W. CAMPBELL, Esq., A.M., M.D., *Dean of the Medical Faculty of McGill University, Montreal.*"

The Committee recommend that the Council intimate that they have no power to grant the application.

2ndly.—An application from Codrington College, Barbadoes, to have the "Testamur" granted by that College received among those regarded as a sufficient equivalent for the preliminary examination of the licensing bodies.

The Committee are satisfied that the qualifications required by that College are amply sufficient to warrant the Council to grant to it the privilege which is sought.

3rdly.—A request from the Tasmanian Council of Education, that the "Degree of Associate of Arts," granted by that body, be inserted among the educational qualifications mentioned in the third section of the Report of the General Committee on Education, adopted by the Council on the 6th July, 1861.

The requirements for this degree are very high, comprising an examination on the following ten subjects:—

1. English.
2. Latin.
3. Greek.
4. French Grammar, or Italian.
5. Pure Mathematics.
6. The Elementary Principles of Hydrostatics and Mechanics.
7. The Elements of Chemistry.
8. Zoology and Botany.
9. Drawing and Architecture.
10. Geology.

The candidate is required to satisfy the examiners that he possesses a competent knowledge of four of these at least, of which Latin or pure mathematics must be one.

It thus appears that the regulations do not render both Latin and mathematics imperative, and the Committee cannot recommend the Council to sanction any certificate which does not show that the holder has passed a satisfactory examination in Latin as well as in mathematics. As, however, many students will probably pass in both these branches, their degree might be accepted, if accompanied by a certificate that the examiners were satisfied with the knowledge of the applicant in these two departments in each particular case.

ALEXANDER WOOD, *Chairman.*

5. Moved by Dr. ALEXANDER WOOD, seconded by Dr. ARNOTT—"That the Report on the recognition of Foreign or Colonial degrees or examinations be received and entered on the Minutes."—Agreed to.

Dr. ALEXANDER WOOD presented the Report of the Committee on Special Claims for Registration.

Report.

Only two special claims have been presented:—

1st.—Application from George Frederick Collier to have his Degree of M.D. conferred by the University of Leyden, on 15th December, 1828, registered.

The application is accompanied by a Certificate from the Dean of the Medical Faculty of the University of Leyden, certifying that the Degree was conferred after regular examination.

The Committee recommend the Council to grant the application.

2ndly.—Application from Dr. Peter Smith to have his Degree of M.D. from the University of Pennsylvania, conferred 4th April, 1845, registered.

The Committee have satisfied themselves that Dr. Smith was in practice in the United Kingdom prior to the passing of the Medical Act; and under very peculiar circumstances they recommend the Council to sanction the registration of his qualification.

ALEXANDER WOOD, *Chairman.*

6. Moved by Dr. ALEXANDER Wood, and seconded by Dr. ARNOTT—"That the Report on Special Claims for Registration be received and entered on the Minutes."

Dr. EMBLETON presented the Report of the Committee on Returns from the Licensing Bodies.

Report.

Your Committee, in presenting the Report on Returns from Bodies in Schedule (A), in compliance with the 16th and 23rd Recommendations of the Report of the General Council on Education (1861) beg to state:

1. That the returns, in compliance with Recommendation 16th, have, since the Report of last year, been received by the Registrar from all the bodies named in Schedule (A), and have been sent by him to each Member of the General Council.

These Returns contain, as was recommended by your Committee last year, the latest regulations of the bodies named in Schedule (A), as regards both Preliminary and Professional Education and Examination; and the degree of their conformity or non-conformity with the Recommendations of the Report of the General Council on Education (1861), is shown in the table already laid before the Council, and which, in a corrected form, is appended to this Report.

By this table, in which are incorporated some remarks by members of the Council, it will be observed that the amount of conformity in the printed Regulations is considerable; and your Committee are glad to be enabled to state that several of the seeming non-conformities only faintly exist in practice, and that there is a general belief pervading the bodies in Schedule (A) as ascertained from their representatives, that a still nearer approach to conformity is attainable.

2. That Returns, in compliance with the 23rd Recommendation, have been received from all the bodies in Schedule (A). The result of these returns may be seen in the accompanying table, which shows the number of students examined and the number rejected by each of the Licensing bodies.

TABLE OF RETURNS UNDER RECOMMENDATION 23.

Licensing Bodies.	Passed. First Examination.	Passed. Second Examin.	Rejected. First Examination. Number.	Rejected. Second Examin. Number.
Roy. Coll. Phys. England ..	60	65	5	22
Roy. Coll. Phys. Edinburgh..	75	81	10	10
K. & Qu. Coll. Phys. Ireland:				
Passed for Dip. on old reg.	..	33	..	10
Passed 1st Ex. on new reg.	2	..	1	
Roy. Coll. Surgeons England.	513	462	142	61
Roy. Coll. Surg. Edinburgh ..	143	123	23	15
Fac. Phys. and Surg. Glasgow	12	78	2	10
Roy. Coll. Surgeons, Ireland..	105	105	23	23
Soc. Apothecaries, London ..	121	343	7	40
Apothecaries' Hall, Dublin ..	23	23	4	2
University of Oxford	3	6	2	0
University of Cambridge ..	7	2	1	1
University of Durham	0	3	0	0
University of London.. ..	23	17	8	6
University of Edinburgh ..	113	109	77	14
Univ. of Edinburgh (3 exam.)	(1st) 40 (2nd) 36	(3rd) 28	(1st) 8 (2nd) 10	(3rd) 4
University of Glasgow ..	82	48	11	4
University of St. Andrews ..	15	580	3	65
University of Dublin	7	17	0	1
Queen's Univ. in Ireland ..	36	34	6	5
Totals	1425	2151	343	285

3. The registers of students, with explanatory letters, having been referred to them (No. 48, Minutes of General Council), your Committee, further present the subjoined Table of the numbers of students registered according to Recommendations 8 and 9, during the winter of 1862, by each of the bodies in schedule (A), that keeps a Register of Students, shewing the numbers registered before and after the expiration of the fifteen days recommended by the Council to be allowed for registration. From this Table it will be seen that the numbers registered after the expiration of the fifteen days are comparatively few, satisfactory letter explanatory of the reasons for such delays have been sent in from the various Bodies in whose registrations those delays have occurred, and doubtless next year this Table will be still more in accordance with your recommendation.

REGISTER OF STUDENTS, 1862.

Under Recommendations 8 and 9.

Licensing Bodies.	Before the 15 days.	After the 15 days.	Total.
Royal College of Physicians, London ..	169	37	206
Royal College of Physicians, Edinburgh..	No Register.		
King and Queen's Coll. Phys., Ireland ..	No Register.		
Royal College of Surgeons, England ..	1401	26	1427
Royal College of Surgeons, Edinburgh ..	221	..	221
Faculty of Physicians and Surgeons, Glasg.	106	..	106
Royal College of Surgeons Ireland ..	149	3	152
Apothecaries' Society, London	1010	..	1010
Apothecaries' Hall, Dublin	No Register.		
University, Oxford	No Register.		
University of Cambridge	18	1	19
" Durham	15	..	15
" London..	No Register.		
" Edinburgh	367	..	367
" Aberdeen	61	..	61
" Glasgow	258	3	261
" St. Andrews	2	2	4
" Dublin	16	5	21
Queen's University, Ireland..	266	9	275
Totals	4069	86	4155

4. Your Committee, lastly, submit a Table, showing how far the Recommendation No. 1 of the Council has been carried out.

Table showing the Number of Students registered by the Licensing Bodies, Oct. and Nov. 1862, who have or have not passed a Preliminary Examination before commencing Professional Study:—

Licensing Bodies.	No. of Students passed Prelim. Examination.	No. of Students who have not passed prel. Exam.	Total.
Royal College Physicians, London ..	212	3	215
Royal College Physicians, Edinburgh ..	No Register.		
King's and Queen's College Phys., Ireland	No Register.		
Royal College Surgeons, England ..	593	834	1427
Royal College Surgeons, Edinburgh ..	Not stated.		230
Faculty of Physicians and Surgeons, Glas.	89	17	106
Royal College Surgeons, Ireland ..	*119	43	162
Apothecaries' Society, London	355	1390	1745
Apothecaries' Hall, Dublin	No Register.		
University of Oxford	No Register.		
" Cambridge	19	3	22
" Durham	15		15
" London	No Register.		
" Edinburgh	335	32	367
" Aberdeen	144	5	149
" Glasgow	240	21	261
" St. Andrews	4		4
" Dublin	24		24
Queen's University, Ireland	299	5	304

* 1, Examined by an American University.

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On the whole, your Committee regard as satisfactory the results brought out in these tables, so far as they go, and feel confident that under a simpler mode of registration, and with a little more attention, these results will in future be found more completely in conformity with the recommendations of the Council.

D. EMBLETON, *Chairman.*

7. Moved by Dr. STORRAR, seconded by Dr. SHARPEY—"That the Report of the Committee on Returns from the Licensing Bodies be received, and referred to the Education Committee."—Agreed to.

The Council resolved itself into a Committee on Education.

1. Moved by Dr. ANDREW WOOD, seconded by Dr. THOMSON—"That four years of Professional study, embracing at least four Winter Sessions, or three Winter and two Summer Sessions, at a Medical School be required, dating from the first registration."

Dr. ANDREW WOOD, by permission of the Council, withdrew his motion for the present Session.

2. Moved by Mr. TEALE, seconded by Dr. EMBLETON—"That the following more simple form of registration of students be adopted in the place of that which stands in the Education Report of 1861":—

No.	Name.	Date of Registration.	Place of Study.	Arts Examination, and Date.

—Agreed to.

3. Moved by Dr. ACLAND, seconded by Dr. ANDREW WOOD—"That the words 'Medical School' in the Recommendations of the Medical Council shall be held to mean any institution where courses of lectures are delivered, or systematic practical instruction given in departments of Practical Medicine, or of the sciences accessory to it, such institution being recognised by any of the bodies named in Schedule (A)."

Amendment moved by Mr. HARGRAVE, seconded by Dr. STOKES—"That the consideration of this motion be postponed to the next Session of the Council."

Amendment carried.

The Council having resumed—

The adjourned debate was resumed upon Dr. LEET's motion (see Minutes, No. 49, Sect. 5), which, by permission of the Council, was amended as follows:—"That this Council is of opinion that Registered Licentiates of the Apothecaries' Company of Dublin are, as apothecaries, entitled to practise Medicine in Great Britain and Ireland."

Amendment moved by Dr. AQUILLA SMITH, seconded by Dr. CORRIGAN—"That the General Medical Council having already had before them the question referred to in the memorial from the Apothecaries' Hall of Ireland on the several occasions, viz., August 9, 1859; June 19, 1860; July 4, 1861; and May 19, 1862, do not consider it expedient on their part to reopen the question. That conflicting legal opinions on the question have at various times come before the Council, and that the Registrar be directed to forward to the Director-General of the Army, for his information, the memorial of the Company of the Apothecaries' Hall of Dublin, with the legal opinions of the Right Hon. Joseph Napier, Attorney-General for Ireland, March 27, 1845; the Right Hon. Sir Richard Bethel, Attorney-General for England, February 15, 1860; Mr. William Smith, June 25, 1861; the Right Hon. Thomas O'Hagan, Attorney General for Ireland, and James A. Lawson, Solicitor-General for Ireland, February 11, 1863."

On the motion of Dr. CORRIGAN, the debate was adjourned.

Confirmed—JOSEPH HENRY GREEN.

MINUTES OF MEETING, TUESDAY, JUNE 2, 1863.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

Mr. GREEN, *President*, took the chair at Two o'clock, p.m.

Present—As before.

The Minutes of the last meeting were read and confirmed.

1. The adjourned debate was resumed, on the motion of Dr. LEET, seconded by Mr. SYME, viz.—"That this Council is of opinion that registered Licentiates of the Apothecaries' Company of Dublin are, as Apothecaries, entitled to practise Medicine in Great Britain and Ireland;"

And on the Amendment, moved by Dr. AQUILLA SMITH, seconded by Dr. CORRIGAN, viz.—"That the General Medical Council, having already had before them the question referred to in the Memorial from the Apothecaries' Hall of Ireland on the several occasions, viz., August 9, 1859; June 19, 1860; July 4, 1861; and May 19, 1862, do not consider it expedient on their part to re-open the question.—That conflicting legal opinions on the question have, at various times, come before the Council, and that the Registrar be directed to forward to the Director-General of the Army, for his information, the Memorial of the Company of the Apothecaries' Hall of Dublin, with the legal opinions of the Right Hon. Joseph Napier, Attorney-General for Ireland, March 27, 1845; the Right Hon. Sir Richard Bethel, Attorney-General for England, February 15, 1860; Mr. William Smith, June 25, 1861; the Right Hon. Thomas O'Hagan, Attorney-General for Ireland, and James A. Lawson, Solicitor-General for Ireland, February 11, 1863."—Amendment put and negatived.

Dr. A. SMITH required the names of the majority and minority to be entered on the Minutes.

Majority—
Dr. Burrows.
Mr. Cooper.
Dr. Bond.
Dr. Embleton.
Dr. Storrar.
Dr. Alexander Wood.
Dr. Fleming.
Mr. Syme.
Dr. Thomson.
Mr. Hargrave.
Dr. Leet.
Sir Charles Hastings.
Dr. Sharpey.
Dr. Christison.

Minority—
Mr. Arnott.
Dr. Acland.
Dr. Andrew Wood.
Dr. A. Smith.
Dr. Apjohn.
Dr. Corrigan.
Mr. Lawrence.
Mr. Teale.
Dr. Stokes.

The motion was then put and carried.

Dr. A. SMITH required the names of the majority and minority to be entered on the Minutes.

Majority—
Dr. Burrows.
Dr. Bond.
Dr. Embleton.
Dr. Storrar.
Dr. Alexander Wood.
Dr. Fleming.
Mr. Syme.
Dr. Thomson.
Mr. Hargrave.
Dr. Leet.
Sir Charles Hastings.
Dr. Sharpey.
Dr. Christison.

Minority—
Mr. Arnott.
Dr. Andrew Wood.
Dr. A. Smith.
Dr. Apjohn.
Dr. Corrigan.
Mr. Lawrence.
Mr. Teale.
Dr. Stokes.

Dr. ALEXANDER WOOD presented the Report of the Committee appointed to consider the requirement, on the part of the Poor-law Commissioners of Ireland, of a Licence in Midwifery from candidates for employment under them.

The Committee on the Requirements of the Commissioners for Administering the Laws for Relief of the Poor in Ireland have to Report—

That by the General Orders of that Body, no person can be appointed as a Medical Officer of a Dispensary or Workhouse under their control, without possessing a Degree or Licence to practise Medicine, a Diploma or Licence to practise Surgery, "and also a Certificate from some Board or Court of Examiners, or other Body duly authorised to grant the same, of his possessing a competent knowledge of Midwifery." A case was brought under the notice of the Committee of a gentleman who had obtained a Licence in Medicine from the Royal College of Physicians of Edinburgh, and a Licence in Surgery from the Royal College of Surgeons of England. This gentleman's qualifications were considered by the Irish Poor-law Commissioners to be incomplete, "inasmuch as he does not possess a Certificate from some Board or Court of Examiners, or other Body duly authorised to grant the same, of his possessing a competent knowledge of Midwifery." It will be seen in Schedule (A) to the Medical Act that the only Body therein empowered to have a Licence in Midwifery granted by them entered on the Register, is the Royal College of Surgeons of England: so that, practically, every applicant for employment under the Poor-law Board in the land would, if the order above quoted were duly enforced, have to repair to London for this extra qualification.

Your Committee are indeed aware that an application was made to the Executive Committee by the Colleges of Physicians and Surgeons in Ireland, to have certain Licences in Midwifery conferred by them entered on the Register, which the Executive Committee, on March 7, 1859, refused to do. This decision appears on the Minutes of the Executive Committee in the following terms:—

"The Executive Committee gave direction that in the *General Register* no licence in midwifery should be entered except that conferred by the Royal College of Surgeons of England, because they are unable to find authority in the Medical Act for the registration of any other midwifery licence."

Subsequently, however, on the 31st May, 1859, on receipt of a letter from a solicitor employed by the College of Physicians and Surgeons of Ireland couched in peremptory terms, the Executive Committee yielded, and directed these qualifications to be entered in the Register.

The Executive Committee appears to have consented to yield to the pressure thus applied, in consequence of a legal opinion obtained by them from Sir Hugh Cairns and Mr. Arthur Hobhouse, from which the following is an extract:—

"1. Whether the licentiates in midwifery of the King's and Queen's College of Physicians in Ireland, and of the Royal College of Surgeons in Ireland, can lawfully be entered on the Register?

"2. Whether the General Council can exercise towards these licentiates any power of dispensing with the provisions of the Act?

"1. It appears to us that no question of this kind can arise with respect to the Royal College of Surgeons in Ireland; for by the extracts from the charters which have been furnished to us, it would seem that this body does not grant any licences in midwifery except to persons already being fellows or associates of the body, so that all their licentiates in midwifery must possess a previous and higher title to be registered. The case is different with the College of Physicians, who have power to examine and license *all* midwives. The question must turn on the meaning to be ascribed to the word 'licentiate,' in clause 3 of Schedule (A).

"We are of opinion that the sounder construction of the Act is to give to the term its literal and full meaning, unless there is something to forbid it, either in the general scope of the Act, or in its terminology.

"The general scope of the Act militates rather in favour of, than against the extended construction of the term; for it seems not to be the intention to disqualify any duly qualified Practitioner, but to give to every one licensed by a duly authorised body, a recognised position in that calling to which he is licensed.

"There is very little in the Act to throw light on the particular term used. The only instance in which it is used in connection with midwifery is in clause 4 of Schedule (A); and as we are given to understand that the general licentiates of the English College of Surgeons are, and are styled, Fellows or Members, and that it has no licentiates so styled, except its licentiates in midwifery, we do not see that any argument in favour of restricting the use of the term in clause 3 can be drawn from its use in clause 4.

"In each case the terms used are sufficient to describe all the Practitioners acting under the authority of the body which is spoken of.

"The result is, that we are of opinion that every person who has received a licence is, for the purposes of this Act, a licentiate in that art to which his licence applies.

"2. The answer to this question depends upon the construction of Schedule (A), and is governed by the same considerations as the answer to question 1."

This opinion seems to be not very decided; and your Committee are of opinion that, unless compelled by law to insert these qualifications, the General Council should refuse to do so, as they are certainly injurious to the interests of other bodies, and not calculated to elevate the character of the Profession.

In conclusion, your Committee would recommend—

1. That the President be requested to correspond with the Home Secre-

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tary, in order to have the order of the Irish Poor-law Commissioners rescinded.

2. That the Bodies at present granting Licences in Midwifery should be requested to surrender this privilege, in the event of a new Medical Act being obtained.

3. That should this be found impracticable, the amended Medical Act should be so framed as to confer the power of granting Certificates in Midwifery on all Bodies which duly examine in that department of medicine.

4. That the Executive Committee be instructed to take the opinion of counsel unconnected with Ireland, on the propriety of continuing to register those qualifications in midwifery which do not appear in Schedule (A) to the Medical Act.

ALEXANDER WOOD, *Chairman.*

2. Moved by Dr. ALEXANDER WOOD, seconded by Dr. LEET—"That the Report of the Committee on the requirements of the Commissioners for administering the Laws for the Relief of the Poor in Ireland, be received and entered in the Minutes."—Agreed to.

The Report of the Special Committee appointed by the General Council on May 27, 1863, relative to the Pharmacopeia (see Minutes, No. 52, p. 14), was taken into consideration.

3. Moved by Dr. CHRISTISON, seconded by Dr. SHARPEY—"That the sum of £94 10s. be voted to Dr. Apjohn for chemical investigations connected with the Pharmacopœia."—Agreed to.

4. Moved by Dr. CHRISTISON, seconded by Dr. SHARPEY—"That the sum of £154 7s. be voted to Dr. Douglas Maclagan, for chemical investigations connected with the Pharmacopœia."—Agreed to.

5. Moved by Dr. CHRISTISON, seconded by Sir CHARLES HASTINGS—"That £150 be voted to Dr. Garrod, as General Secretary of the Pharmacopœia Committee, and Secretary to the London Sub-Committee; £100 to Dr. Charles Wilson, and £100 to Dr. Aquilla Smith, as Secretaries respectively of the Edinburgh and Dublin Sub-Committees."—Agreed to.

6. Moved by Dr. CHRISTISON, seconded by Dr. ACLAND—"That to the principal Editor in London, Dr. Farre, £75 be voted, to be received when the Pharmacopœia is published; and that to each of the Edinburgh and Dublin Editors, Dr. Maclagan and Dr. Neligan, £50 be voted, to be received when the Pharmacopœia is published."—Agreed to.

7. Moved by Mr. SYME, seconded by Mr. HARGRAVE—"That £500 be voted to each of the Sub-Committees, for preparing the Pharmacopœia, as a honorarium for their time and services, the Sub-Committees being respectively,"—

London Pharmaceutical Sub-Committee.

Dr. Watson.	Mr. Green.
Sir James Clark.	Mr. Nussey.
Dr. Farre.	Mr. Squire.
Dr. Garrod.	

Edinburgh Pharmaceutical Sub-Committee.

Dr. Christison.	Dr. Maclagan.
Dr. Begbie.	Dr. Andrew Wood.
Dr. Sellar.	Mr. Syme.
Dr. Wilson.	Mr. Macfarlane.
Dr. Sanders.	Afterwards, on his death, Mr. Gardner. Mr. Robertson.

Dublin Pharmaceutical Sub-Committee.

Dr. Apjohn.	Dr. Neligan.
Dr. A. Smith.	Dr. Barker.
Dr. Williams.	Dr. Leet.

Amendment moved by Dr. ANDREW WOOD, seconded by Dr. LEET—"That payments to the Sub-Committees on account of the Pharmacopœia be delayed till next Session of the Council, when the Pharmacopœia shall have been published, and the Council shall be enabled to form a correct judgment as to the money they may be able to vote as a honorarium to them."

The amendment was put and negatived.

Dr. ANDREW WOOD required that the names of the majority and minority be entered on the Minutes.

Majority—	*Minority—*
Mr. Arnott.	Dr. Embleton.
Mr. Cooper.	Dr. Alexander Wood.
Dr. Acland.	Dr. Andrew Wood.
Dr. Bond.	Dr. Thomson.
Dr. Storrar.	Dr. Leet.
Dr. Fleming.	
Mr. Syme.	
Dr. A. Smith.	
Mr. Hargrave.	
Dr. Apjohn.	
Dr. Corrigan.	
Dr. Sharpey.	
Mr. Teale.	
Dr. Stokes.	

The motion was then put, and agreed to.

Dr. ANDREW WOOD required that the names of the majority and minority be entered on the Minutes.

Majority—	*Minority—*
Mr. Arnott.	Dr. Embleton.
Mr. Cooper.	Dr. Alexander Wood.
Dr. Acland.	Dr. Andrew Wood.
Dr. Bond.	Dr. Leet.
Dr. Storrar.	
Dr. Fleming.	
Mr. Syme.	
Dr. A. Smith.	
Mr. Hargrave.	
Dr. Apjohn.	
Dr. Corrigan.	
Dr. Sharpey.	
Mr. Teale.	
Dr. Stokes.	

Confirmed—JOSEPH HENRY GREEN.

MINUTES OF MEETING, WEDNESDAY, JUNE 3, 1863.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

MR. GREEN, *President*, took the chair at Two o'clock p.m.

Present—

Dr. Burrows.	Dr. Andrew Wood.	Sir Charles Hastings.
Mr. Arnott.	Dr. Fleming.	Dr. Sharpey.
Mr. Cooper.	Mr. Syme.	Mr. Lawrence.
Dr. Acland.	Dr. Thomson.	Mr. Teale.
Dr. Bond.	Dr. A. Smith.	Dr. Christison.
Dr. Embleton.	Mr. Hargrave.	Dr. Stokes.
Dr. Storrar.	Dr. Leet.	
Dr. Alexander Wood.	Dr. Corrigan.	

Dr. FRANCIS HAWKINS, *Registrar.*

The Minutes of the last meeting were read and confirmed.

The consideration of the Report of the Special Pharmacopœia Committee was resumed.

1. Moved by Dr. CHRISTISON, seconded by Dr. ANDREW WOOD—"That the proposed price of the Pharmacopœia—viz., 7s. 6d. for the large, and 5s. for the small edition—be submitted, according to the provisions of the Act of Parliament, to the Commissioners of the Treasury."—Agreed to.

2. Moved by Mr. SYME, seconded by Dr. ANDREW WOOD—"That the several sums voted for the publication of the Pharmacopœia shall be paid at the end of six months from the time of its publication."

Amendment, moved by Mr. ARNOTT, seconded by Dr. ACLAND—"That the Treasurers be authorised, under the direction and sanction of the Executive Committee, to advance such sums of money as may be necessary to discharge the expenses incurred in preparing, printing, and publishing the Pharmacopœia."

Amendment put and carried.

3. Moved by Mr. TEALE, seconded by Dr. SMITH—"That Dr. Christison be requested to prepare and publish an explanatory statement of the forthcoming Pharmacopœia, showing its composition, the principles of its construction, the changes introduced, and the necessity under which the members of the several branches of the Medical Profession will lie of making themselves acquainted with the British Pharmacopœia, in place of the Pharmacopœia which it will shortly supersede."—Agreed to.

4. Moved by Dr. CHRISTISON, seconded by Mr. HARGRAVE—"That the Council adopt the recommendations of the Special Pharmacopœia Committee, which provide for the preparation and publication of the new editions of the Pharmacopœia."—Agreed to.

5. Moved by Dr. SHARPEY, seconded by Dr. CHRISTISON—"That it be an instruction to the Executive Committee to watch the progress of the Bill on Weights and Measures, now before Parliament, and, in the event of its passing the second reading, to take such steps, on petition in the name of the Council, or otherwise, as may seem to them best calculated to prevent the enactment of any statutory restriction or obligation affecting the use of weights and measures in pharmacy, unless such provisions as shall obviate the risk of its inconvenient or premature enforcement."—Agreed to.

6. Moved by Dr. BURROWS, seconded by Sir CHARLES HASTINGS—"That the Report of the Finance Committee be adopted."—Agreed to.

7. Moved by Dr. ALEXANDER WOOD, seconded by Mr. HARGRAVE—"That the Standing Orders in regard to the 'Order of Business,' regulating the manner of taking the votes be amended as follows:—

"1. That if there be but one amendment, the vote shall be first taken upon it; and if it is negatived, then on the original motion.

"2. That if there be more than one amendment, the amendment last moved shall be first put to the vote; and in the event of its being negatived, then the amendments shall be put in the inverse order to that in which they have been proposed. If all the amendments are negatived, the vote shall then be taken on the original motion."—Agreed to.

8. Moved by Dr. ALEXANDER WOOD, seconded by Dr. LEET—"That the Registrar be directed to send annually, within one month after the Meeting of Council, to the various bodies in Schedule (A), the names of those who, during the meeting of the Council, have been struck off the Register by order of the Council, and to request the attention of each Body to Regulation 7, Chapter VIII., of the Standing Orders, which shall be altered as follows:—

"That the Council recommend that any person whose name has been once removed from the Register shall not be admitted to Examination for any new Qualification, without the consent of the General Medical Council."—Agreed to.

9. Moved by Mr. TEALE, seconded by Mr. HARGRAVE—"That the Report of the Committee on Recognition of Colonial and Foreign Universities be adopted."—Agreed to.

10. Moved by Dr. CORRIGAN, seconded by Dr. A. SMITH—"That the Registrar be requested to apply to the several Licensing bodies mentioned in Schedule (A) to the Medical Act for copies of the Charters or Acts of Parliament under which those Licensing Bodies issue Degrees, Diplomas, and possess or exercise any other powers in reference to Medicine, Surgery, Midwifery, or Pharmacy."—Agreed to.

11. Moved by Dr. CORRIGAN, seconded by Mr. A. SMITH—"That it be an instruction to the Executive Committee to obtain returns of the regulations relative to education and examination from the several licensing bodies mentioned in Schedule (A); to ascertain in what particulars the regulations of any of those bodies may differ from the recommendations of the General Medical Council; to request from those corporate bodies, whose regulations so differ, such observations or explanations as they may deem it to offer; and to submit the correspondence, with their report thereon, to the next meeting of the General Council."—Agreed to.

12. Moved by Dr. STOKES, seconded by Mr. SYME—"That, looking at the various curricula of professional education enforced by the licensing bodies enumerated in Schedule (A) to the Medical Act, the Council are of opinion that the number of courses of lectures required to be attended might be reduced with advantage, so as to give the student a larger amount of time for self-education. That the overloading of the curriculum of education—whether as to the number of courses, or of lectures in particular courses, must be followed by results injurious to the student."—Agreed to.

Mr. LAWRENCE required that the names of the majority and minority be entered on the Minutes.

Majority—	*Minority—*
Mr. Arnott.	Dr. Andrew Wood.
Mr. Cooper.	Dr. Thomson.
Dr. Acland.	Mr. Hargrave.

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Majority—
Dr. Bond.
Dr. Embleton.
Mr. Syme.
Dr. A. Smith.
Dr. Leet
Dr. Corrigan.
Sir Charles Hastings.
Mr. Lawrence.
Mr. Teale.
Dr. Stokes.

Minority—
Dr. Christison.

13. Moved by Mr. Syme, seconded by Dr. Christison—"That the Medical Council resolve to take into consideration, at the next meeting, the propriety of recommending a reduction in the number of courses of lectures which the regulations of the various licensing boards at present render obligatory. That, with the view of facilitating the consideration of this subject, the General Council request to be favoured with the opinion of the bodies in Schedule (A), on the possibility and propriety of this, before next meeting."—Agreed to.

14. Moved by Dr. Acland, seconded by Mr Hargrave—"That the various resolutions and recommendations of the Council, affecting directly the subject of Medical education, be separately printed; that a copy be furnished to the several bodies named in Schedule (A), to the members of the General Council, and other persons named by the President; and that written communications be invited concerning them from those to whom they may be sent."—Agreed to.

15. Moved by Mr. Teale, seconded by Mr. Hargrave—"That the Council recommend to the various Licensing Bodies, named in Schedule (A) of the Medical Act, the consideration of the *ad-eundem* principle in the granting of degrees and licences, with a view to the reduction of the number of examinations on the same subject, which the student is now frequently obliged to undergo, in order to obtain a plurality of qualifications."—Agreed to.

16. Moved by Dr. Andrew Wood, seconded by Mr. Teale—"That the Medical Council, having by the Act of Incorporation a corporate seal, the following bye-laws in reference to it, which have been prepared by the Solicitor be adopted by the Council, and that it be remitted to the Executive Committee to carry them out:"—

1. The corporate seal shall be kept in a box having two different locks. The key of one lock shall be in the custody of the President; that of the other in the custody of the Registrar.

2. The seal shall only be affixed by order of the General Council, or, when the General Council is not sitting, by order of the Executive Committee of the General Council, its use by such Committee being limited to such Acts as may be necessary to effectuate the powers delegated to it by the General Council.

3. Any order for affixing the seal, shall state the object of its use, and shall be entered on the Minutes of the General Council, or of the Executive Committee, as the case may be.

—Agreed to.

17. Moved by Dr. Embleton, seconded by Dr. Thomson—"That it be referred to the Branch Councils to report to the next meeting of the General Medical Council, as to the simplest mode of registering Medical students."—Agreed to.

18. Moved by Dr. Andrew Wood, seconded by Dr. Christison—"That the standing order which provides for the rising of the Council at six o'clock be suspended for this day."—Agreed to.

19. Moved by Dr. Corrigan, seconded by Dr. A. Smith—"That the Executive Committee be requested, in accordance with the recommendation of the report of the Medical Acts' Amendments Committee (see Minutes, June 1, 1861), to have a Bill drafted embodying the amendments prepared; that copies of such Bill be forwarded to the Branch Councils, for their observations thereon; that the Executive Committee cause to be prepared, for the next annual meeting of the General Council, interleaved copies of such Bill, with all suggested amendments; and that the General Council, at the same timo, desire it to be understood that they refrain at present from expressing any opinion on the amendments now proposed."

(First Amendment.)

Moved by Dr. Christison, seconded by Mr. Syme—"That the Report of the Medical Acts' Amended Committee be re-committed."

(Second Amendment.)

Moved by Dr. Fleming, seconded by Dr. Thomson—"That the Report of the Medical Acts' Amendments Committee be forwarded to the branch Councils, for their observations thereon."

Second amendment put to the vote, and carried.

20. Moved by Dr. Andrew Wood, seconded by Mr. Arnott—"That the Report of the Committee on appointments of members of the Council be received, entered on the Minutes, and adopted by the Council."—Agreed to.

Report.

The Committee appointed by the General Council to consider and report whether any, and what steps should be taken by the Council in relation to the retirement and election of its members, in view of the expiration of the term of five years from its constitution, beg to make the following Report:—

The documents in the possession of the Registrar do not form a complete record of all appointments which have taken place; but from those which the Registrar has, it appears that some members were appointed generally, without specifying any term; others were appointed specifically for five years; while others who were originally appointed without any specification of term have received subsequent appointments, making their tenure of office one year only.

It appears to the Committee that in each case the period of office, whether for five or any other number of years, must be calculated from the day of appointment, and that steps should be taken to ascertain correctly the date of appointment of each of the present members of the Council.

As regards members appointed in the place of others, it appears to the Committee that their tenure of office must be regulated by the instrument appointing them, without reference to the period of appointment of the persons in whose place they have been substituted.

Your Committee have had under their consideration the tenure of office by the President. On his election he became a member of the Council; and though the 8th Section of the Act seems to draw a distinction between the President and the other members of the Council, yet, on the whole, your Committee is of opinion that the President is subject to the same rules as to tenure of office as the other members of the Council.

Your Committee recommend that a book should be kept, containing the names of the members of the Council, the bodies they represent, the date of appointment of each member, the term for which he was appointed, and the date of the death or retirement of each member, such book to be regularly kept up, so as at once to show the period at which each of the bodies having power to appoint should proceed to a new appointment; also the same particulars with regard to members appointed by the Crown.

Your Committee also recommend that a form for appointing members should be prepared, and sent by the Registrar to the Secretary of State, and to each body having power to appoint, two months before the expiration of the term of the existing appointment, so that the new appointment may be made to take effect from the day on which the old appointing shall expire.

Your Committee submit a form of such appointment:—

We, the , in pursuance of the power given to us by the Medical Act, do hereby appoint to be a member of the General Council of Medical Education and Registration of the United Kingdom, for the term of year from the day of 186

With reference to the fact that the term of office of members constituting the Executive Committee may expire while the General Council is not sitting, your Committee suggest that in appointing the Executive Committee the General Council should delegate power to supply vacancies amongst the members of that Committee.

Your Committee, in conclusion, think it right to state that this Report has been drawn up under the guidance of the Solicitor of the Medical Council.

John Storrar, *Chairman.*

21. Moved by Dr. Andrew Wood, seconded by Mr. Hargrave—"That the case prepared at the meeting of the General Council in 1862, relative to the educational sections of the Medical Act, with the opinion of counsel thereon, be received, and printed in the Minutes."—Agreed to.

Case for the Opinion of Counsel.

The Medical Council is desirous of being advised as to the true construction of the Medical Act (1858), so far as relates to the educational sections.

By the Medical Act a General Council of Medical Education and Registration of the United Kingdom is constituted.

Counsel will no doubt have in view the entire scope of the Act, but the sections which especially refer to the powers of the General Council as to education are the 18th (and the Schedule (A) therein referred to), the 20th, 21st, 22nd, and 24th.

By the 18th Section, "The several Colleges and bodies in the United Kingdom mentioned in Schedule (A) to this Act shall from time to time, when required by the General Council, furnish such Council with such information as they may require as to the courses of study and examinations to be gone through in order to obtain the respective qualifications mentioned in Schedule (A) to this Act, and the ages at which such courses of study and examination are required to be gone through, and such qualifications are conferred, and generally as to the requisites for obtaining such qualifications."

The 20th Section provides, that "in case it appear to the General Council that the course of study and examinations to be gone through in order to obtain any such qualification from any such College or body are not such as to secure the possession by persons obtaining such qualification of the requisite knowledge and skill for the efficient practice of their Profession, it shall be lawful for such General Council to represent the same to Her Majesty's Most Honourable Privy Council."

Sections 21, 22, and 24 state the action to be taken by the Privy Council on such representations being made.

The question on which the Medical Council is desirous of obtaining information may be stated generally as follows:—

"Whether the General Medical Council, in considering the returns made to it by the several Colleges and bodies in the United Kingdom in accordance with Section XVIII. of the Medical Act, is entitled to have respect to the supposed value of different degrees or licences, or whether the Medical Council is limited by Clause XX. to laying down a minimum standard sufficient in its opinion to secure the requisite knowledge and skill for the efficient practice of their profession by the holders thereof, although in the opinion of the General Council the standard may not be that which should be demanded for the higher qualifications."

For the better understanding of the question intended to be raised, it will be necessary to state the action which the General Medical Council has taken with reference to general and professional education.

In the year 1859, the General Medical Council came to the conclusion, that, as they were authorised by the Medical Act to represent to the Privy Council whatever defects of study or examination they might consider to exist on the part of bodies granting qualifications to practise, it would be expedient for them to publish their views on the subject of education and examination, so that every body which was entitled to grant qualifications to practise might be informed beforehand what standard of proficiency would be required by the Council.

The General Medical Council have accordingly issued three reports on education and examination, dated respectively 1859, 1860, and 1861. Copies of these reports accompany the case.

The Report of 1859 is preceded by some general remarks, pointing out the views of the Council as to the nature and importance of the preliminary examination in general knowledge which should be required.

The subject of education is divided by the General Council into three heads:—

1. Preliminary General Education.
2. Professional Education.
3. Professional Examinations and the conditions on which the higher qualifications in Medicine and Surgery should be granted. (*Vide* the Report of the Committee on Education, 1861.)

The General Medical Council report with some fulness on the first head, and issue "Recommendations" as regards the Preliminary Examinations in General Education which should be required of all students seeking any kind of Professional qualification whatever.

They also make some "Recommendations" on the subject of Professional Examination (Head 3), but these "Recommendations" are of a general character, and apply alike, without distinction, to all Professional Examinations.

In the Report of 1860, an opinion is recorded which, in the Report of 1861, is extended to Surgery:—

"That it is not desirable that any University of the United Kingdom should confer any Degree in Medicine or Surgery—whether that of Bachelor, Doctor, or Master—upon candidates who have not graduated in Arts, or passed all the Examinations required for the Bachelorship in Arts, or the Examinations equivalent to those required for a Degree in Arts."

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It may be now stated, as a result of the steps taken by the General Medical Council, that an Examination in General Education is required by all Bodies who confer Degrees or grant Diplomas or Licences, and that in most cases the Examination in General Education has been further made preliminary in conformity with the wish of the Council.

But there has not been an equal concurrence of opinion on the part of all the Bodies mentioned in Schedule (A) with the resolutions of the General Medical Council of 1860 and 1861 (Head 3), relating to the General Education of persons obtaining higher qualifications in Medicine or Surgery; nor can it be said that the General Medical Council considers examination sufficient that they have authority under the Medical Act to require a higher standard of proficiency for candidates for higher qualifications than for persons only obtaining a Diploma or License to practise.

The Regulations of some of the Bodies named in Schedule (A) were already in accordance with the recommendations of the Medical Council; of those which were not in accordance, some have conformed with the recommendations, and others have expressed the power of the Council to require any regulations beyond such as are essential for securing the requisite knowledge and skill for the efficient practice of their Profession.

Up to this present time, it must be remarked that the authority of the General Medical Council to issue "Recommendations," or to make representations to the Privy Council in regard to the insufficiency of study and examination for higher qualifications as distinguished from the sufficiency of study and examination required for a Diploma or Licence, has only been disputed as respects preliminary General Education; because, in fact, the General Medical Council have not as yet taken any step in regard to the Professional Education for University Medical or Surgical Degrees, neither have they considered the expediency or otherwise of fixing a higher standard for those higher qualifications conferred by Medical Bodies beyond the Diploma or Licence to practise. It will be evident, that should the General Medical Council take up these points at a future meeting, the same conflict of opinion, as to the extent of their authority, is likely to arise, and in a more extended form.

Let attention now be drawn to Schedule (A). In this Schedule are enumerated all the titles or qualifications derivable from Universities or Medical Bodies which may be recorded in the Medical Register. These titles or qualifications not only refer, as to the mind of the Profession, and to the mind of the public, variety in degree of proficiency in Medical and Surgical Science, but also variety in nature, at least to some extent, *e.g.*, Medicine and Surgery.

Difference of opinion has existed as to the word Profession, as used in Section 20, it being contended, on the one hand, that it must be applied to the entire Schedule, and that the authority of the Medical Council is restricted to the requirement of a minimum standard common to all qualifications; while the opposite view is, that the word Profession is to be taken in its distributive sense, and applied to each qualification separately, so that the General Medical Council would be authorised to estimate the extent of proficiency and variety of attainment which should correspond with each title or qualification in the Schedule, and make representations accordingly, if need be, to the Privy Council.

The questions for your consideration are:—

1. Is the General Medical Council, in making representations to the Privy Council, restricted to representing such cases (should they exist) in which the course of study and examination, whether in general knowledge or in strictly Professional studies, is inadequate; to secure the possession of the requisite knowledge and skill for the efficient practice of any grade whatever of the Medical Profession?

2. Is the General Medical Council authorised to represent to the Privy Council that a course of study and examination, whether in general knowledge or strictly Professional studies, though adequate to secure the requisite knowledge and skill for the efficient practice of the Profession under one grade or qualification, is not adequate for the efficient practice of it under another grade or qualification?

3. Is the General Medical Council authorised to represent to the Privy Council that a course of Professional Study and Examination, though adequate as to kind, to secure the requisite knowledge and skill for the efficient practice of one department of the Profession, say Medicine, is not such, as to kind, as ought to be required, in order to secure the requisite knowledge and skill for the efficient practice of another department of the Profession, say Surgery?

Opinion.

We have considered the questions submitted to us, and are of opinion as follows:—

1. We think that the General Medical Council, in making representations to the Privy Council, is not restricted to representing cases in which the course of study and examination, whether in general knowledge or in strictly Professional studies, is inadequate to secure the possession of the requisite knowledge and skill for the efficient practice of any grade whatever of the Medical Profession; and that the Medical Council may represent to the Privy Council cases in which the course of study and examination to be gone through in order to obtain a qualification for the practice of Medicine, is inadequate, in any respect, to secure the requisite knowledge and skill for the efficient practice of Medicine, though adequate, it may be, in that respect, for the efficient practice of Surgery, and *vice versâ*. To this extent, but only to this extent, we think that the Medical Council is not restricted to the requirement of a standard common to all qualifications.

2. Except in reference to the distinction we have mentioned between qualifications for the practice of Medicine and qualifications for the practice of Surgery, we do not think that the General Medical Council is authorised to represent to the Privy Council that a course of study and examination, whether in general knowledge or in strictly Professional studies, though adequate to secure the requisite knowledge and skill for the efficient practice of the Profession, under one grade or qualification, is not adequate for the efficient practice of it under another grade or qualification. We do not think that it is within the functions of the Medical Council, acting under the 20th section of the Medical Act, to make representations to the Privy Council with regard to the insufficiency of study and examination for higher degrees or qualifications, as distinguished from the sufficiency of study and examination required for a diploma or licence to practise. We do not think that the Medical Council is authorised, for example, to recommend a higher standard of proficiency for the degree of Doctor of Medicine than for that of Bachelor; nor to demand higher standard of general or Professional education from graduates of Universities qualified to practise Medicine, or to practise Surgery, as the case may be, than from licentiates of corporations similarly qualified.

3. We think, as a ready mentioned, that the General Medical Council is authorised to represent to the Privy Council that a course of Professional Study and Examination, though adequate as to kind, to secure the requisite knowledge and skill for the practice of the Medical Profession in the department of Medicine, is not such, as to kind, as ought to be required, in order to secure the requisite knowledge and skill for the efficient practice of the Profession in the department of Surgery, and *vice versâ*. It the Medical Profession must, in our opinion, be considered as, for this purpose, divided only into the two departments mentioned, viz., those of Medicine and Surgery.

ROBERT L. PALMER,
C. J. SELWYN,
F. VAUGHAN HAWKINS.

22. Moved by Dr. ALEXANDER WOOD, seconded by Mr. SYME—"That the Council is of opinion that the matter referred to in a memorial presented by Dr. Edwards Crisp, respecting the Carmichael Prizes, is not within the powers of the Council, as limited by the Medical Acts, and the Council therefore decline to enter on its consideration."—Agreed to.

23. Moved by Dr. ALEXANDER WOOD, seconded by Mr. SYME—"That the Council is of opinion that the matter referred to in a memorial presented by Henry Holmes, M.D., M.R.C.S., of Bridgenorth, respecting the conduct of the Salopian Medico-Ethical Society, is not within the powers of the Council, as limited by the Medical Acts; and the Council therefore decline to enter on its consideration."—Agreed to.

24. Moved by Dr. ANDREW WOOD, seconded by Dr. EMBLETON—"That it be remitted to Dr. Embleton, in conjunction with the Registrar, to prepare and print an Index of all the Minutes, as well of the General Council and Executive Committee as of the Branch Councils."—Agreed to.

25. Moved by Dr. ANDREW WOOD, seconded by Dr. THOMSON—"That £200 of the General Registrar's salary of £500 be charged against the funds of the Branch Council for England."—Agreed to.

26. Moved by Dr. Christison, seconded by Dr. ANDREW WOOD—"That the consideration of the Report of the Committee on the requirements of the Commissioners for Administering the Laws for Relief of the Poor in Ireland, be deferred till the next meeting of the General Council."—Agreed to.

27. Moved by Dr. A. SMITH, seconded by Dr. CORRIGAN—"That the Executive Committee be authorised to protect the copyright of the *British Pharmacopœia*, which is vested in the General Council."—Agreed to.

28. Moved by Dr. CORRIGAN, seconded by Mr. SYME—"That the Executive Committee be requested to direct their attention, and take such steps as may appear advisable to them, towards obtaining from Government a suitable place of meeting for the General Council."—Agreed to.

29. Moved by Dr. ANDREW WOOD, seconded by Mr. TEALE—"That the Executive Committee consist of—

"The President. "Mr. Arnott.
"Dr. Burrows. "Dr. Acland.
"Dr. Sharpey."

—Agreed to.

30. Moved by Dr. A. SMITH, seconded by Dr. ANDREW WOOD—"That the powers and duties delegated to the Executive Committee, in accordance with the ninth section of the Medical Act, shall be vested in the Committee until the next meeting of the General Medical Council."—Agreed to.

31. Moved by Mr. TEALE, seconded by Mr. HARGRAVE—"That the thanks of this Council are eminently due, and are hereby offered, to the Royal College of Physicians, London, for their obliging and courteous accommodation during the present session of the Medical Council."—Agreed to.

32. Moved by Dr. ANDREW WOOD, seconded by Mr. HARGRAVE—"That a gratuity of ten guineas be given to the servants of the Royal College of Physicians of London."—Agreed to.

33. Moved by Dr. A. SMITH, seconded by Mr. HARGRAVE—"That a gratuity of ten guineas be given to Mr. Bell, and the same to Mr. Hoope, the clerks, for their extraordinary labours in attendance on the Council."—Agreed to.

34. Moved by Dr. EMBLETON, seconded by Mr. HARGRAVE—"That the thanks of this Council are due, and are hereby tendered to the President of the Council, Dr. Burrows and Dr. Sharpey, for their important services."—Agreed to.

35. Moved by Dr. CORRIGAN, seconded by Dr. ALEXANDER WOOD—"That the grateful thanks of the Council are hereby given, to the President, for his continued zeal, kindness, and attention, in discharging his duties this session."—Carried by acclamation.

MINUTES OF ADJOURNED MEETING, WEDNESDAY, JUNE 3, 1863.

COLLEGE OF PHYSICIANS, LONDON.

Mr. GREEN, *President*, in the chair.

Present—

Mr. Cooper.	Dr. Fleming.	Dr. Corrigan.
Dr. Embleton.	Dr. A. Smith.	Mr. Arnott.
Dr. Alexander Wood.	Mr. Hargrave.	Mr. Teale.
Dr. Andrew Wood.		

Dr. FRANCIS HAWKINS, *Registrar.*

The Minutes of the last meeting were read and confirmed.

REVIEWS.

A Clinical Memoir on Certain Diseases of the Eye and Ear, consequent on Inherited Syphilis; with an Appended Chapter of Commentaries on the Transmission of Syphilis from Parent to Offspring, and its more Remote Consequences. By JONATHAN HUTCHINSON, F.R.C.S., Senior Assistant-Surgeon and Lecturer on Surgery at the London Hospital; Assistant-Surgeon to the London Ophthalmic Hospital, etc. London: Churchill and Sons. 1863. Pp. 269.

This is a book upon a difficult subject. We have to show where the great difficulty lies, and how Mr. Hutchinson

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meets it. Given certain diseased conditions of the eye and ear in young persons, the author undertakes to prove by clinical evidence that they derive their origin from inherited syphilis. For the most part, the patients themselves can give no assistance in tracing them to the supposed cause, and considerations of moral obligation or motives of kindness preclude the Surgeon from pursuing his investigation by direct questioning. He is thus driven to indirect methods of arriving at his object. In some instances, indeed, this is not the case, as one or both parents may either exhibit unmistakeable marks of syphilis, or may confess to its occurrence, or may detail enough of the previous Medical history of the child to supply full conviction to the mind of the Surgeon. But, in the majority of cases of suspicious disease, it is not so, and the difficulty to be met is to fix upon some unmistakeable tokens or objective signs of the hereditary syphilitic diathesis,—such as shall declare to all who observe them that the person exhibiting the marks is hereditarily infected. Taking these signs as positive indications, corroborative evidence may be sought to strengthen the case in the eyes of the less believing. Now, Mr. Hutchinson considers that he is in possession of such objective tokens, at all events in persons whose age has advanced to the period of second dentition. We are not about to discuss the accuracy of this test; it is sufficient for us here to say that he quotes Mr. Dixon and Mr. Paget as satisfied with its value. To those persons who are disposed to accept the test, this work will be conclusive in its reasoning; to those who do not accept it, the conclusions of the author will not be satisfactory. Such persons must withhold their judgment until they have tested by their own experience the test itself. The test of hereditary syphilis, in the difficult cases alluded to, mainly lies in the exhibition of certain developmental peculiarities especially obvious in the state of the permanent teeth, but also in other marks, respecting all which we shall allow our author to speak for himself. "*The central upper incisors of the second set are the test teeth*, and the Surgeon not thoroughly conversant with the various and very common forms of dental malformation will avoid much risk of error if he restrict his attention to this pair. In syphilitic patients, these teeth are usually short and narrow, with a broad vertical notch in their edges, and their corners rounded off. Horizontal notches or furrows are often seen, but they, as a rule, have nothing to do with syphilis." —P. 204. A plate, illustrative of typical syphilitic teeth, is given. "Next in value to the malformations of the teeth are the state of the patient's skin, the formation of the nose, and the contour of his forehead. The skin is almost always thick, pasty, and opaque. It also often shows little pits and scars, the relics of a former eruption, and at the angles of the mouth are radiating linear scars running out into the cheeks. The bridge of the nose is almost always broader than usual and low; often it is remarkably sunk and expanded. The forehead is usually large and protuberant in the regions of the frontal eminences; often there is a well-marked broad depression a little above the eyebrows. The hair is usually dry and thin, and now and then (but only rarely) the nails are broken and splitting into layers."—P. 205. And then follow some signs which we must pass over, referable to former syphilitic attacks of inflammation of the eyes. All these signs together Mr. Hutchinson calls the "syphilitic physiognomy."

The diseases of young subjects, about which Mr. Hutchinson is most certain that he is correct in referring them to hereditary syphilis, are acute iritis, chronic interstitial keratitis, and inflammation of the choroid and retina. About other diseases of the eye treated of in his book he appears less certain. We will therefore confine our attention here to the diseases we have mentioned, leaving our readers to make their own acquaintance, as we think they ought to do, with the whole subject as placed before them by this experienced observer.

Twenty-three cases of acute iritis in young infants, the oldest aged sixteen months, are related, in most of which there was a history of syphilis in the parents, or the association with the iritis of indubitable syphilitic maladies in the child. A very few of the cases, although strongly suspicious, are not such as to carry full conviction to our mind. We will quote our author's brief summary respecting this disease:—"1. The subjects of infantile iritis are much more frequently of the female than the male sex. 2. The age of five months is the period of life at or about which syphilitic infants are most liable to suffer from iritis. 3. Syphilitic iritis in infants is often symmetrical, but quite as frequently not so. 4. Iritis, as it occurs in infants, is seldom complicated, and is attended by but few of the more severe symptoms which characterise this disease in the adult. 5. Notwithstanding the ill-characterised phenomena of acute inflammation, the effusion of lymph is usually very free, and the danger of occlusion of the pupil great. 6. Mercurial treatment is most singularly efficacious in curing the disease, and, if recent, in procuring the complete absorption of the effused lymph. 7. Mercurial treatment previously adopted does not prevent the occurrence of this form of iritis. 8. The subjects of infantile iritis, though often puny and cachectic, are also often apparently in good condition. 9. Infants suffering from iritis almost always show one or other of the well-recognised symptoms of hereditary taint. 10. Most of those who suffer from syphilitic iritis are infants born within a short period of the date of the primary disease in the parents."—P. 26. To this series of aphorisms is appended a note which we also quote:—"In many of the cases the patients had previously been treated by mercury for other symptoms of hereditary syphilis. In one instance the second eye was attacked while the patient was taking mercury for the cure of iritis in that first affected. This I have known occur more than once in adults. In the latter, in five instances I have seen acute syphilitic iritis set in during actual ptyalism." We can match the observation by another. We have seen rheumatic pericarditis not only set in during mercurial treatment of the original articular rheumatism several times, but once after ptyalism had commenced. Others must have met with a similar phenomenon. Although the drug does not prevent the occurrence of a disease, it is still believed to modify its progress.

Nearly half the book is occupied in the discussion of the syphilitic origin of chronic interstitial keratitis, respecting which the author says that its occurrence is not only now considered by several high authorities as pathognomonic of inherited taint, but that "it is almost invariably coincident with the syphilitic type of teeth, and, when these two conditions are found together in the same individual, I should certainly feel that the diagnosis was beyond doubt."—P. 205. This being the importance attached by Mr. Hutchinson to the matter, one cannot be astonished at his devoting so much space to the subject. Indeed, he tells us at starting that the heredito-syphilitic origin of this disease, and of the dental peculiarities mentioned, are the principal assertions met with in the pages of his book. It is a disease which, under the name of "scrofulous corneitis," has frequently been described by authors on ophthalmology. The following are the chief reasons which have induced Mr. Hutchinson to regard it as a direct result of inherited syphilis:—"1. From its being a very well marked and peculiar form of ophthalmia, it is *a priori* probable that it acknowledges some single and definite cause. 2. Its subjects are almost invariably of a very peculiar physiognomy, and usually bear the most marked similarity to one another. 3. Its subjects almost invariably have their upper central incisor teeth of the permanent set dwarfed and notched in a peculiar and characteristic manner. 4. In most cases the features alluded to under the last two heads bear no resemblance whatever to those of struma properly so-called. On the contrary, the subjects of tuberculous struma usually have large white teeth, and are often of a florid complexion. 5. I have not yet seen a single case in which the patient was the subject of phthisis, and but very few in which suppuration of the glands of the neck had occurred. 6. It affects by preference the eldest living child of the family, a circumstance to be expected under the syphilitic hypothesis, but wholly inexplicable under that of struma. 7. It affects female children in preference to males, and usually occurs in families in which a large infantile mortality has taken place. 8. It occurs in all classes of the community, the well-fed and under-fed, the residents of the most healthy situations (sea-coast, etc.), as well as those of crowded cities. 9. In a large proportion of those cases in which I thought it right to make direct inquiries on the subject, I obtained a confession that one or other parent had suffered from constitutional syphilis prior to the birth of the patient. 10. In a very large majority of those cases in which I obtained information as to the health of the patient during early childhood, a clear history of the usual symptoms of infantile syphilis was given. 11. In many instances there was a clear history of symptoms of infantile syphilis having been observed in brothers or sisters of the patient. 12. Whilst, as above observed, enlargements of the lymphatic glands are unusual, other affections far more closely connected with syphilis than with true struma, such as nodes, ulceration of the palate, and erosive lupus, are not

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infrequent in subjects of this disease." — P. 124. Mr. Hutchinson's conclusions are derived from 102 cases, which are detailed and tabulated in his book. He tells us that the prognosis is favourable just in proportion as the intolerance of light is slight, and that even in the most severe cases a certain amount of clearing may be anticipated. The treatment he prefers is the use of mercurial ointment behind the ears, in the neck, and under the axillæ every night, and of a mixture containing iodide of potassium, iodide of iron, and tincture of nux vomica.

The chapter on inflammations of the choroid and retina, as dependent upon inherited syphilis, is much more brief, only fourteen cases being recorded. Mr. Hutchinson expresses a belief that, were it not that these deeper lesions generally occur with or after an attack of keratitis, they would be more frequently noticed; as it is, the haziness of the cornea prevents the ophthalmoscopic inspection by which the disease is recognised.

The Seventh Chapter is a brief one, and the only one devoted to consideration of diseases of the ear. It is entitled "On Deafness in connexion with Inherited Syphilis." Twenty-one cases are noted, fifteen of which were previously detailed in the chapters relating to disease of the eyes. All had suffered from keratitis. In this form of deafness the function seems to fail without any external disease; it is usually symmetrical, and its stages are often so rapidly passed through, that a patient who six months ago could hear almost perfectly, becomes, without otorrhœa, or any marked degree of pain, utterly deaf. The author believes the deafness due either to disease in the nerves, or to some changes in the non-accessible parts of the auditory apparatus.

The book concludes with a series of aphorisms respecting constitutional syphilis, and its transmission from parent to offspring, which we must needs pass over now; nevertheless, they will be read with interest. The whole book is the work of a man whose careful and extended observation will ensure for him an attentive hearing by every class of Practitioner.

FOREIGN CORRESPONDENCE.

GERMANY.

BERLIN, May 12.

IT is a curious fact that until now the state of animal heat during and after parturition has scarcely at all been investigated, although we possess many valuable observations on the temperature of the living body in its normal physiological condition and in febrile diseases. It is therefore a great merit on the part of Dr. Winckel, Assistant-Physician to the Lying-in-Institution connected with this University, to have taken up this subject; and as he has arrived at many valuable results, I shall to-day communicate to you the most salient points of his experiments.

From various reasons he always determined the state of the temperature in the vagina before, during, and after birth. A sensitive thermometer was placed into the vagina, so that the globe was from two to four inches from the introitus, and was kept in its position by the thighs, which were pressed against one another. To measure the temperature in the arm-pit during birth is not only troublesome and tedious to the Physician, but also nearly intolerable to most parturient women, on account of the uncomfortable position of the arm. In the arm-pit it is necessary that the thermometer should remain at least twenty-five minutes, while in the vagina on the average nine minutes are sufficient for the thermometer to reach its highest standard; moreover, the instrument does not give any inconvenience to the women, whether they lie on the back or on the side. The question would then arise whether the canal of the vagina might not be too wide during birth for an accurate determination of the temperature to be made, and whether the local hyperæmia of the vagina would allow of conclusions to be drawn therefrom as to the temperature of the body altogether. It therefore became necessary to make comparative observations on the temperature in the arm-pit and the vagina. These gave the result—1st, that if all other circumstances, such as clothing, air, food, etc., remained the same, the difference in the temperature of the arm-pit and the vagina was nearly constant, that of the latter being 0·1 to 0·4° C. higher than that of the former; 2ndly, that if variations were observed in this difference, these were always caused by a higher temperature of the skin; and 3rdly, that even if there were considerable morbid conditions of the vagina and uterus (which was generally the case only after, but not during birth), there was always the greatest similarity as regards the temperature of both places, so that it became evident that we might, during and after parturition, draw just as certain conclusions with regard to the temperature of the blood from the heat of the vagina as from that of the arm-pit.

In a hundred experiments made in women who were in the last two months of pregnancy, Dr. Winckel found the temperature of the vagina, between 9 and 10 a.m., on the average to be 100°·67 F.; between 5 and 7 p.m. it was on the average 100°·79. This remained the same during the whole of the last two months, and did not even increase within the last few hours before birth; in one case only was there an inconsiderable augmentation of temperature in the evenings of the last four days before birth. The hope therefore that we might perhaps be able to determine, by means of the thermometer, whether labour was impending, was not fulfilled.

It is not difficult to ascertain the temperature of the vagina in the first period of birth; during the second, if the head descends rapidly, the thermometer is sometimes expelled; but where the head comes down slowly, or where it remains fixed for some time, we may even during the second period determine the heat of the vagina without much inconvenience. Care must be taken to introduce the globe in an oblique direction below the lower labium of the os uteri, lest the membranes might be prematurely ruptured. In drawing our conclusions from the facts observed, we must take into account the ordinary daily variations of temperature. Animal heat increases under ordinary circumstances from 2 to 10 a.m., and decreases from 10 a.m. till 2 p.m.; it then again rises from 2 till 6 p.m., and is diminished from 6 p.m. till 2 a.m. Muscular exertion is always apt to give rise to an increase of heat; and it might therefore be expected that, as there is much muscular action in parturient women, even during the first period, and which continually increases as labour is progressing, we should find an augmentation of heat, more especially in primiparæ. But there are other circumstances which regulate and rather tend to diminish the temperature. Most parturient women do not partake of food during labour; they generally feel a great desire for cooling beverages, by which animal heat is diminished. Moreover, respiration is generally short, rapid, and superficial, while expiration is prolonged and intensified (screaming, moaning, etc.). Less oxygen is therefore carried to the blood, and, at the same time, the evaporation from the lungs is increased, whereby cold is produced. Heat is also lost by evaporation from the skin, the more so as the women are generally only lightly covered up.

Experiments made in forty parturient women, with regard to the circumstances just mentioned, have shown that the mercury always rose much faster during pains than before or after them. Heat is slightly increased during every labour. (0°·34 to 0°·40 F.) It does not rise continually and in proportion to the progress of labour, but the ordinary daily variations of temperature still go on undisturbed. The temperature is slightly higher in the second than in the first period. Early rupture of the membranes has generally no influence upon the heat. In premature births heat is much the same as in ordinary ones. Immediately after birth, it amounts to 101°·05. Compared with the temperature of the second period, it was higher than this, if birth took place between 2 and 10 a.m., and between 2 and 7 p.m., but lower if it was between 10 and 1 in the morning, and between 7 p.m. and 2 a.m. Within the next twelve hours, the heat rises about 1°, and only falls within the second twelve hours after birth. With regard to anomalous pains, it was found that if any inflammation was present, the temperature increased continuously even during the intervals between the pains, and that after birth it suddenly fell again considerably.

I now proceed to give some remarks which lately came from Professor Traube with regard to pneumothorax and the metallic sounds perceived in that affection. The best way to hear these sounds is to percuss a considerable surface of the thorax by means of a plessimètre. In many cases the metallic sounds could not be heard during life, but very distinctly after the death of the patient. The mixture of gases contained in the thorax has a certain tension, which may be much larger than that of the atmosphere. By the refrigeration of these gases after death the tension is diminished, and thus the perception of the sound facilitated. If the tension is exceedingly high, no

sound is produced. In several cases where the tension had been very considerable during life, Professor Traube, at the autopsy, first opened the abdomen. The metallic sounds, which had been very distinct before, disappeared if the diaphragm was slowly pushed upwards, whereby the tension in the sac of the pleura was of course increased. In one case only this experiment did not succeed, but here there was a considerable fistula, and the air escaped through the windpipe in proportion as the pressure was augmented.

To show the presence of pneumothorax after death, three methods may be employed—(a) The body is shaken before the autopsy is commenced. If there is pneumothorax, the gases mix with the effusion, and froth is produced. (b) The soft parts are so prepared that they form a sort of pouch with the chest; this is filled with water, and the thorax is then punctured below the water. (c) The abdomen is in a similar manner filled with water, and the diaphragm then punctured. In the two latter cases the air visibly escapes to the surface of the water.

An impediment to the exchange of gases within the bronchial tubes may cause death in two different ways: (a) amidst symptoms of dyspnœa, or (b) amidst symptoms of paralysis of the heart. Dyspnœa is considerable if, by the impediment to respiration, not only the absorption of oxygen is diminished, but also a considerable accumulation of carbonic acid in the blood is caused. Death may ensue without dyspnœa if there are only few red corpuscles in the blood, so that the formation of carbonic acid in the system is altogether diminished, and in consequence of a weakened heart's action, the transverse section and the rapidity of the current of blood is so much decreased, that only a trifling amount of carbonic acid can be carried to the medulla oblongata. Thus, Professor Traube has seen cases of pneumothorax with scarcely any dyspnœa, where the patients had been greatly weakened by phthisis. In the same manner bleeding will relieve dyspnœa, but this remedy is a double-edged knife. If a patient dies of an acute affection of the respiratory organs, at a time when his blood still contained a normal amount of red corpuscles, death is produced in a rather complicated manner. The carbonic acid, an excess of which is accumulated in the blood, excites not merely the nerves of respiration, but also both nervous systems of the heart to increased activity. By the augmented action of both the muscles of inspiration and the heart, the consumption of oxygen is considerably increased, while a lesser quantity of this gas is carried to the blood. The consequence of this is, that the blood becomes at last so poor in oxygen, that the excitability of the nervous centres is reduced to zero; that is, that they cannot even be excited by the maximum amount of carbonic acid carried to them. That the action of the nerves of inspiration is extinguished before that of the nerves of the heart, may be explained by the different length of the nervous courses. Those fibres which conduct the impulse of the medulla oblongata to the muscles of inspiration are far longer than the fibres which pass from the ganglia of the heart to the muscular substance of this organ; and this is the reason why the heart's action always lasts longer than that of the inspiratory apparatus, that is, why breathing ceases before the pulse disappears. The case is quite different if anæmic persons die from an affection of the respiratory organs. In such patients less oxygen is carried to the centres of life, and therefore the excitability of these latter is far less in them than in persons who were in good health. At the same time the quantity of the stimulus is less considerable; and thus the excitation is so feeble that no dyspnœa is produced. Nevertheless, death will ensue here as well as in the former case, because, owing to the impediment to respiration, at last a minimum amount of oxygen is carried to the blood, so that the excitability of the nervous centres is likewise reduced to zero.

OBITUARY.

DEATH OF DR. PHILIP BURNARD AYRES, M.R.C.S.

The readers of the *Medical Times*, with which journal he was so long and so intimately connected, and also an offshoot, the *Pharmaceutical Times*, of which he was the editor, will regret to learn that this accomplished Physician died on Thursday, April 30, at his residence in the Champ de Mars, Port Louis, Mauritius, after an illness of about ten days. The first symptoms were those of a bilious remittent fever, rife at that period; but as he felt little or no pain, he neglected to pay that attention to himself which he would have done to a patient. On the Tuesday week preceding his decease he went to bed in his usual good spirits, but awoke in the middle of the night with an excruciating pain in his abdomen. From the intensity of his sufferings it was evident to the Medical men in attendance that some lesion of a grave nature had taken place. The most energetic treatment was resorted to, but without success, and, notwithstanding all efforts, he gradually sank. The post-mortem examination confirmed the diagnosis which had been formed during life, and disclosed a perforation of the small intestine about an inch and a-half from the ileo-cæcal valve, with the concomitant appearances of intense peritonitis. Thus one of the rarest, and, at the same time, most unexpected, complications in a disease of comparatively little danger became the ultimate cause of the death of one of the most distinguished Physicians that ever visited the Mauritius.

Dr. Ayres was born at Thame, in Oxfordshire, on December 12, 1813, and from his earliest youth gave indications of a strong predilection for the natural sciences, and so decided was his taste for, and so complete his devotedness to his studies, that his parents resolved that he should embrace the Medical Profession as the best adapted to satisfy his longings for science. In 1836, he became a Licentiate of the Society of Apothecaries; on April 25 in the same year a member of the Royal College of Surgeons; and on December 9, 1841, a Doctor of Medicine of the London University, from which learned institution he carried off seven medals. He then entered on the active duties of his Profession, and, engaged almost night and day in providing for his young family, he yet found time for his favourite studies—botany and natural history. In physiological chemistry and hygiene, by long research and unrelenting industry, he brought out new facts which elicited the attention of the scientific men of his time, in the glorious array of whom he soon obtained a distinguished place for himself. Having been introduced by his friend Mr. Stone to Professor Quekett, a warm friendship sprang up between these men of congenial tastes, and, being an elegant writer, he edited the greatest part of that celebrated histologist's lectures, and assisted greatly in the histological catalogue of the Hunterian Museum. As a lecturer at the Charing-cross Hospital on chemistry he drew a large and attentive class. In 1851, he was appointed Physician to the Islington Dispensary; and in 1855, through the interest of his attached friend, the late lamented James Robinson, the well known Dentist, of Gower-street, the Secretary of State offered him the post of Superintendent of Quarantine at the Mauritius, which he at once accepted, and arrived on the scene of his future labours on January 5, 1856. In an elaborate notice of the death of Dr. Ayres, which appears in the *Overland Commercial Gazette*, it is stated that those who knew the state of matters at that time can fully appreciate what Dr. Ayres did in his new appointment. The misery he endured, his separation from his family, his trials, his excessive labours, were nothing for him; always calm and cheerful, he looked to the end—the completion of his task, and the improvements of the quarantine system. The excellent accommodation for the Indians at the Lazits of Flat Island, if not mainly due to him, at least was established by his earnest representations. Several of his reports, especially those of the Medical Charity Commission, and those on Quarantine and Sanitary Reform, bear the stamp of a masterly mind. His various communications to the Royal Society of Arts and Sciences, on the Geology of Flat Island, on the Diseases of Mauritius, and the Utility of Vaccination, are the results of careful observation and deep study. In every one of them are to be seen the same luminous train of reasoning—the suggestion of measures hitherto unheard of in this colony, conducive alike to the health of its inhabitants, and abounding with conclusions of the most practical value. Appointed Surgeon in charge of the Civil Hospital a little after the retirement of the late Dr. Montgomery, he soon placed that establishment upon a footing which gave universal satisfaction. Whilst discharging his official duties, he did not, however, neglect his scientific pursuits. Intent upon writing a Flora of Mauritius, each moment he could snatch from busy labour was spent in his botanising walks, but death snatched him away ere his work was finished, and the Flora of Mauritius remains uncompleted!—a work which, had his life been spared, would have placed him on a level with the first botanists of the day.

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In private life he won the esteem of all those who knew him. Kind-hearted, generous, sympathising, he was always to be found foremost wherever any good was to be done, displaying on all occasions the benevolence and integrity of the true Christian, the courtesy of the gentleman, the kindness of the friend. To the disconsolate widow and the fatherless children the loss is irreparable, more especially as they have been left, it is greatly feared, in straitened circumstances. His eldest son, a most accomplished artist, is at present pursuing his Medical studies with great success in Edinburgh.

EDMUND BELFOUR.

The members of the Profession will sympathise with the worthy and time-honoured Secretary to the Royal College of Surgeons in the lamentable death by drowning of his only son. On the 4th inst. Mr. E. Belfour left his residence, Grove House, Putney, soon after six o'clock for his usual early pull on the river Thames. As he did not return, some uneasiness was felt, and inquiries were made, the result of which was that his boat, one of those dangerous out-riggers, was discovered drifting without him. Search was immediately commenced, and a large number of boats were employed in dragging that part of the river over which he was supposed to have passed, but no trace of the body could be found until Saturday morning, when it was discovered at Hammersmith. An inquest was held on the remains the following Monday at the Boileau Arms, and adjourned until the following day, when a verdict of "found drowned" was returned. This terrible catastrophe has not only plunged the family and friends of the deceased into deep grief, but is keenly felt by all who enjoyed the privilege of his acquaintance. This was shown at his funeral, which took place on Wednesday last, and was attended by a large number of the most distinguished inhabitants of the neighbourhood, including the members of the London Rowing Club, of which the deceased was a Vice-President.

LEGAL INTELLIGENCE.

COURT OF QUEEN'S BENCH.—June 4.

(*Sittings in Banco.*)

EX PARTE SERGEANT v. THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

This was an application by a Medical man under the Medical Council Act of 1858, which provides for a general registration of Medical men, and enacts that only those who are registered shall be entitled to sue for their fees. The Council had sent a circular letter to all Medical men, desiring to know if they had ceased to practise, but through his absence from home he did not receive the letter, and did not hear of it until December, 1861. He had since then repeatedly applied to the Council to register him, but his applications had not been acceded to. He now desired a *mandamus* to compel them to register him, and he made an affidavit to the effect that he was duly qualified, and that his right to be registered was not disputed.

Mr. Henry James now moved on his behalf for a *mandamus* to the Council to register him.

The Court granted a rule.

MEDICAL NEWS.

Royal College of Physicians of London.—The following gentlemen passed the First Part of the Professional Examination for the License of the College on June 5, 1863:—

Charles William Ellis Foster, Leeds School of Medicine; George Lamb, 162, Caledonian road, Islington; Richard John Lupton, school of Medicine, Liverpool; William Vacy Lyle, St. Mary's Hospital; Jesse Wheelock Thibou, St. Bartholomew's Hospital; Henry George Walker, University College; and Walter Thomas Prideaux Wolston, King's College.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, June 4, 1863:—

Francis Henry Burdett, Birmingham; Wm. Hy. Hayward, Church-street, Oldbury; John Douglas Lawrie, Bradford, Yorkshire; Chas. Mont. Davenport Davidson, Springfield, Wandsworth-road; Jas. Acworth Angus, Newcastle-on-Tyne; Thos. Jewison Jefferson, Market Weighton, Yorkshire; Wm. Llewellyn Nash, Cheltenham; John Crump Lindop, St. Bartholomew's Hospital; John Sebastian Wesley, 38, Southampton-row; Thomas Henry Barnes, Clare, Suffolk.

The following gentlemen also on the same day passed their First Examination:—

Richard John Lupton, Liverpool, and Robert Harrison, Nether Seven, Milnthorpe.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Allingham, William, F.R.C.S. Eng., has been elected Surgeon to the Great Northern Hospital.

Bayley, Joseph, M.R.C.S. Eng., has been elected Medical Superintendent of the Salop and Montgomery Lunatic Asylum, Bicton, near Shrewsbury.

Collis, William, F.R.C.S.I., has been elected President of the Royal College of Surgeons, Ireland.

Cullinan, Patrick M., M.B., T.C. Dub., has been appointed Justice of the Peace for the County of Clare.

Earle, Edward B., F.R.C.S. Eng., has been elected Honorary Surgeon to the Western General Dispensary.

Gandy, W., M.R.C.S. Eng., has been appointed House-Physician to the Westminster Hospital.

Horridge, A. C., M.R.C.S. Eng., has been appointed House-Surgeon to the Westminster Hospital.

Moore, William W., M.D. Edin., has been elected one of the Honorary Physicians to the Brighton and Hove Dispensary.

Murray, Gustavus C. P., M.D. Edin., has been elected Physician-Accoucheur to the Great Northern Hospital.

Murray, William, M.D. Durham, has been appointed Physician to the Dispensary, Newcastle-on-Tyne.

Parker, W., L.F.P.S. Glasg., has been appointed Medical Officer of Health for Bermondsey.

Smyly, Josiah, F.R.C.S.I., has been elected Vice-President of the Royal College of Surgeons of Ireland.

Swallow, James Dodd, M.D. Univ. St. And., has been appointed Surgeon to the Royal South London Dispensary.

Thomas, L., L.R.C.P.L., has been elected Assistant Medical Superintendent of the Devon County Lunatic Asylum, Axminster.

Waters, William, L.K.Q.C.P.I., has been elected Medical Officer to the Corbury Dispensary.

Williams, William W., M.D. St. And., has been appointed Consulting Physician to the Gloucester County Lunatic Asylum.

DEATHS.

Barry, William, M.D., at 7, Burlington-street, Bath, on June 2, aged 89, late Deputy-Inspector General of Hospitals.

Beere, William Henry, M.R.C.S. Eng., at Banbury, Oxon, on May 21, aged 52.

Bignell, John Beavis, M.D. St. And., at Barnstaple, Devon, on May 14, aged 77.

Burrows, Philip, M.R.C.S. Eng., at 88, Gloucester-crescent, Hyde-park, on June 6, aged 47.

Dalrymple, Archibald, late of Norwich, on May 28, aged 53.

Dyer, George W., M.D. Edin., at Chippenham, Wilts, on May 27.

Fox, Thomas James, L.R.C.S.I., at Cottage-park, Kilgobbin, County Dublin, on June 2.

Hunt, Robert, M.R.C.S. Eng., at Terrington St. Clement's, King's Lynn, on May 28, aged 43.

Kingdon, Edward W. C., M.D. Edin., at North Fort, Liverpool, on May 6, Staff Surgeon Army.

White, Dr. T. A., at Galway, Ireland, on May 27.

The Levée.—The following presentations to the Prince of Wales, on behalf of the Queen, took place at St. James's, on Monday, the 8th inst., the names having been previously left at the Lord Chamberlain's Office, and submitted for her Majesty's approval, viz.:—Staff-Surgeon P. J. Clarke, by the Adjutant-General; Assistant-Surgeon M. W. Cowan, M.D., by Major-General A. B. Stransham; Dr. S. J. Goodfellow, by Lord Leigh; Assistant-Surgeon Dr. Hodgson, by Colonel C. Bingham; Dr. E. Lankester, Coroner for Middlesex, by the Right Hon. C. P. Villiers, M.P.; Deputy Inspector-General of Hospitals J. Lovell, by Sir C. Wood; Inspector-General Dr. Macpherson, on appointment of Honorary Physician to Her Majesty, by Sir C. Wood; Staff Assistant-Surgeon E. L. McSheehy, by the Adjutant-General; Dr. George Moore, R.N., by the Duke of Somerset; Surgeon G. Pain, on re-appointment to the Royal Artillery, by Colonel C. Bingham; Assistant-Surgeon T. Tarrant, M.D., by Colonel C. Bingham. The following gentlemen attended the Levée, viz.:—Doctors Minter, F.R.C.S.; James McCann; —McCann; Edward Smith, F.R.S.; and Royston Piggott. Messieurs G. B. Childs, F.R.C.S.; John Simon,

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F.R.S.; Howel Morgan, F.R.C.S.; and Haynes Walton, F.R.C.S.

THE HEALTH OF THE KING OF PRUSSIA.—The King of Prussia has been ordered by his Physicians, Messrs. Grimm, Böger, and Lauer, to Carlsbad, to take a course of the waters there. He is said to be suffering from renal calculus.

THE CAMEL IN EUROPE.—The directors of the Garden of Acclimatization, in the Bois de Boulogne, have admitted camels among the animals to which they have directed their attention. Two of these animals are to be seen there at this moment, of the species called *Camelus Bactrianus*.

CAMBRIDGE UNIVERSITY.—The fees for the degree of Master in Surgery have been fixed as follows:—For those who have not taken any degree previously, £18; for those who have taken the degree of B.A. or M.B., £12; for those who have taken the degree of B.A. and M.B., £6; for those who have taken the degree of M.A., £1.

ENFORCING VACCINATION.—There is before the House of Commons a Government Bill extending only to Scotland, proposing that after February next a schoolmaster or schoolmistress shall be liable to a penalty for receiving into a school a child under fourteen without a Medical certificate of its having been vaccinated. There is to be a penalty also upon any one who shall receive into his or her employment or service a young person under eighteen without such a certificate. Every prisoner and every person admitted to parochial relief is to be vaccinated as soon as possible after admission to such relief or imprisonment, unless the Surgeon is satisfied that such person has been vaccinated or has had small-pox.

ROYAL COLLEGE OF SURGEONS.—The readers of this Journal will be surprised to learn that, notwithstanding the number and importance of the subjects for collegial prizes annually offered by the Council of the College of Surgeons for competition among its members, that few, if any, attempt to carry them off; no award has yet been made for the subjects of the past year, and now there are the six following prizes open for the present and ensuing year, viz:—The Collegial Triennial Anatomical Prize of Fifty Guineas. The subject of this prize is: "The Structural Anatomy and Physiology of the Lymphatic Vessels and Glands (the anatomical distribution not being required); the communications (if any) between the Lymphatics and the Blood-vessels to be demonstrated; and the influence (if any) which the Lymphatic vessels or Glands exercise on the fluid they transmit to be elucidated. The dissertation to be illustrated by preparations and drawings." There are two Jacksonian Prizes of Twenty Guineas for the present year, 1863, the subjects of which are: "The Pathology and Treatment of Diseases of the Larynx; the diagnostic indications to include the appearances as seen in the living person. The dissertation to be illustrated by drawings and preparations;" and "The Normal and Pathological Anatomy of the various Synovial Bursæ connected with the Muscles and Tendons of the Upper Extremity, and the treatment of their Diseases. The dissertation to be illustrated by preparations and drawings." There are also three subjects for prizes for the ensuing year, 1864, namely: Club Foot; its Causes, Pathology, and Treatment." "The Diseases of the Ankle joint, and of the Joints and Bones of the Tarsus, requiring Surgical Treatment; and stating the treatment, including Operative, most suitable in each case, with the results thereof;" and "The Malformation, Diseases, and Injuries of the Fingers and Toes, with their Surgical treatment. The dissertation to be illustrated by preparations and drawings."

THE NATIONAL MEDICAL REGISTRATION ASSOCIATION.—This Association, it will be remembered, was established by the leading members of the Profession immediately after the passing of the Medical Act in 1858, to secure, as far as possible, the efficient operation of these clauses which it was expected would confer so much benefit upon the public and Profession, by affording them protection against the unqualified and dishonest pretender. That this Association has rendered the Profession important services there can be no question, and if it has not attained to all that was hoped and expected, it has been due to the utter failure of a certain clause of the Act referred to, and the means at its disposal, rather than to a want of effort on its part. The activity of the Vigilance Committee, and the terror it excited in the minds of evildoers at that time, cannot be forgotten. Prosecution after prosecution was undertaken, and manfully fought to the death, nor did they desist until they had demonstrated beyond clearly the worthlessness of the 40th clause in particular. The Committee then memorialized the Medical Council to obtain from Parliament an amendment of this clause, but at present to no purpose. Until, however, this clause is altered, the Association, as a prosecuting body, is powerless. But we regret to learn that, owing to the members' subscriptions being very much in arrear, a debt of nearly 200*l.* properly incurred is pressing very heavily on the Committee, and that their respected treasurer, J. Davies, Esq., is really subject to personal annoyance on account of it. This ought not to be, and we wish to call the attention of all our readers to the fact. All members of the Association are bound doubt legally liable for the debts of their Committee. There is, however, a higher feeling, and one that we feel sure will actuate them and the Profession generally, and they will feel in honour bound to protect the pockets of those who have so generously bestowed their time and energies, as well as their money, in this service. Some members of the original Committee have determined to relieve their treasurer of the annoyance to which he is subject, and at a meeting held on Monday evening the following subscriptions were announced:—William Fergusson, Esq., £2 2s.; Dr. George Webster, £2 2s.; John Erichsen, Esq., £2 2s.; John Propert, Esq., £2 2s.; the proprietors of the *Lancet*, £5 5s.; Ernest Hart, Esq., £2 2s.; J. F. Clarke, Esq., £2 2s.; Dr. E. Kirby, Esq., £2 2s.; Dr. Hillier, £1 1s.; Jabez Hogg, Esq., £2 2s.; Dr. H. G. Wright, £2 2s.; Dr. Bradford, £2 2s.; William Adams, Esq., £2 2s.; N. H. Clifton, Esq., £2 2s.; Dr. Thane, £1 10s.; W. A. N. Cattlin, Esq., £2 2s.; Dr. J. B. Williams, £2 2s.; Sir J. Ranald Martin, K.C.B., £2 2s.; Dr. Theodore B. Ladd, £2 2s.; Dr. G. Pearse, £2 2s.; Charles Tunaley, Esq., £2 2s.; Dr. Thomas Ansell, £2 2s.; J. Mann, Esq., Charter House, £1 1s.; Dr. Grasemann, 10s. 6d.; Dr. Hensley, 5s.

ON Saturday, the 20th, a short paper will be read by Dr. Druitt before the Metropolitan Association of Medical Officers of Health, at their evening meeting, at 8, Richmond-terrace, Whitehall, S.W., at half-past Seven; Subject: "Impediments to Successful Vaccination." The attendance of vaccinators is desired.

DESGENELTES.—Some amusing anecdotes are told in the *Union Medicale* of this celebrated Army-Surgeon while officiating as Examiner at the Faculty. He was the very providence of the weak and feeble. His questions were of interminable length, and when the candidate sometimes attempted to put in a few words, he would exclaim, "Now, silence, will you! Your interruption is neither polite or politic. It is not polite, for no man should be interrupted while speaking; and it is not politic, for while I am talking you are committing no errors, and the time is running out." An affirmative vote was the inevitable result of these interrogatories. On one occasion, however, he had to examine Kerrouman, a famous pharmacien of encyclopædial knowledge and lively wit, who wished to become a Doctor. Broussais first examined him, and the replies were solid and brilliant. When Desgenelte' turn came, he said, "I have to examine you in Hygiene, which embraces Medical Police. You may be called upon to exercise municipal functions, as I have been (Desgenelte was mayor of his *arrondissement*), and you ought to be acquainted with the laws and regulations which govern Medical Police. Now, what would you do supposing, as happened to me yesterday, you arrived home at ten o'clock at night, and found a man easing himself at your door?" Those present burst out laughing, and Broussais touched his elbow, as if to say, do now be more serious. Kerrouman, swift as an arrow, and with indescribable irony, replied, "Sir, the case you put would appear to me of so serious a nature that I should call you into consultation." Again bursts of laughter followed; but, strange to say, Desgenelte, who usually so keenly relished a witty reply, became much ruffled, and voted against the candidate. The matter, without the interference of Broussais, would have been brought before the Council of the Faculty.

BOOKS RECEIVED.

Outlines of Surgery. By F. Le Gros Clark, F.R.C.S. London: John Churchill and Sons. 1863.

The Nullity of Metaphysics as a Science among the Sciences. London: Longman and Co. 1863.

The Connection between Tuberculosis and Insanity. By T. S. Clouston, M.D. 1863.

The American Journal of the Medical Sciences, April, 1863. Philadelphia: Blanchard and Lea.

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NOTES, QUERIES, AND REPLIES.

Be that questioneth much shall learn much.—Bacon.

In consequence of the publication in this Journal of a *verbatim* copy of the Minutes of the General Council of Medical Education and Registration, we were compelled to omit last week all Reviews of Books, and in our present Number the Hospital Reports.

M.R.C.S.—We believe not.

M.R.C.S.E., Ramsgate—Such an advertisement is, as our correspondent says, "most unprofessional." The offender would be best dealt with by the local Medico-Ethical Association.

Mr. Wyld's Map of Africa, showing the source of the Nile, should be consulted by all who desire to know the facts of that great discovery.

Prey don't pump upon this fellow!"—If any one heard this said in a public row he would know what it meant. Equally do we know what is meant by those disgusting advertisements in the American newspapers, cautioning women against using such and such a quack pill when pregnant, "lest they might bring on miscarriage."

Dudley.—If a representation were made to Dr. F. Hawkins, Secretary to the Medical Council, showing that an M.D., L.R.C.P. and S. of Glasgow, and L.M., circulated handbills like those of the meanest tradesman, promising all sorts of impossible cures, and puffing a secret remedy and system of treatment, the Council must take some notice of the matter.

Public Vaccinators are placed in an awkward position. They must keep up their stock of lymph by keeping up a weekly roll of vaccine patients, and they are bound to promote vaccination generally. Whatever may be the duties which a gentleman has to perform, he will always perform them as a gentleman. He may send and warn small tradespeople of the necessity of vaccination, and yet neither in form nor substance be a mere "touter," or interfere with the practice of other Medical men.

Inoculation.—The following appeared in the *Oxford Journal* of February 3, 1758; we copy the same, *verbatim et literatim*, for the edification of our readers:—

"I George Ridler near Stroud in the County of Gloucester Brand cleth Waver at the deecie of people hereabout do gee nautis that I have inocklated these two seasons past between two and dree hundred vor the smeal pox and but two or three of um died—A many people be aveard o the theng but evaith tis no more than scratten a bit of a haul in their yarm and pushing in a piece of scraped rag diped in some of the pocky matter of a child under the distemper—That everybody in the nashion may be sarved I wool God willing undertake to inocklate them with the pevisor they wool teak two purges before hand and louze a leetle blood away vor half a crown a yead; and I will be bould to say noo body goes beyond me. N.B.—Poor volk at a shilling a yead but all must pay vor the purging."

THE MYSTIC ACTION OF THE CALABAR BEAN.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In reference to a letter from Dr. Thomas R. Fraser, inserted in the *Medical Times and Gazette* of this date, I desire to state that I do not claim, and have never, either directly or indirectly, claimed, the credit of having discovered the property possessed by the Calabar bean of contracting the pupil; on the contrary, I have from the first acknowledged that that discovery was Dr. Fraser's. What I have done is, to examine carefully all the effects produced by this agent on the eye, and to point out its importance and some of its practical applications. I am, &c.

4, Maitland-street, Edinburgh, June 6. D. ARGYLL ROBERTSON.

THE CASE OF SIR CULLING EARDLEY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The Profession is indebted to Dr. Evans for detailing the symptoms and progress of the late Sir Culling Eardley's case. The obligation would be much increased if he could publish the history of the vaccine-lymph that was used, giving its source, time and mode of keeping, together with the manner of performing the operation, whether by scarification or lancet; if by the latter, was the same instrument used as for any other member of the household. Without this knowledge, the experiment, as regards the important question of re-vaccination, is a "blind" one. As many Practitioners of great experience object to re-vaccination, it is desirable that every case attended with untoward symptoms should be fully investigated. If the able Practitioners who were called to treat this unfortunate case would give us their several or joint opinion as to the cause, whether accidental or constitutional, of the fatal complication, it would be of lasting value to the Profession.

I have heard of severe inflammation after re-vaccination being attributed to the poisonous action of the colouring matter used to dye a black stuff dress. It is worth while to bear this in mind, as a possible source of cutaneous pot-ooning, at the present day, when under-clothing is worn of the most decided and often brilliant colours. I am, &c.

3, Finsbury-square, E.C., June 8. SEPTIMUS GIBBON, M.B. Cantab.

A BREAST-TOURNIQUET AND A CATARACT KNIFE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you kindly permit me to bring under the notice of the Profession two Surgical Instruments which may possibly prove useful?

(1) A tourniquet for controlling hæmorrhage in the removal of tumours of the breast. This consists in a stout steel ring (of variable size), with an upright at the two opposite ends of one of its diameters. To the top of each upright a strap is attached. The edge of the ring, compressing the tissues between it and the wall of the thorax by the pressure of the straps which buck e round the chest, controls the surrounding circulation.

(2.) A knife for making the section of the cornea in cataract operations with one single puncture. This instrument is nothing but an enlarged triangular tevatome, such as is used in the operation of iridectomy, but is intended to avoid the necessity of two punctures in making the corneal flap.

On the advantages of either instrument (a) I am not yet in a position to speak from experience, but in the meantime should be glad to hear the other Practitioners had tried them, and with what results.

I am, &c.

June 9. J. ZACHARIAH LAURENCE.

COMMUNICATIONS have been received from—

Dr. HUMPHREYS; Sr. MARY'S HOSPITAL; Mr. HILL; APOTHECARIES' HALL; Mr. W. B. KESTEVEN; Dr. T. M. HARDING; Dr. J. MULREADY; Dr. MORELL MACKENZIE; THE COUNCIL OF MEDICAL EDUCATION AND REGISTRATION; Dr. CHARLES KIDD; Dr. KIRKES; Mr. J. ZACHARIAH LAURENCE; Mr. C. H. TAYLOR; Dr. D. ARGYLL ROBERTSON; Mr. TAIT; Dr. SEPTIMUS GIBBON; Mr. W. PARKER; ROYAL COLLEGE OF PHYSICIANS; ETHNOLOGICAL SOCIETY; Mr. OSWALD FOSTER; Dr. EDWIN WORTS; Mr. H. STANLEY GALE; J. F. C.; Mr. SIMPSON; Mr. J. WYLD; Dr. GILLESPIE; Dr. J. D. SWALLOW; M.R.C.S.E.; M.R.C.S., etc.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 6, 1863.

BIRTHS.

Births of Boys, 971; Girls, 877; Total, 1848.
Average of 10 corresponding weeks, 1853-62, 1631 7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	607	607	1214
Average of the ten years 1853-62	552·3	496·8	1029·1
Average corrected to increased population..	..	..	1132
Deaths of people above 90	1	2	1

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria.	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	4	19	9	..	6	6	1
North ..	618,210	21	10	19	2	7	9	4
Central ..	378,958	8	..	7	..	11	4	1
East	571,158	14	1	19	4	13	17	9
South ..	773,175	9	7	18	3	11	10	5
Total.. ..	2,803,989	56	37	72	9	48	46	24

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·819 in.
Mean temperature	57·7°
Highest point of thermometer	84
Lowest point of thermometer	42·1
Mean dew-point temperature	49·1
General direction of wind	S.S.E. & S.W.
Whole amount of rain in the week	1·07 in.

APPOINTMENTS FOR THE WEEK.

June 13. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Lock Hospital, Dean-street, Soho, 1 p.m. Royal Free Hospital, 1½ p.m.

15. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital, 1½ p.m.; Samaritan Hospital, 2½ p.m.

16. Tuesday.

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ETHNOLOGICAL SOCIETY, 8 p.m. John Crawford, Esq., "On the so-called Celtic Languages and Races."

17. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m. Middlesex, 1 p.m.

18. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m. London, 1½ p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m. Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

19. Friday.

Operations, Westminster Ophthalmic, 1½ p.m.

(a) They may be had of Mr. Coxeter, of Grafton-street.

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Medical Men Remunerated in every Case Submitted to them.

STAR LIFE ASSURANCE SOCIETY,

48, MOORGATE-STREET, LONDON.

Directors:

CHAIRMAN—CHARLES HARWOOD, Esq., F.S.A., Judge of the County Court of Kent, and Recorder of Shrewsbury.
DEPUTY-CHAIRMAN—JOHN CHURCHILL, Esq.

The STAR LIFE ASSURANCE SOCIETY was founded in the year 1843.

ANNUAL REVENUE, £120,000.

CLAIMS PAID.—The total claims arising from death which have been discharged by the Society amount to £300,000.

BONUSES.—Three distinct calculations have been made with a view of appropriating the surplus sum or profit arising from the operations of the Society: at the last, made at the beginning of the year 1859, the Actuary reported that, after putting by £180,379 18s. 10d. as a reserve for future contingencies, there was £67,847 15s. 9d. available for division.

ASSETS.—The Assured have the security not only of the Capital Stock, but of a large invested sum, amounting to MORE THAN HALF-A-MILLION, which, with the well-known character of the Directors of the Society, is a substantial guarantee that all claims will be met with readiness and punctuality.

The following Table will best illustrate the progress of the Society:—

Year.	Number of New Policies issued.	Sums Assured thereby.	Annual Premiums therefrom.	Total Accumulations from all sources.
		£	£ s. d.	£ s. d.
1856	603	204,451	6,597 18 3	202,110 7 2
1857	572	221,122	7,785 9 5	238,055 1 7
1858	638	235,350	8,582 0 9	274,797 15 4
1859	812	294,495	10,172 19 6	309,444 5 3
1860	902	336,290	11,312 15 9	360,530 3 0
1861	1,115	361,960	12,668 3 11	414,231 5 9
1862	1,007	375,197	12,562 7 9	*484,976 14 0

JESSE HODSON, F.L.S., Secretary.

* Since this Report was closed, the Accumulated Fund has so increased as to raise it above Half-a-Million.

BRITON MEDICAL AND GENERAL LIFE ASSOCIATION,

WITH WHICH IS INCORPORATED THE

NEW EQUITABLE LIFE ASSURANCE COMPANY.

OFFICE —429, WEST STRAND.

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ORIGINAL LECTURES.

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THE LECTURES ON THE VERTEBRATE SKULL.

(Continued from page 610.)

In like manner, the face may be resolved into a series of bones, occurring in pairs from before backwards, and forming more or less well-defined lower arches, some of which embrace the nasal cavity, being placed in front of, or above, the oral aperture, while others enclose the buccal chamber, and are situated behind and below the oral aperture. Of the former, *pre-oral* bones, there are four pairs—the *premaxillæ* (*Pmx.*), the maxillæ (*Mnx.*), the palatines (*Pl.*), and the pterygoids (*Pt.*)

The *premaxillary* bones, which lodge the upper incisor teeth, so early lose their distinctness in man, by becoming anchylosed with the maxillary bones, at any rate externally and anteriorly, that they are rarely recognised as distinct parts. Nevertheless, a suture extending upon the bony palate from the posterior margin of the alveolus of the outer incisors to the incisive foramen, very commonly persists, as an indication of the primitive distinctness of these bones. The most important character of the premaxillæ, regarded morphologically, is, that they are connected, superiorly, with the anterior termination of the cranio-facial axis, and that this connexion is a primary one. Each premaxilla passes from its inner end, which is united with the axis, outwards and backwards. Two of the other three pair of pre-oral bones have similar relations to the cranio-facial axis. The anterior of these are the *Palatine* bones; the inner, or sphenoidal, processes of which are connected with the basi-sphenoid and with the vomer; while the outer, or orbital, processes articulate with the so-called lateral masses of the ethmoid and with the maxilla; so that the upper part of each palatine bone is directed, from the cranio facial axis, with which its inner end is connected, outwards and forwards (Fig. 8). The third pair of bones, the *Pterygoids*, are the internal pterygoid processes,—bones which are originally quite distinct from the sphenoid, while the external pterygoid processes are of a very different character, being mere outgrowths of the aliisphenoids. These are connected with the basi-sphenoid (or rather with the *linguiæ sphenoidales*), above, and, in front, with the palatines, while their planes are directed backwards and somewhat outwards. The fourth pair of pre-oral bones—the *Maxillæ*—are connected in front and internally with the premaxillæ, and behind and internally with the palatines, but they nowhere come into direct contact with the cranio-facial axis, at least primarily.

I make the latter qualification because the vomer articulates with the superior surface of the palatine plates of the maxillæ, and it may be said that, in this way, the maxillæ do unite with the cranio-facial axis. This articulation, however, has nothing to do with the primitive connexions of the bones, but depends upon a modification of the maxillæ peculiar to the higher vertebrata. The bony apertures—called "posterior nares"—in Man, for example, are structures of a totally different character from, and superadded to, what are called the posterior nares in a frog, or ordinary lizard, or bird. In these lower vertebrates, the posterior nares are apertures, bounded on the inner side, by the vomer, on the outer side and behind, by the palatine bones, in front, by the premaxillæ and maxillæ. In Man, on the other hand, the apertures so called are bounded, it is true, on the inner side by the vomer, and on the outer side by the palatine bones; but they are also bounded below and in front by the palatine bones, and the premaxillæ and maxillæ have nothing to do with them. On looking closely into the matter, however, it will be found that that region of the palatine which forms the outer and inferior boundary of the posterior nares of Man is a something which has no representative in the lower vertebrate.

But if, with a fine saw, the greater part of the perpendicular plate of the palatines, and the corresponding part of the maxillaries, and, with these, their palatine plates, be cut away, leaving only the premaxillæ, vomer, and upper parts of the maxillary and palatine bones; it will be found that hinder nares are left, which entirely correspond with the "posterior nares" of a bird or of an amphibian; that is to say, they are passages between the vomer in the middle line, the premaxillæ and maxillæ in front and externally, and the palatines externally and behind.

Fig. 8.

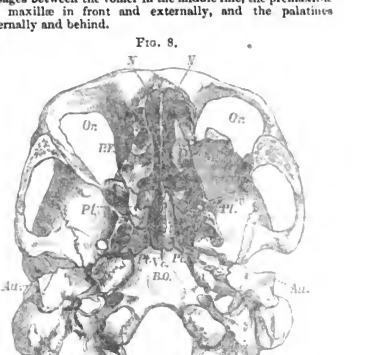

Fig. 8.—The base of a human skull—the nasal, ethmoid, vomerine, maxillary, palatine, and pterygoid bones being cut through horizontally, and their lower portions removed. The entire right maxilla is taken away. The posterior pair of letters, *N N*, are situated in the median nares, which are incomplete in front in consequence of the removal of the premaxillæ.

In fact, the apertures of the nasal chamber into the mouth, thus artificially exposed, are those which originally exist in Man and the higher *Vertebrata*; but the downward growth of the maxilla into its alveolar process, and of the palatine bone into its perpendicular plate, and the production inwards of the palatine plates of these bones, which eventually unite with the vomer, give rise to the apertures, which are ordinarily called posterior nares. So that in Man, for example, there are three pairs of "nares:"—the *external*, situated between the anterior end of the internasal septum, the nasal bones, and the premaxillæ, as in the lower vertebrates; the *median*, between the vomer, the palatines, and the premaxillæ, which correspond with the posterior nares of the lower vertebrates; and the *posterior*, between the vomer, internally, and the palatines above, at the sides, and below, which are peculiar to the higher vertebrates.

And, to return to the maxilla, we find that it really differs altogether from the other pre-oral bones, and is, as it were, fastened on to the outer sides of the premaxillary and palatine bones, without having any primary direct connexion with the cranio-facial axis.

The *post oral* bones surround the buccal cavity, and form two distinct arches—the *mandibular* and the *hyoidean*. Neither of these arches is directly connected with the cranio-facial axis, nor with the segments of the brain-case, but both are suspended to different parts of the temporal bone, which is so singularly intercalated between the middle and posterior of those segments.

The *mandible* (*Mn*) consists of two rami, anchylosed at the symphysis, and each consisting of a single piece, the condyle of which articulates with the squamosal.

The *hyoid* bone (*Hy*), composed of its body and two pairs of cornua, does not articulate directly with the temporal bone, but a ligament connects it with the styloid process, and this last bone unites with the posterior part of the periotic capsule.

Thus, the natural connexions of the bones by no means allow of the separation of the walls of the lower chambers of the skull into a series of arches sprouging from, and corresponding with, the axial parts, as we found to be the case with the walls of the upper chambers.

If the temporal bone be detached, the hyoidean and mandibular arches come with it, and exhibit no connexion with the occipital or the parietal segments. Indeed, the latter is

pre-occupied by the pterygoid and the palatine, both of which are connected with the basi-sphenoid (at least with the *linguæ*), while the anterior part of the palatine is also connected, in the adult state, with the presphenoid, by the intermediation of the *cornua sphenoidalia*.

Two bones yet remain to be mentioned which come neither into the category of axial bones, nor of superior or inferior arch bones, nor, strictly speaking, of sense-capsule bones. These are the *Lachrymal* (*L*), intercalated between the nasal, maxillary, and lateral mass of the ethmoid, and serving to lodge the conduit which places the orbit and the nasal cavity in communication; and the *Jugal* or *Malar* (*Ju*), which connects the bones of the orbital chamber with the squamosal element of the temporal bone.

The skull thus composed serves as a protection to the organs which are lodged within it, and which are of as great importance in their morphological, as in their physiological, aspect.

The cerebral hemispheres and cerebellum, with their dependent parts, fill the cranial cavity, the lower lateral margin of the posterior cerebral lobes corresponding with the *torcular Herophili* and the lateral sinuses, on the inner surface of the occipital bone; or, in other words, with the line of attachment of the tentorium. Certain axial parts of the brain have definite relations to the axial parts of the cranium. Thus, the medulla oblongata lies upon the basi-occipital. The pituitary body rests upon the upper surface of the basi-sphenoid, this bone constituting the chief part of the front as well as of the hinder wall of the *sella turcica*. The *chiasma* of the optic nerves rests upon the hinder portion of the upper face of the presphenoid, and the peduncles of the olfactory nerves upon the front portion of that face. The termination of the axial parts of the brain in the beak of the corpus callosum corresponds with the termination of the basi-cranial axis in the anterior extremity of the presphenoid.

Not less important are the relations of many of the cerebral nerves to the lateral elements of the arches of the brain-case.

The filaments of the olfactory nerves pass out through the cribriform plates, leaving the ethmoid proper, or *lamina perpendicularis*, upon their inner side, and the lateral masses of the ethmoid, or superior and middle spongy bones, upon their outer sides.

The optic nerves pass out through the optic foramina, situated between the roots of the orbito sphenoids, from the *chiasma*, which rests, as has just been stated, upon the posterior and upper part of the presphenoid. Hence it follows that the presphenoid lies in front of, and between, the optic nerves, which embrace it, as in a fork, from behind.

The third and fourth pairs are not of so much morphological importance that I need dwell upon them, but the trigeminal affords first-rate cranial landmarks by its nasal branch and its whole third division. The nasal nerve enters the orbit by the *foramen lacerum anterius*, passes to the inner side of the eye, and then, traversing the anterior of the two ethmoidal foramina, perforates the "lateral mass of the ethmoid," and entering the cavity of the bony cranium, though it always lies beneath the dura mater, skirts the olfactory aperture, and passes out into the nasal cavity, by an aperture in the front part of the cribriform plate. We shall find this irregular perforation of the "lateral mass of the ethmoid," by the nasal division of the fifth nerve, to be an excellent guide to the determination of the homologue of the bone in the lower *Vertebrata*.

The third division of the trigeminal traverses the *foramen ovale* in the posterior part of the ali-sphenoid, so that it makes its exit behind the greater part of that bone, and altogether in front of the periotic bones.

The *portio dura* enters the internal auditory foramen in the periotic mass, runs along its canal, situated above the *fenestra ovalis*, and eventually passes out by the stylo-mastoid foramen. It therefore perforates the fore part of the periotic capsule, passing in front of the membranous labyrinth. The *portio mollis* also entering the periotic mass, by the internal auditory foramen, terminates in the membranous labyrinth.

The eighth pair passes out through the *foramen lacerum posterius* completely behind the periotic capsule (which thus lies between the exits of the fifth and of the eighth pairs), and in front of the exoccipitals.

The ninth pair perforates the exoccipitals in front of the condyles.

With regard to the relations of the nerves to the inferior arches of the skull, only one circumstance calls for particular notice,—this is the distribution of the terminal divisions of the *portio dura*. This nerve divides, as it is about to leave the temporal bone, into two portions, the larger of which passes out by the stylo-mastoid foramen, and, besides giving off many other branches, supplies certain muscles of the hyoidean apparatus.

The smaller division of the nerve, of comparatively insignificant size—the *chorda tympani*—returns to the tympanic cavity, crosses it, and leaving it by an aperture internal to, and above the tympanic element, runs down upon the inner side of the lower jaw. In Man the great development of the facial muscles gives a predominance to the branches of the *portio dura* which supply them; but in the lower vertebrates the nerve becomes more and more completely represented by simple mandibular and hyoidean divisions, corresponding respectively with the *chorda tympani* and the branches distributed to the stylo-hyoid and digastric.

In the preceding description of the architecture of the human skull, I have, as far as possible, avoided complicating the general view of its structure which I have desired to give, by entering into any details which were not strictly necessary; but there remains one part of the cranium—the temporal bone—the structure of which must be carefully and thoroughly investigated, if we desire to understand the modifications undergone by the bones which correspond with its constituent elements in other *Vertebrata*.

Fig. 9.

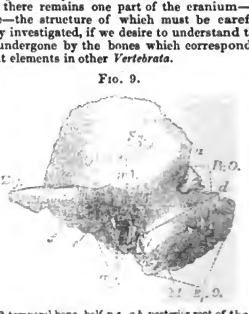

Fig. 9.—Left temporal bone, half n.s. *a b*, posterior root of the zygomatic process; *e*, middle root; *f*, anterior root; *b*, post-auditory fossa; *m*, long processes of the malleus and of the incus.

Viewed from without, the temporal bone presents the well-known *pars squamosa* (*Sq.*) and *pars mastoidea* (*M.*), in the re-entering angle between which, the tympanic element (*Ty.*) is fixed.

No suture separates the *pars squamosa* from the *pars mastoidea*, but the posterior limits of the former are indicated, in the first place, by the curved ascending portion of the posterior root of the zygoma (*a b*), which bounds the attachment of the temporal muscle; and secondly, by a curved ridge, convex backwards, differently defined in different subjects, the *margo tympanicus* of Henle, which passes downwards, behind the auditory meatus, until it cuts the contour of the tympanic bone. Near the upper end of this ridge is an elongated "post-auditory fossa" (*b*), more marked in old than in young subjects.

The portion of the squamosal element, the free edge of which terminates in this ridge, forms an arch, the posterior pillar of which constitutes the posterior and upper wall of the auditory meatus, while the anterior pillar constitutes the front boundary of the glenoid cavity. The centre of the arch is interrupted by the middle root of the zygoma (*e*), or post-glenoidal process of the squamosal, which runs as a wedge-shaped ridge transversely to the span of the arch.

The upper edge of the anterior wall of the gutter-shaped tympanic bone (which forms the hinder boundary of the glenoid cavity), unites with this ridge, crossing its direction obliquely inwards and forwards. Beyond the ridge it is no longer united with the squamosal, but, keeping its oblique direction, crosses rather to the inner side of the lower edge of that bone, and leaves the Glaserian fissure between the squamosal and itself.

A section taken through both the external and the internal auditory meatuses (Fig. 10) shows that this arched plate of the squamosal is interposed between the upper half of the tympanic and the upper parts of the *pars petrosa* and *pars*

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mastoidea, the depth of the interposed squamosal being greatest posteriorly, while it diminishes to nothing anteriorly.

The upper region of the *pars petrosa*, however, does not directly abut, by its thick mass, against the squamosal, but by a thin horizontal plate which roofs over the tympanum, the Eustachian tube, and the *antrum mastoideum*, and is the *tegmen tympani*.

The lower region of the *pars petrosa* in like manner gives off a thicker and shorter plate, which forms the floor of the Eustachian tube and the outer or inferior boundary of the carotid canal, in front; the floor of the tympanum, in the middle; and then, becoming gradually thicker, constitutes the lower boundary of the *antrum mastoideum*. It is with the outer edge of this inferior, or floor-plate of the tympanum that the lower portion of tympanic bone becomes anchylosed. The inner wall is of course constituted by the outer surface of the more massive part of the *pars petrosa*. Thus, the roof and floor of the tympanum are formed by the superior and inferior prolongations of the *pars petrosa*, while the outer wall of the tympanum is formed above by the squamosal, and below by the tympanic. A section taken vertically and transversely

Fig. 10.

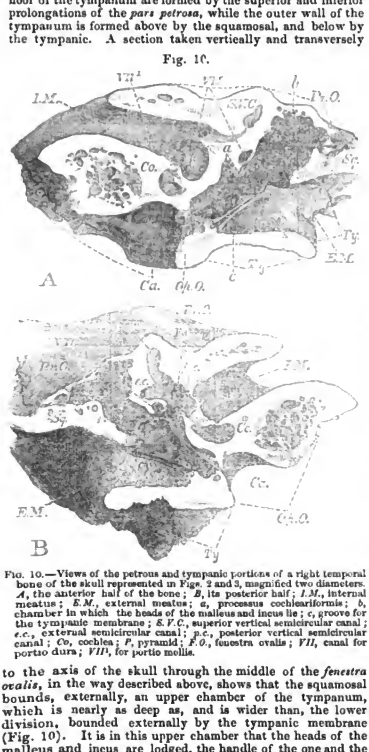

Fig. 10.—Views of the petrous and tympanic portions of a right temporal bone of the skull represented in Figs. 2 and 3, magnified two diameters. *A*, the anterior half of the bone; *B*, its posterior half; *I.M.*, internal meatus; *E.M.*, external meatus; *a*, processus cochleariformis; *b*, chamber in which the heads of the malleus and incus lie; *c*, groove for the tympanic membrane; *S.V.C.*, superior vertical semicircular canal; *e.c.*, external semicircular canal; *p.c.*, posterior vertical semicircular canal; *Co*, cochlea; *P*, pyramid; *F.O.*, fenestra ovalis; *VII*, canal for portio dura; *VIII*, for portio mollis.

to the axis of the skull through the middle of the *fenestra ovalis*, in the way described above, shows that the squamosal bounds, externally, an upper chamber of the tympanum, which is nearly as deep as, and is wider than, the lower division, bounded externally by the tympanic membrane (Fig. 10). It is in this upper chamber that the heads of the malleus and incus are lodged, the handle of the one and the long process of the other, only, depending into the proper tympanic cavity. Hence, in looking into the tympanum from without (Fig. 9) when the ear-bones are *in situ*, only these processes are seen, the heads of both malleus and incus being hidden by the arched plate of the squamosal. Thus, the tympanum is formed by a very complicated adjustment of bony elements, and we shall by-and-by see reason to believe that it is even more complex still, inasmuch as the so-called *pars petrosa* will prove to be composed of two distinct elements, an inferior *opisthotic* bone, containing the lower part of the cochlea, and a superior *pro-otic* sheltering the greater part of the vestibule, the upper part of the cochlea, the anterior vertical semicircular canal, part of the posterior vertical canal, and the external semicircular canal.

Behind the posterior boundary of the squamosal, constituted by the two diverging lines above described, lies all that portion of the temporal bone which is known as the *pars mastoidea*. But as I shall have occasion to demonstrate when explaining the mode of development of the temporal bone, this *pars mastoidea* is, in reality, made up of extensions of two of the primitive constituents of the *pars petrosa*, and of a third element, the *epiotic*. The posterior margin of the squamosal, as above described, may be said roughly to form two sides of a parallelogram. The third side is the thick part of the upper edge of the *pars mastoidea*, corresponding with the termination of the upper and anterior surface of the *pars petrosa* on the inner side of the bone. If a fourth side is made by an imaginary line connecting the ends of the others, the bony surface which lies above and in front of the line will as nearly as possible belong to the *pro-otic* element, while that which lies below and behind it, including the mastoid process, belongs to the *epiotic*. On the other hand, a certain amount of the *pars mastoidea* internal to the digastric groove belongs to the *opisthotic*.

ORIGINAL COMMUNICATIONS.

AN ACCOUNT OF THE

PHYSIOLOGICAL RESEARCHES OF THE REV. PROFESSOR HAUGHTON, M.D., TRINITY COLLEGE, DUBLIN.

(Continued from page 596.)

DIABETES MELLITUS.

No disease can offer a more spacious field for the exercise of scientific ingenuity than Diabetes Mellitus. Slowly and at long intervals have the leading points in its chemical history been arrived at, and, till the most recent times, its pathology threatened to keep itself a secret. Aretæus, the Cappadocian, included dropsy of various kinds under the title of diabetes, which he gave to the class of diseases in which diuresis was a prominent symptom, either constant or occasional. It was for Dr. Thomas Willis, of Christchurch, Oxford, to discover that diabetic urine "quasi melle aut saccharo imbuta, miro dulcescebat." Cowley, in 1778, isolated the saccharine principle. The sugar having been now discovered to be present in the urine of these patients, the question of its origin came to be discussed, and may be said to be even at the present moment *sub judice*. Till the time of Mead, Physician to George the Second, the kidneys were regarded as the seat of the disease, and their altered condition was viewed as the anatomical expression of the phenomena, but his dissections led him to suspect the liver was the organ at fault. Rollo and Macgregor found out that sugar was formed in the stomach, and considered it to be due to imperfect digestion, as it was not then known that the saccharisation of starch was the natural and physiological action of saliva.

An important advance in the history of diabetes was made by Sir Robert Kane in 1832; he controverted the erroneous idea that the sugar was formed at the expense of urea, by publishing cases to prove that the urea and sugar in this disease were not complementary.

Bernard's discovery (1848) and isolation (1857) of the glycogenic matter of the liver, a substance allied to sugar, reconvertible into sugar, and a product of the sugar and starch used as food, gave birth to his theory of diabetes mellitus, that either sugar was excessively formed in the liver, or there was a defective destruction of it in the lungs. Pavy considers that there is a defective assimilation of sugar in the liver, that the product of the starch and sugar of the food instead of being converted into amyloid substance in the liver, is allowed to filter through, and enter the circulation unchanged.

Notwithstanding these advances in our knowledge of the disease, there are many points connected with it buried in the

deepest obscurity. It has been often remarked in the treatment of diabetes, that no matter how strictly the patient has been confined to an animal diet, no matter how scrupulously sugar-producing food has been excluded from his "carte," still evidences of saccharine impregnation were found in the urine. It is known that the blood of the lower cava between the liver and heart contains sugar in animals which have been exclusively fed on flesh food; its existence under these circumstances led to the enunciation of the glycogenic function of the liver, though there are supporters of the view that it is from the flesh of the vegetable feeders on which the carnivora live that the sugar is derived. Analysis of the urine made by Brücke, and confirmed by Dr. Bence Jones, have led them to believe that sugar is a constituent of healthy urine.

However, his own investigations have led the Rev. Prof. Haughton to consider that sugar does not normally occur in healthy urine,—a result which has been confirmed by experiments made by Professor Jellett, with his new and highly sensitive saccharometer. Professor Haughton specially studied six out of several cases of diabetes mellitus—four of these are tabularly stated below—with regard to the ingestion and excretion of sugar and urea. The food used by these patients was accurately estimated in sugar and urea equivalents, and great care was taken to avoid any irregularities of diet. The quantity of glucose sugar producible from the various kinds of food used was thus estimated:—

Brown Wheaten Bread.—1. According to Peligot's researches it appears that in whole wheaten meal, on the average, the proportion of proteinic to starch compounds is as 14 per cent. to 68 per cent. 2. The proteinic compounds are to urea as 3 to 1. 3. Starch will produce glucose in the proportion of 81 to 99.

From these data the subjoined chain follows:—

1 lb. of brown bread.
1 — 267 grs. urea.
1 — 3 grs. proteinic compounds.
14 — 68 grs. starch.
81 — 99 grs. glucose.

4755 grs. glucose.

Hence 2lbs. of this bread are equivalent to 9510 grains of glucose. The chain rule, which is admirably adapted for these calculations, may be stated as follows:—

1. Write down the term of demand, as head of the column of consequents; a little to the left, and in a line under it, write the term which is of the same kind, as head of the column of antecedents.

2. In the same line with this, and under the term of demand, write a second consequent, the quantity which is of equal value.

3. As second antecedent write down the quantity which is of the same kind as the second consequent; and as third consequent the quantity which is of equal value with second antecedent.

4. Proceed in this way, making each antecedent of the same kind as the last consequent, and each consequent of the same value as the last antecedent, until we arrive at the last consequent, which will be the odd term.

5. Divide the product of the consequents by the product of the antecedents.

The quotient is the value of the term of demand expressed as required.

For example, it is required to know what is the sugar equivalent of 1 lb. of rice. Rice, according to Boussingault, contains 83 portions of starch to 7·5 of azotised matter; 1 lb. of rice is known by experiment to be equivalent to 245 grains urea.

Antecedents.		*Consequents.*
		1 lb. rice (term of demand).
1 lb. rice.	=	245 grains of urea.
1 grain urea	=	3 grains azotised matter.
7·5 grains azotised matter (75).	=	83 grains starch or (830).
81 grains starch	=	99 grains glucose.
		9942 grains glucose.

In this example, 1 lb. of rice, the term of demand, is made the first consequent, and the quantity which is of the same kind the first antecedent; this is followed by 245 grains of urea as second consequent, because it is of the same value, and so on.

The product of the consequents divided by the product of the antecedents is the value of the term of demand expressed as required. Hence, 2 oz. of rice are equivalent to 1243 grains of glucose.

In this manner the sugar and urea ingested in the four cases here given were calculated and compared with the quantities excreted, the results being shown in the tables.

This scheme contrasts favourably with the elaborate table published by Dr. Parry, of investigations on the excretion of sugar alone, conducted several times every day, and involving an amount of labour very inadequately repaid by the results arrived at.

Case of Owen Murphy.

	Date.	Weight.	Urine.	Sugar excreted.	Sugar ingested.	Urea excreted.	Urea ingested.
	1860.	lbs.	fl. ℥.	grs.	grs.	grs.	grs.
a	Nov. 8	98	310	12,329	11,513	1,559	1,383
b	„ 15	92·5	268	12,216	11,513	1,429	1,153
c	„ 22	92·5	260	11,259	11,513	1,439	1,670
d	„ 29	93·5	300	12,290	11,513	1,181	1,784
e	Dec. 6	90·5	275	9,255	11,513	1,293	1,727
f	„ 13	—	240	9,543	6,758	1,181	1,460
g	„ 29	93·5	175	6,960	6,758	976	1,460
	1861.						
h	Jan. 5	91·5	194	7,716	6,404	849	925
i	„ 10	87·5	199	6,394	6,404	849	869

Case of Thomas Cooke.

	Date.	Weight.	Urine.	Sugar excreted.	Sugar ingested.	Urea excreted.	Urea ingested.
	1861.	lbs.	fl. ℥.	grs.	grs.	grs.	grs.
a	Oct. 5	146	110	4,010	2,569	722	270
b	„ 9	—	70	2,533	2,569	674	270
c	„ 16	145	99	2,461	3,758	749	795
d	„ 24	144	64	1,666	3,758	896	795
e	„ 30	145	68	1,750	—	714	—
f	Nov. 6	—	51	1,115	—	558	—
g	„ 14	—	40	1,060	—	682	—
h	„ 21	—	40	795	—	560	—

Case of John Murphy.

	Date.	Weight.	Urine.	Sugar excreted.	Sugar ingested.	Urea excreted.	Urea ingested.
	1861.	lbs.	fl. ℥.	grs.	grs.	grs.	grs.
a	Dec. 14	—	200	7,292	5,109	919	797
b	„ 21	136	275	7,993	5,109	1,075	797
	1862.						
c	Jan. 9	134	471	13,737	6,892	1,277	897
d	„ 17	133	277	12,119	5,109	970	797
e	„ 24	136	233	8,231	6,892	866	897
f	„ 31	137	220	7,549	6,892	866	989
g	Feb. 9	136	250	8,585	6,892	1,006	989
h	„ 14	140	209	8,527	6,892	755	989
i	„ 21	143	240	9,545	6,892	997	989
j	Mar. 7	145	240	9,130	6,892	892	989
k	„ 19	142	220	7,760	6,892	866	989
l	„ 29	—	190	7,557	6,892	—	989

Case of Owen Butler.

	Date.	Weight.	Urine.	Sugar excreted.	Sugar ingested.	Urea excreted.	Urea ingested.
	1861.	lbs.	fl. ℥.	grs.	grs.	grs.	grs.
a	Nov. 29	131	160	5,000	4,947	1,059	796
b	Dec. 14	131	188	6,854	5,139	864	851
c	„ 21	129	229	7,156	5,139	1,062	851
	1862.						
d	Jan. 9	129	180	6,300	6,922	1,162	951
e	„ 17	126	169	6,363	6,922	966	951
f	„ 24	128	205	6,523	6,922	1,076	951
g	„ 31	128	188	6,854	6,922	1,110	1,043
h	Feb. 14	129	204	7,285	6,922	1,071	1,043

(To be continued.)

ON CHOREA: ITS RELATION TO VALVULAR DISEASE OF THE HEART, AND ITS TREATMENT.

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Few forms of disease are so distressing to witness, and so perplexing to treat, as those of aggravated chorea; not unfre-

quently, indeed, such cases terminate fatally. The circumstances under which these urgent forms of the disease occur are so various, that we need not feel surprised at there being no very decided rules for treatment laid down, even in the best standard works. The treatment of ordinary chorea is well enough defined, and, as is well known, the disorder, in this its simple form, usually disappears in time, be the direct treatment what it may—even if there be none at all. It is not in such forms of the disease, therefore, that anxiety is felt, and the skill of the Physician severely taxed, but in those violent and furious examples in which, but for speedy help, death from exhaustion seems inevitable. Ordinary chorea, as is well known, usually occurs in weakly, irritable children, in whom at the same time there is occasionally associated some temporary disorder, such as constipated bowels, worms, irregular dentition, the irritation connected with approaching puberty, and, later on, the evils of disordered menstruation.

Omitting, for the present, any further allusion to these occasional attendants on chorea, the influence of which has probably been much over-estimated, I wish specially to draw attention here to three other conditions with which chorea is not unfrequently associated,—namely, rheumatism, disease of the heart, and pregnancy.

1. It is now well known that chorea is one of the evils to which the subjects of acute rheumatism, or of the rheumatic diathesis, are liable. This association of disease has been observed much more frequently in this country and in France than in Germany, the pathologists of which latter country, indeed, are disposed to doubt its occurrence. (See, for example, Hasse, in Virchow's "Handbuch der Pathol. und Therapie." Bd. 4, p. 164.) Sometimes the chorea is developed during the progress, or towards the subsidence of the rheumatic attack; occasionally, though rarely, it precedes the development of the rheumatism; very frequently it occurs some weeks or even months after the rheumatic affection of the joints has disappeared. The nature of the relation between the two forms of disease has been the subject of much discussion. Formerly, when our knowledge about chorea was much more limited than it now is, the development of the choreic and other nervous phenomena in the course of rheumatism was attributed by some to simultaneous inflammatory mischief in the membranes of the brain or spinal chord, by others to sympathy of the nervous centres with coincident pericarditis. (a) But the fact since ascertained, that rheumatic chorea may exist without, prove fatal without leaving any trace of inflammation about either the cerebro-spinal centres or the pericardium, shows that some other explanation is requisite. Dr. Begbie, who has written so well on the subject, advanced the opinion that the same diathesis or morbid condition of the blood which gives rise to rheumatism, may give rise also to chorea; the irregular muscular movements, as well as the affection of the joints and of the heart being, in his opinion, the results of the rheumatic diathesis. (*Monthly Journ. of Med.*, 1847; also his lately published "Contributions to Practical Medicine.") With this opinion the observations of Dr. Watson and Dr. Todd in the main agree. M. See also took the same general view, and even inclined to believe that the rheumatic diathesis is the real cause of nearly all cases of chorea, whether any affection of the joints be established or not. He believed, however, that it is mainly through the medium of an inflammatory affection of some one or more of the serous membranes, especially the pericardium, that the rheumatic diathesis brings about the nervous affection. (*Mémoires de l'Acad. de Méd.* Paris, vol. xv., 1850.) Cases, however, not unfrequently occur, and prove fatal, without exhibiting any signs of serous inflammation; hence such explanation cannot always hold good. In a paper published in the *Medical Gazette* in 1850, I endeavoured to show that one of the most common attendants on fatal cases of chorea is an inflammatory affection of the cardiac valves, and that probably such valvular affection has an important share in the production of the nervous symptoms. Subsequent observation has confirmed me in that view, and I now believe that whenever chorea occurs in association with acute rheumatism, the valves of the left side of the heart are inflamed, and that therefore the association is not between chorea and rheumatism, as usually believed, but between chorea and valvular disease of the heart, excited by rheumatism. According to this view chorea occurs in rheumatism, not simply because of the rheumatism itself, but because the rheumatism is so apt to excite endocarditis, on which I believe the chorea mainly to depend.

The principal grounds for this opinion are, first, the frequency, if not invariableness of an endocardial murmur in cases of chorea associated with rheumatism; secondly, the fact that in all the fatal cases of rheumatic chorea examined by myself after death, the valves of the left side of the heart have presented unmistakable proofs of recent inflammation, and, thirdly, that evidence of like inflammation is furnished by the records of nearly every fatal case published, whenever the state of the valves of the heart is mentioned.

2. Cases of chorea not unfrequently occur in which no other attendant morbid condition can be found than that of valvular disease of the heart. Sometimes such cases happen in individuals belonging to a rheumatic family, and in whom therefore the rheumatic diathesis may be assumed to be in some degree operative; sometimes they happen in association with some of the trivial temporary disorders, such as worms and the like, which have been mentioned as occasional attendants on chorea. Very often, however, I have failed to detect in such cases any evidence of rheumatic tendency to account for the cardiac disease, and any proof of the existence of any other ailment likely to explain the chorea. Whatever be the circumstances under which these cases of chorea occur, the evidence of valvular disease is usually clear, and is furnished by endocardial murmurs during life, and, when they prove fatal, by structural changes observed after death. The existence of an endocardial murmur in many cases of simple chorea was long ago pointed out by Dr. Addison, and the observation has since been abundantly confirmed by Dr. Todd and others. When at the base of the heart, and attended by general signs of anæmia, it is of course open to doubt whether organic disease has any share in its production, or whether it be not entirely functional. When at the apex, however, where, indeed, it is most commonly perceived, and where anæmic murmurs are rarely heard, its origin in mitral imperfection is nearly certain. It has been suggested that such apex murmurs may occasionally be due to irregular choreic contraction of the musculi papillares of the heart, whereby valvular imperfection and regurgitation may be temporarily induced. Be this explanation true or not, and I doubt its correctness, for there is no good proof that involuntary muscular organs participate in the choreic disorder, it can only explain a temporary or momentary murmur, not a permanent one, such as certainly exists in chorea. Moreover, it is by no means clear, as Dr. Todd long ago pointed out (*Medical Gazette*, 1849, p. 664) that closure of the auriculo-ventricular valves would be in any degree affected by irregular action of the papillary muscles. One important point in connection with these choreic murmurs requires to be especially noted, namely, that absence of a murmur is no proof of the absence of even serious organic disease of the valves of the heart. I have repeatedly observed cases in which the most careful examination failed to detect a murmur, even up to the last day of life, yet in which after death there were unmistakable signs of recent acute mischief about the valves. The fact is important, because it warrants us in assuming the existence of valvular disease in suspected cases, even although no murmur be heard. The explanation of the fact is very simple; the thickening, swelling, and other changes in the mitral valve, including fibrinous depositions, were, in the cases to which I allude, and probably therefore in others similar to them, observed principally, if not exclusively, on the auricular surface of the valve, above the free margin, which was thus uninterfered with in its power of closing and preventing regurgitation. The proofs of inflammatory mischief in the valves disclosed after death are usually quite plain, and consist of swelling, alone or combined with evident vascularity, softening and loosening of texture, a rough, granulated, occasionally abraded surface, and often the presence of separable fibrinous concretions. The change in many cases, however, is so very slight, and requires such careful examination for its detection, that I am persuaded it has frequently been overlooked, and therefore has not been described as often as it really exists. The granules, too, are frequently so minute as to be readily lost sight of, unless specially sought for. Often, too, they adhere so loosely to the surface of the valve that they may be readily brushed off in the ordinary examination of the interior of the heart, and thus not be taken into account. Although the mischief found may thus be slight, and the granular deposits few and small, yet these changes by no means represent the amount of inflammation

(a) For a full account of these views, see the valuable work of Dr. Burrows, "On Disorders of the Cerebral Circulation."

which may have been going on during life. They represent it, indeed, no more than do the granulations on a wound after death represent the amount of discharge from the wound during life. Much evil may have resulted from continued valvular inflammation, which leaves but little sign in the degree of structural change disclosed after death.

3. Several recorded cases by Ingleby (*Lancet*, 1840), Lever ("Guy's Hosp. Rep." 2nd ser. Vol. V. and VI.), Romberg ("Manual of Nervous Diseases"), and others, leave no doubt of the occasional occurrence of chorea during the pregnant state. Some of the worst, most furious, and fatal cases of this disorder have indeed occurred during pregnancy. The relation which the pregnant state bears to the chorea has not been clearly determined. Certain points of interest, however, are presented by the recorded cases, as analysed by Sée (*loc. cit.*), Romberg, and others. (b) The chorea, for example, seldom occurs before the second month of gestation, or after the fourth; in one of two instances observed by myself, however, it commenced in the fifth month, and in the other at the end of gestation. Similar instances of its late occurrence have been recorded by Ingleby and others. Sometimes, on the other hand, it begins soon after conception. From the third to the fifth month, however, appears to be the average period for its commencement (Sée). It is more common in primipara than in those who have already borne children. Also, it is more common in those who fall pregnant in early life than in those who do not become pregnant till later. From nineteen to twenty-four is the average period of life at which it occurs, according to M. Sée. In one case it occurred at sixteen, and in several others at ages between sixteen and twenty. It may occur in those who have not, as well as in those who have, suffered from the disease on a former occasion. Its occurrence in one pregnancy does not necessarily entail its repetition on the patient becoming pregnant again, though occasionally the same patient has chorea in two or three successive pregnancies (Lever and Romberg). It appears to occur independently of anything unusual or abnormal in the pregnant state, and of any attendant disease detectable during life. Once developed, it usually continues until delivery, whether this be premature, as often happens, or at the end of the natural term; it generally ceases then, but sometimes continues longer.

Such are some of the main points noticed about chorea in pregnancy. There is, however, nothing in them to explain the connection. Accordingly, one is led to the belief that in this, as probably in most other forms of chorea, more is due to the peculiar nervous temperament of the pregnant person, and perhaps to some attendant condition, than to the mere pregnancy itself. Naturally the pregnant state is one which is attended by much nervous excitement, especially when it occurs for the first time, and in young subjects, and especially, too, when it occurs under circumstances occasioning much mental distress or disgrace. This was well shown in one of Dr. Levick's cases (*American Journal of Medical Science*, January, 1862), that of a young girl who had been seduced at the age of 16. She suffered much from the consequent shame and disgrace of becoming pregnant, and soon after was seized with chorea, which killed her. The natural state of nervous susceptibility during pregnancy in young persons renders them also specially liable to be over-impressed by all causes of mental disturbance. Levick mentions one case in which the death of a friend seemed to be largely concerned in the production of the chorea; and another in which a sudden fright developed the attack. But together with these general and special circumstances producing an undue state of nervous excitement, and rendering the subjects unusually susceptible of any additional cause of irritation, physical or moral, there probably is associated in most cases of chorea in pregnancy a peculiar predisposing tendency to nervous affections. This is shown in the fact that in many of the recorded cases there had been chorea on a former occasion; also that on the occasion of subsequent and quite natural pregnancies chorea recurred in several of them. It may be assumed therefore that the choreic tendency had all along existed in those attacked, but that it required the peculiar circumstances connected with pregnancy specially to predispose to it, and, in addition, perhaps some direct exciting condition, like a mental shock, or some associated state to develope it. Fortunately, fatal cases of chorea in pregnancy are rare; but unfortunately such cases when they have occurred have rarely been examined thoroughly after death; hence we are deprived of much that might help to an interpretation of the association in question. The number of cases which I have found recorded being so few, I venture to append the two following to the list already published, especially since I believe they furnish some clue to the pathology of puerperal chorea, as well as of chorea in general:—

Case 1.—A young married woman, aged 20, was admitted into St. Bartholomew's Hospital in January, 1852, being five months pregnant with her second child, and suffering from violent general chorea of about three weeks' duration. The attack had been gradually coming on for several weeks before it assumed the severity by which it was characterised on the patient's admission. She had had no similar attack in her former pregnancy, or at any other time, and had no rheumatic history. For two days the violent choreic movements continued without any mitigation, except while the patient was under the influence of chloroform, and on the morning of the third day she miscarried, lost a large quantity of blood, and almost immediately died. The points of chief interest disclosed on the post-mortem examination were the following:—The substance of the spinal cord and of the brain, especially the cerebellum, was remarkably soft, inelastic, and pale. The membranes of the brain were healthy; those of the spinal cord were congested, and in the loose tissue immediately outside the theca were numerous large ecchymose-looking spots, consisting apparently of recently-extravasated blood. Similar apparent ecchymoses were found among the deep muscles of the back, on the outer surface of the heart, in the muscular tissue of the left ventricle, amid the loose tissue connecting together the great vessels at the base of the heart, along the costal pleura, and, in the greatest abundance, in the tissue of the omentum, mesentery, and other folds of the peritoneum. On more closely examining these spots, especially those in the loose tissue about the base of the heart, it was found that they were not real ecchymoses, or extravasations of blood, but masses of small tortuous vessels gorged with dark, stagnant blood, which was variegated by pale, buff-coloured streaks, apparently of separated fibrin. So closely identical in appearance were the spots met with in the various parts, that there seemed no doubt of their being all of the same nature, namely, portions of extreme capillary engorgement, resulting probably from some cause of obstruction to the circulation therein.

The heart was small, flaccid, and empty. The right valves were healthy. The mitral and aortic valves, near their borders, were studded with pale, soft, loosely-adhering granules. The lungs, and the various abdominal organs, including the recently-emptied uterus and its appendages, were healthy. On various parts of the trunk and limbs were numerous large pustules, somewhat like ordinary boils. There were also several suppurating lymphatic glands in the neck, and the right mammary gland was enlarged, hard, unduly vascular, and many of the lactiferous tubes yielded a puriform fluid on section and pressure.

The pathological appearances in this case resolved themselves, therefore, into a pale, soft state of the nervous centres, as commonly found in chorea; soft, easily-separable vegetations on the left valves of the heart; numerous patches of intense capillary congestion, resembling ecchymoses, in various loose textures of the body; pustules in the skin, and suppurating lymphatic and mammary glands. Nearly all these conditions were indicative of a contaminated state of the blood. The cause of this contamination at first seemed doubtful. The patient, just before the development of the urgent choreic symptoms, had, it was subsequently learnt, cut her thumb deeply; the wound suppurated, the hand became much swollen, and at the time of her death the wound was still gaping and unhealthy-looking. Had this been the source of introduction of morbid material into the blood? Possibly it had, although against it there is the fact that the lungs were healthy, and it is rarely, if ever, that these organs escape when the venous blood is contaminated by the products of phlebitis, or other similar noxious matters introduced. Another suggestion was furnished by the deposits on the valves of the heart; these afforded indications of an inflammatory state of the endocardium, which was probably sufficient to have contaminated the arterial blood, and to have brought about local obstruction in the capillaries, and thus occasioned the ecchymose-looking spots. The presence of these patches of capillary engorgement about the theca of the spinal cord may

(b) For a good discussion of the subject, consult Dr. Tanner in his "Signs and Diseases of Pregnancy;" see also, for references to most of the published cases, Dr. Charles Reeve's book on "Diseases of the Spinal Cord."

have contributed materially to keep up the irritation in the nervous centres to which the chorea was due. Without, however, commenting further on this case at present, let me narrate the other :—

Case 2.—In December, 1859, a healthy woman, aged 25, who had borne one child previously and miscarried twice, was taken in labour at her own home, and sent to St. Bartholomew's Hospital for assistance. The gentleman who attended her from the Hospital found her in a state of violent chorea. She was delivered of a full-grown living child in a few hours, and the movements then partially ceased, but soon afterwards recurred with increased severity. The patient was brought to the Hospital, and died in four days, exhausted by the violence of the choreic agitation. It was ascertained that the chorea had commenced only three or four days before parturition; also that the woman had suffered from chorea when fourteen years old, the attack at that time appearing to have been in connexion with rheumatism. The body, examined after death, appeared well nourished. The brain and its membranes were congested; the cerebral substance tolerably firm. The spinal cord was not examined. The lungs and abdominal viscera appeared healthy. The left ventricle of the heart was a little hypertrophied; all the valves were healthy, except the mitral, which presented signs of old mischief, in thickening and shortening of the tendinous cords, and of recent mischief, in a row of small warty vegetations along the auricular surface, just above the free margin. The uterine organs presented the appearance proper to them a week after delivery.

In this, as in the previous case, there were thus signs of recent mischief in the mitral valve. It is on this account chiefly that the case is worthy of notice. The valvular affection becomes especially significant when taken in conjunction with the fact that a similar condition of the valves existed (whenever the heart was specially mentioned) in every one of the fatal cases of puerperal chorea which I have found recorded.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

THE EDINBURGH ROYAL INFIRMARY.

CASE OF AMPUTATION OF THE THIGH — ACUPRESSURE — REMOVAL OF NEEDLES TWENTY-ONE HOURS AFTER THE OPERATION.

(Under the care of Mr. EDWARDS.)

[Reported by R. L. TAIT.]

J. S., age 7½, had been suffering from disease of the left knee-joint when I saw him first, in December, 1862.

There were several openings on either side of the joint, and one in the popliteal space. A large abscess extended along the whole front of the thigh. As the abscess was evidently induced by the irritation of the diseased ends of the bones, it was determined to remove them at the same time that it was evacuated. Amputation was quite inadmissable, not only on account of the feeble, hectic condition of the patient, but also the extent of the abscess. The patient's father was told that the operation was merely to be a preliminary in all probability to amputation, as complete recovery of the limb was not to be expected. After the sources of irritation were removed, the abscess became greatly diminished in size, and the boy's health steadily improved for four months, when Mr. Edwards, in presence of Professor Simpson, Dr. Bean, R.N., and others, removed the limb close to the trochanters by the lateral flap operation. All the large vessels, including the superficial and deep femoral arteries, were in the internal flap; they, along with three smaller branches, were secured by short sewing needles, and loops of wire placed across the axis of the arteries, and therefore with their ends towards the cleft between the flaps when the latter were adjusted. A deep obturator branch retracted so as to give trouble in securing, and was controlled by a long needle, passed by Professor Simpson through the skin.

Twenty-one hours after the operation all the needles were removed, and there was no subsequent hæmorrhage, except a slight trickling of venous blood from the orifice left by the long needle in the skin, but this stopped in a few minutes, and did not recur.

April 28.—Flaps have adhered, and the stump is nearly healed. There is a small quantity of discharge from the upper part.

The recovery was complete before the fourth week, which must be considered as tolerably rapid, considering the prolonged illness and greatly wasted condition of the patient. It may be considered that the treatment in this case was too severe, but I do not see what other course I could have pursued under the circumstances. Had I been satisfied in the first instance with merely opening the abscess in the thigh, the downward course of the patient's strength would not have been arrested. Had I, on the other hand, amputated, I must have done so through an abscess and through tissues in an acutely inflamed condition, but by removing the ends of the bones, and hence the cause of all the disturbance in the soft parts, I obtained time to rally the patient's almost exhausted energies, and allow the excitement in the neighbourhood to subside. When performed rapidly (and even the most ingenious lingerer over an operation can scarcely occupy more than three or five minutes), and when for chronic disease the shock to the system seems scarcely more from excision of the knee than excision of the elbow-joint. Of course, long exposure of the raw surface, necessarily of large extent, alters the circumstances.

As to the method of arresting the arterial bleeding, nothing can be more satisfactory than acupressure, and, although I cannot pretend to apply the needle so quickly as ligatures could be applied, yet expertness in their application may surely be acquired, and it is, it must be an advantage, under ordinary circumstances to have foreign materials out of the wound at an early period. It does seem somewhat contradictory to introduce wire sutures, and say you do so because they produce less irritation than thread, and yet to leave a number of threads in the wound, and as many Surgeons have declared, believe they not only produce no irritation, but do positive good.

Mr. Dix, of Hull, has favoured me with two communications on the subject of his paper read before the Medico-Chirurgical Society. His method of crossing the vessel with a loop or staple I have never tried; this plan, which reminds one of the directions given in a fragment of Archigenes, preserved by Oribasius, that the vessels bringing blood to the part are to be sewn together (διαῤῥάπτειν to sew through or between). Cocchius rendering them "consuenda vasa sunt." Ambrose Paré applied "this strong twisted thread" . . . "through the skin making your stitch over the said vessels by piercing through the raw flesh and skin. Then make your ligature on the fold of a rag, thus you bind the artery and vein (see Wiseman)." If for "thread" you read "wire" and for "rag" "cork," you have a tolerably correct description of Mr. Dix's method.

THE LONDON HOSPITAL.

SYME'S AMPUTATION AT THE ANKLE — RECOVERY—PATIENT ABLE TO WALK ON THE STUMP DURING TWO YEARS—AMPUTATION OF THE LIMB ON ACCOUNT OF DISEASE OF THE KNEE AFTER THE LAPSE OF ELEVEN YEARS—DISSECTION.

(Case under the care of Mr. CURLING.)

T. C., at the age of 7, was brought into the London Hospital on April 15, 1852, in consequence of the fore part of his right foot having been crushed by the wheel of a dray passing over it. Mr. Curling at once amputated the foot at the ankle-joint, and removed the malleoli. The part healed favourably, and a shoe made by Gray, of Cork-street, was afterwards worn. For two years the boy was able to walk and jump as well almost as before the accident. The head of the tibia and knee-joint then became diseased, and contraction took place, so that he was no longer able to bear on the stump.

About a year and a-half ago an attempt was made to straighten the limb by forcible extension. This was followed by suppuration in the thigh, when all extension was discontinued.

In May, 1863, at the age of 18, he applied to Mr. Curling to amputate the limb.

The leg was acutely flexed on the thigh, and admitted of no extension. There were sinuses leading to diseased bone at the head of the tibia. He has reddish hair, and is of strumous

appearance. There is shortening of the index finger, and a large cicatrix resulting from necrosis and removal of the metacarpal bone.

On May 7, Mr. Curling amputated the thigh by Teale's method, which was most convenient, in consequence of the flexed condition of the limb.

Dissection of the Amputated Limb by Mr. Cooper, Assistant-Surgeon to the Hospital.—The knee admits of very little extension, and is kept flexed by the hamstring muscles together with the condensed and shrunken tissues with which their tendons are matted in the popliteal space. There is more lateral gliding of the tibia on the femur than is normal, but the movement is unaccompanied by grating, although much rough and denuded bone is felt within the joint when a probe enters it by any of the sinuses. Thus, when introduced by either of two sinuses whose orifices on the front of the leg are three inches below the head of the tibia at the outer side, a probe encounters rough open cancelli within the head of the tibia, in which there is a large cavity moistened with pus. In some places the bone crumbles too easily under the impact of the probe. Carried further, the instrument enters the joint, and again, on the patella, encounters a carious surface. The patella is not anchylosed. A third sinus at the upper limit of the ham space conducts to rough bone on the back of the outer condyle of the femur. The skin is natural over the knee, and is nowhere glued to the subjacent bone. The muscles of the thigh and leg are much atrophied, and the condyles of the tibia and femur are thus by comparison, although not actually, enlarged. On the other hand, these bony prominences maintain a natural external form. The head of the tibia still touches the back of the condyles of the femur, and although the leg is flexed so that, before amputation, the heel all but touched the buttock, the axis of the tibia preserves its right relation to that of the femur.

A vertical section is made from before backward through the knee-joint in the mesial line. In the vicinity of the section, the articular surfaces of the patella, femur, and tibia are loosely connected by watery, areolar tissue, which resolves itself under the microscope into exceedingly fine, single filaments, irregularly interlacing in wide meshes. Nowhere are wavy, fibrillated bands of normal binding tissue visible; there is, however, an abundant intermixture of fat. On destroying these loose adhesions in the outer half of the dissection, the femoral condyle is found without cartilage, except in the middle, where a circular, cartilaginous island, an inch in diameter, remains, and shelves off posteriorly into rough, open cancelli, and in front into a portion of the articular surface, whose cartilage is wholly replaced by soft, gelatinous, and very vascular granulations, and by the watery, areolar tissue just mentioned. Through these the point of the knife is easily sunk into the open subjacent cancelli. The articular surface of the patella retains only a central islet of cartilage in apposition with that on the outer femoral condyle. Its edge is thinned, and around it the articular surface is carious, or is covered by soft, vascular granulations. The outer part of the head of the tibia is excavated, and its cancelli are bathed in pus. This portion of the joint contains no vestige of sound synovial membrane. Neither in the inner half of the joint, with an exception to be mentioned, is any free or healthy synovial surface present, although the inner is less disorganised than the outer half. A small piece of cartilage on the patella has a smooth, glistening, and free surface, but elsewhere the synovial surfaces are adherent, and converted either into loose, filamentous tissue, or into tissue more condensed, firm, and vascular. Cartilage still covers most of the inner condyle of the femur and of the corresponding surface of the head of the tibia, but these surfaces are only exposed by breaking down the close fibrous adhesions by which the synovial membrane is replaced. The edges of both cartilages are thinned and encroached upon by soft granulations bathed in pus. The semilunar cartilages have disappeared, but crucial ligaments are still traced, although much altered. It is impossible to ascertain how far the cancelli of the tibia are infiltrated with pus, seeing that the saw must have carried that fluid beyond the diseased tissues. The section is continued vertically through the tibia and through the stump at the ankle in a direction from before backward and a little outward. The bellies of the gastrocnemius and soleus are wholly converted into fat. The lesser muscles of the leg are less completely fatty, and contain, here and there, pale, tawny, muscular fasciculi. The tendo-Achillis is much thinner than is usual at the age of eighteen. Traced into the stump, it ends in a patella-like disk of bone, which, fixed below, glides freely by means of a bursal surface against the blunt and rounded posterior edge of the lower end of the tibia and fibula. This bone has the following dimensions:—Length, 1¼ inch; breadth, ⅞ inch; thickness at the centre, ½ inch. It is composed of cancellous bone, bounded by a very thin laminar surface. Its long axis is horizontal, its back strongly convex, its anterior surface concave, both in the horizontal and in the vertical direction, the latter curve being the stronger. It thus accurately fits against the edge of the tibia, on which it plays. The fibres of the Achillis tendon spread out a little as they approach this bone, and then invest it on all sides, becoming incorporated with its periosteum. From the lateral and from the lower edge of the bone there is continued a membraniform ligament, which, together with some thinner fibrous bands coming from its upper border, where the tendo-Achillis joins it, loosely unites this sesamoid bone, after the manner of a capsular ligament, to the lower extremities of the tibia and fibula. The fibres coming from the lower edge are thickest and most numerous of any, and, although much less bulky than the tendo-Achillis, are formed by the re-union of its fibres after they have spread and enveloped the bone. They run forward to insert themselves over the anterior third of the lower surface of the end of the tibia. The lateral fibres run to either edge of this surface, and the thin bands from the upper edge of the sesamoid bone terminate upon the back of the tibia immediately above the posterior rounded edge of its lower extremity. The interior of the capsular ligament, as well as the bony surfaces which it bounds, are smooth, like the interior of a bursa, but are not lined with epithelial particles. They are moistened, however, with glairy, synovial fluid. The lower fibres constitute the ultimate insertion of the tendo-Achillis, just as the patellar ligament gives insertion to the rectus femoris, and the osseous disk bone much resembling to a sesamoid bone developed within the substance of the tendo-Achillis. Yet, whatever may have been its function during life, its formation must be attributed to a pure accident.

In dissecting the tendo-Achillis from the tuberosity of the os calcis, during the operation of 1852, Mr. Curling doubtless raised with it a portion of periosteum, which afterwards became a transplanted centre of ossification.

The thick skin and granular fat investing the stump are identical with those of the natural heel.

The length of the tibia, measured from the inter-articular spine to the centre of the lower extremity, is 13¼ inches; that of an adult tibia (period of development not precisely known, but with furrows denoting the recent adhesion of epiphyses—possibly belonging to a female), between the same points, is 14 inches; that of an old male tibia, well marked in all respects, is 15½ inches between the same points.

CHELTENHAM GENERAL HOSPITAL.

CASE OF TUMOUR OF THE PHARYNX—LARYNGOTOMY—TUBE WORN FOR MORE THAN TWO YEARS—DEATH—AUTOPSY.

(*Referred to in the Medical Times and Gazette of June* 8, 1861.)

[Reported by Mr. David Hartley, House-Surgeon.]

George J. H., about two years of age, was brought to the Hospital as an out-patient in 1859, having a swelling under the angle of the lower jaw on the left side, apparently an enlarged gland, which his mother said was first observed when he was three months old. It was not painful, and the child appeared in good health. Various means were used, but it did not get less, and in a few weeks, his mother said, he made a noise in breathing, particularly when asleep, and he had some difficulty in swallowing. The uvula was larger than usual, and relaxed. To this various applications were used, and the swelling in the neck left to itself. In this state he remained without much alteration till September 5, 1860, when he was taken to the Hospital almost suffocated, and breathing with great difficulty. Mr. Bubb, who, during my absence, was acting as House-Surgeon, perceived, on looking into the throat, a large tumour behind the velum, more especially on the left side. On pressing back this tumour, the breathing was temporarily relieved; in twelve hours after admission, during which time several means had been resorted to without benefit, the child was in so much danger that Dr. Eves performed laryngotomy. An elastic tube was introduced, with instant relief to the breathing, and the child went

to sleep quietly, and the next day was able to take wine and fluid food. Several attempts were made by Dr. Eves to remove the tumour, but unsuccessfully, portions only being cut off.

On September 20, a double silver tracheotomy-tube was substituted for the elastic one, and worn constantly as long as the child lived. He could swallow his food very well, walked about the house, and, in fine weather, the garden, without any inconvenience. He played about and enjoyed himself like other children. His voice was entirely lost, although he could occasionally blow a child's whistle. The tumour continued to increase, notwithstanding it had been several times cut away as far as could be reached.

Dr. Eves, after consultation, gave up all idea of effectually removing it, and with his consent, in April, 1861, I took the child to King's College Hospital, when Mr. Fergusson kindly examined the case, but did not give any favourable prognosis for further operation. I therefore brought the boy back to Cheltenham.

The tumour in the mouth and the swelling of the neck both steadily increased. In March, 1862, by the resignation of Dr. Eves, the child became a patient of Mr. Hawkins, who several times cut off portions of the tumour (which was neither sensitive nor vascular), as it interfered with mastication. A few months ago an abscess formed in the neck on the left side, which was opened near the orifice where the tube was inserted, and very offensive matter discharged. Similar abscesses continued forming till his death. He had occasionally severe attacks of dyspnœa when he used to call the nurse to clean the tube. On one of these attacks the nurse brought him to me apparently dead, but a change in the position of his head appeared to remove some obstruction, and in a few minutes he was as well as usual. On May 17 last, I opened a large abscess near the trachea with the usual relief. On the following morning he was dressed and had his breakfast, when he asked the nurse to clean his tube. This she did, but as his face became turgid, she removed the tube and ran with him into my room. He was slightly convulsed. I passed a long elastic tube down the trachea, but found no obstruction; he was dead.

Autopsy, May 19, Twenty-six Hours after Death.—The body was much emaciated. The neck was greatly swollen. On making an incision from the chin to the sternum, and reflecting the integuments and muscles, the tumour was exposed. It occupied the whole of the mouth and fauces, and extended into the right posterior nares and lay on the glottis; there were no adhesions to the bones of the cranium or the cervical vertebræ. There was caries of the left ramus of the lower jaw, and also of one of the transverse processes of the cervical vertebræ. The tumour had its origin under the left angle of the lower jaw, from which it had been developed towards the pharynx, and was, in all probability, congenital. The diameter of the carotid artery, just below the bifurcation, was one-third of an inch. The weight of the tumour was one pound one ounce and a quarter avoirdupois; the circumference being eleven inches and a half, the widest surface measuring six inches. On cutting through the tumour it was found to consist of fibroid tissue, the capsule being the mucous membrane of the fauces.

LIVERPOOL SOUTHERN HOSPITAL.

EXTIRPATION OF THE WHOLE OF THE TONGUE FOR CANCER—SECTION OF LOWER JAW—RECOVERY.

(Under the care of Dr. NOTTINGHAM.)

[Reported by Dr. GUILSTON WOLLASTON, Senior House Surgeon.

J. McD., formerly a soldier in the East India Company's service, aged 44, was admitted into the Liverpool Southern Hospital on March 4, 1863.

There is extensive malignant disease on the left side of the tongue, extending far back, and nearly half way across the organ. He has always livid a steady life, but has been a great smoker. No very distinct history as to the duration of the existence of the disease can be obtained, but he believes it to be about two years, although the progress has been very slow to within a few weeks of admission.

Under the use of several local remedies, everything went on smoothly for some days, but on the night of March 15 a smart gush of arterial hæmorrhage took place, which was restrained by styptics with much difficulty. From this date he became rapidly worse: scarcely a day passed without an attack of bleeding, often to a large amount; the disease extended rapidly; the pain was constant and most acute; in fact, the patient was going down hill very fast. All applications failed to stop the hæmorrhage—strong nitric acid, tincture of iron, Pagliari's styptic, the actual cautery, etc., etc. being used without the least benefit. Plugging the mouth with a large sponge was the only thing that afforded temporary relief.

At a consultation held on April 14, it was determined to remove the tongue, as being the only chance of prolonging the man's life, and this was accordingly done the same day.

Chloroform having been administered, the patient sitting in a chair, an incision was carried over the chin in the median line, to a little above the level of the hyoid bone. A small labial artery had to be tied, and this was the only vessel requiring ligature in the whole operation. The lower jaw was divided by two lines of section, meeting at an angle, so that the juxtaposition of the two pieces, one entering, as it were, within the grasp of the other, was afterwards more easily maintained. Each half of the divided jaw was now seized and drawn forcibly apart, and the inferior and lateral attachments of the tongue separated. The chain of the écraseur was then passed over the base of the organ, immediately in front of the epiglottis, and retained in this position by the finger during the operation of the instrument. The tongue was separated in about eight minutes, without the least hæmorrhage. A hole was bored on either side of the section in the jaw, and the extremities of the bone brought together with a piece of strong iron wire, the soft parts being kept in apposition by means of hare-lip pins. Primary union took place; deglutition could not be performed for three weeks, the patient had therefore to be supported solely by beef-tea and brandy enemata.

On May 14, the man was discharged, to all appearances quite well; the union in the divided jaw was not very firm, but still there was union; deglutition was perfect; articulation astonishingly distinct; in fact, those accustomed to him could distinguish most of what he said.

The question arises will the disease return? Probably it will; time alone will prove this. The operation was performed to save the man from dying from hæmorrhage, in which particular it has, undoubtedly, been completely successful; independently of which, the removal of the disease will no doubt prolong the man's life for a longer or shorter period as the case may be.

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Medical Times and Gazette.

SATURDAY, JUNE 20.

THE GENERAL COUNCIL AND THE PHARMACOPŒIA.

THE fifty-fourth section of the Medical Act of 1858 required that the Medical Council "shall cause to be published under their direction a book. . . . to be called the British Pharmacopœia," and, in order to fulfil this, among other ends of their being, the Council during their first Session, in November, 1858, appointed a committee "to prepare and publish the National Pharmacopœia with all convenient speed;" the result of which is, that during the last Session of the Council, in this present year of grace 1863, the above-

mentioned Committee "can confidently predict that the National Pharmacopœia will be published not later than October next." We remember to have heard that a young and enthusiastic connoisseur once found himself in a picture gallery with the late Mr. Ernest Hartzen, and, to evince his knowledge of art, began to point out some faults in a picture of Etty's, when Mr. Hartzen, one of the most learned and profound art-critics of the day, interrupted him with "Will you pardon me if I give you some advice: when you look at any work of art, first seek for its beauties, and not for its defects; you will have so much more pleasure." Believing that this critical canon is as just as it is generous and pleasant, and that it has a far wider application than to the fine arts only, we hasten to congratulate the Medical Council on the near completion of the new Pharmacopœia. It has long been felt to be a very great and serious inconvenience that the Colleges of Physicians of London, Edinburgh, and Dublin should publish separate Pharmacopœias, in which the catalogues of the drugs employed in medicine and the pharmaceutical compounds differed in arrangement, strength, mode of preparation, and nomenclature—that the prescriber should have to consider in what division of the empire his prescription would probably be dispensed, and the chemist the Pharmacopœia according to which it had most likely been written. The scandal to British Medical science, and the not slight danger arising from this unseemly state of things, had long been freely acknowledged; but no power had been able to overcome the petty jealousies of the three Colleges so far as to induce them to unite in the publication of a national Pharmacopœia; it was felt therefore that the production of such a work was by no means one of the smallest benefits expected to flow from the General Medical Council; its advent has been eagerly looked for, and the announcement of its near approach hailed with universal satisfaction. No one of course expects that it will meet with unmingled approval; but, be its merits or defects what they may, the fact that its existence will be a material, tangible proof of the usefulness of our Medical Parliament will not a little conduce towards securing it a favourable reception.

Of the book itself we as yet know very little, beyond the facts that it is "to be published in the English language, with the lists of the Materia Medica and compounds in the Latin language;" and that two editions, in duodecimo and in octavo, are to be published contemporaneously, at the prices of five shillings and seven-and-sixpence respectively, from which we draw the happy inference that it will not be very voluminous.

A forerunner, or detached *envoi*, containing "an explanatory statement of the forthcoming Pharmacopœia," is to come from the practised and honoured pen of Dr. Christison. It is to "show the composition of the work, the principles of its construction, the changes introduced, and the necessity under which the members of the several branches of the Medical Profession will lie of making themselves acquainted with the British Pharmacopœia, in place of the Pharmacopœias which it is to supersede." No better choice of an exponent could possibly have been made.

We fear that we have now come to the end of the pleasant part of our work. We must indeed acknowledge that the Pharmacopœia Committee have not been idle; for, as they are themselves careful to inform us, the three branch committees into which they divided held 407 meetings, and the number of attendances of the members was 1851; and they further held two conferences of delegates in London and Edinburgh; but as there may be a "busy idleness," so there may be also an "idle industry;" and it does not seem possible to praise very highly the kind of industry which required five years to amalgamate three pre-existing Pharmacopœias, though we do not forget that the Committee consisted of eminent members of a busy Profession; and we may suppose that the original instruction to the Committee to prepare the Pharmacopœia "with all convenient speed" referred to the convenience of the Committee rather than to that of the Profession at large. It is true that considerable delay was caused last year by the necessity of obtaining an Act of Parliament vesting the copyright of the Pharmacopœia in the Council, and by the agitation and controversy aroused by the Committee's new fancy grain; but that the need of Parliamentary powers was not discovered till so late certainly was not very creditable to either Council or Committee; and the battle of the grains was the result of a weak compromise between the Avoirdupois and the Troy champions in the Committee.

The "special Pharmacopœia Committee" appointed this Session observe that "it appears to have been thought by some members of the Council that the numbers of persons who have been engaged in preparing the British Pharmacopœia, and consequently the expense, might safely have been less." We venture to predict that the opinion of "some members of the Council" will be very generally the opinion of the Profession, who will further be apt to wonder why the said opinion of "some members" has been so sterile. The Medical Council voted away for Pharmacopœia expenses above £2000 during this Session, and they had previously advanced at least £1600, and no part of these sums goes to defray costs of printing and publishing. These are very large sums, and we believe that the heavy expense of the new Pharmacopœia and the lengthened delay in its preparation are alike due to the unnecessarily large number of persons engaged on it. The Committee originally appointed by the Council consisted of ten members, and they were given powers "to add to their numbers," "to beg of the three Colleges of Physicians to appoint Fellows to be associated with them," "to communicate with the Pharmaceutic Society for the same purpose," and "to appoint a chemist or chemists to assist them;" the result was the formation of a Sub-Committee in London consisting of seven members, in Edinburgh of ten, and in Dublin of six. Who, remembering the shrewd saying of an experienced old committee man, that "the best possible number for a working committee is three, of whom two never attend," would not feel that the constitution of the Pharmacopœia Committee was only too sure to infect it with the spirit of hesitation, compromise, and postponement of difficulties that has so often marred the labours of the General Council? Perhaps no severer comment can be offered on the unbusiness-like character of the whole arrangements than the remarks in the report of the Special Pharmacopœia Committee of 1863:—"There seems to have been a general understanding [in the Council] that, unless for the services of professional chemists and others, the Council would escape any outlay on account of those engaged in preparing the work. The labour required of the Sub-Committees, however, soon proved to be so great in prospect that it was impossible to expect that so many professional men should surrender their time without some compensation." Who outside the Council would ever have expected it? or, when enlightened, would have left the arrangement of the compensation till the work was done?

However, if the Profession obtain a good Pharmacopœia for five shillings per duodecimo copy, it will, we doubt not, be ready to condone any shortcomings of the Council in preparing it; and, with regard to future editions or supplements, the Council have made arrangements which certainly do not err on the side of extravagance. Each of the Branch Councils is to appoint a "Medical Practitioner acquainted with the natural history and chemistry of pharmacy," who is to keep "the necessary information for the Pharmacopœia" posted up from month to month to "a level with advancing knowledge," and "to invite information as to improvements in the Pharmacopœia from the Medical, Surgical, and Pharmaceutical bodies" of his division of the Kingdom; the three gentlemen so appointed are "to intercommunicate their

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results half-yearly," and they are to be ready every five years to give to the General Council "their conjoint opinion as to the changes they consider advisable for a new edition, or a supplement, of the Pharmacopœia." And these gentlemen are to do all this for £20 a-year each! This arrangement exhibits, both as to the number of agents employed, and the definite settlement of their remuneration, a most laudable disposition on the part of the Council to profit by past experience.

We omitted last week to point out that the Minutes of the General Council contained a case prepared relative to the educational sections of the Medical Act, "with the opinion of counsel thereon." It appears to be counsel's opinion that the General Medical Council can, through the Privy Council, require "that the course of study and examination, whether in general knowledge or in strictly Professional studies," be adequate "to secure the possession of the requisite knowledge and skill for the efficient practice" of the lowest grade of the Medical Profession; and that they can represent to the Privy Council that any such course while adequate, as to kind, to secure the requisite knowledge and skill for the efficient practice of Medicine, is not such, as to kind, as ought to be required for the practice of Surgery, and *vice versâ;* but that they cannot demand different standards of proficiency for the different Professional grades or degrees.

THE WEEK.

MEDICAL MEN WANTED IN SOUTH AUSTRALIA.

A correspondent of the *Guardian* newspaper, writing from Adelaide, South Australia, March, 1863, says:—

"Frequent advertisements evince that Medical men are wanted just now in several places here, where they would soon make satisfactory incomes if they could tide over the difficulty of supporting themselves for the first few months; and I think that in some districts a sufficient number of people could be induced to guarantee to a qualified man a certain remuneration for Medical attendance during the first year."

He also says:—

"The journal published by Mr. Waterhouse, who accompanied Mr. Stuart in the capacity of naturalist, has caused great disappointment on account of its meagre nature. The interior of the country is level and monotonous, with little timber, and that chiefly the universal gum-tree. Great part of it is stony. Other extensive districts are scantily clothed with spinifc, or porcupine grass, a plant so sharp and prickly that the cattle cannot eat any part of it but the flower stalk. Water is very scarce, bad, and undrinkable. There is no disguising the fact that great part of the interior of this continent, if not a desert, is exceedingly barren, and capable of supporting only a small number of cattle on a very great extent of country."

THE COLLEGE ELECTIONS.

In another page will be found the latest news about the approaching elections. Really there seems some fear of a return to the old title of College of Surgeons of *London*, so little do the country Surgeons seem inclined to contest the privilege of belonging to the governing body of their College. If the times of meeting of the Council do not suit country Surgeons, they ought to demand such an alteration as may enable them to be present without too great a sacrifice. Petty details and routine work might be transacted by a London Committee; but, for the discussion of really great questions, the meetings ought to be so arranged that country Surgeons could take a part in them. At all events, the number of important questions which are astir; the vast advances made by Surgery; the daily increasing "points of contact between science and art," and the increasing number of men devoted to pure Surgery, point to one grand principle in this and all future elections. We want *fresh blood*. We want men who can look at medico-political and educational questions with fresh and independent eyes. And we claim a seat at the Council, not as the perpetual privilege of a few, but as an honour to be enjoyed in turn by all men, whose age, character, and position entitle them to claim it. Foremost amongst the new candidates stands Samuel Armstrong Lane. For many years a most popular teacher of anatomy, a veteran Hospital Surgeon, the editor of "Cooper's Dictionary," of unimpeachable character as a gentleman and man of honour, his claims are paramount for a vacant seat. As regards the other two seats, we should be sorry not to see Mr. Cæsar Hawkins and Mr. Tatum re-elected; but then, if it should please the Fellows to give them a temporary holiday, and to elect two of the other candidates *pro hac vice*, we will undertake to say that no one would bear the thing with greater equanimity, or rejoice more heartily that two of their *confrères* should enjoy a taste of senatorial dignity, than would Mr. Hawkins and Mr. Tatum. Every fair and manly English maxim, sentiment, and, if you please, prejudice, favours this policy. "Fresh blood," "fair play," "every man in his turn," "room for all,"—such are the sentiments which we believe will animate the electors as they go down to the ballot-boxes.

SUCCESSFUL PROSECUTION OF AN UNQUALIFIED PRACTITIONER AT LIVERPOOL.

On June 9, the Liverpool magistrates fined a man named Robert Fell £5, with costs, for practising as a Doctor of Medicine contrary to the Medical Act. It appeared that five years ago Fell had endeavoured to elude the penalties of the Act by removing the word Surgeon from his door. It was, nevertheless, proved that he had visited, prescribed, and sent medicines in several recent cases. His treatment appears to have been routine, and his scale of fees limited. The application of whisky and water to the head, and of mustard and water to the feet, seems to have been his stock practice, whilst his charges varied from 1s. to 1s. 6d. There was some evidence that he had been in the habit of giving certificates of death, but the absence of a principal witness prevented the magistrates investigating this part of the charge. In defence, it was pleaded that Fell had done "no more than almost every clergyman in country districts did every day;" but as clergymen do not extract small coin from the pockets of their parishioners for advising cold lotions to the head and mustard baths, the plea was not allowed. The fact that three children had died under Fell's care seems to have steeled the hearts of the bench even to the plea that Mrs. Fell's ministrations to the poor were highly esteemed by the clergy of the district. It is to be noticed in this case that the magistrates convicted on the ground that Fell wilfully and falsely pretended to be a Practitioner of Medicine, he having practised as one, and not on the ground that he had taken or used either of the names or titles specified in the Medical Act.

LIFE ASSURANCE FOR WORKING MEN.

A Cirencester paper contains an account of an insurance office called the "General Provident Assurance Company," the ostensible object of which is charitably to provide for the working classes the benefits of life assurance. The capital of the company is stated at £50,000, with power to increase it to £1,000,000. The prospectus informs the artisan that "weekly, monthly, and quarterly payments—a few shillings per annum will provide for a family, and save from want the wife and little ones." Persons insuring for sums under £50 are not subjected to Medical examination, but in the case of larger amounts, a Medical opinion is required, and Dr. Hodges, of Cirencester, has been appointed Medical referee. In course of time, the company doing a considerable business in the counties of Gloucestershire, Wiltshire, and Monmouthshire, Dr. Hodges' fees amounted to £5 15s. 6d., for which he very naturally applied. Applica-

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tion after application, however, proving fruitless, although numerous letters from the Secretary, printed in the journal from which we quote, acknowledge the debt, Dr. Hodges placed the matter in the hands of his attorney. A writ was served on the secretary, who, instead of remitting the money, had recourse to what is technically known as "putting in an appearance," a proceeding by which time is gained. In the course of communication, however, between Dr. Hodges and the secretary, it came out that the district agent received 50 per cent. on the premiums, and yet had managed to get into the company's debt. This seems to have been a reason assigned for non-payment. An office with a capital of £50,000 sued for an acknowledged debt of £5 15s. 6d. is a curious phenomenon. No doubt it may be explicable by circumstances with which we are not acquainted. But, at all events, the managers do not display that appreciation of the value of appearances which was established as a ruling principle in the conduct of insurance companies by the sagacity of the late Tigg Montague, Esq., of "Anglo-Bengalee" memory.

PROTECTION FOR COURTS OF EXAMINERS.

All "examiners" lose their temper at times. It is impossible that it should be otherwise. If there be forty-nine well-informed, free-speaking, honest examinees,—young fellows who can look you full in the face, give a plain answer to a plain question, and not be afraid to say "I don't know," when that happens to be the case—there is sure to come a fiftieth—some crafty, idle fellow, with a hangdown look, who fences and hedges with every question, never can be got to say plain "no" or "yes," or "black" or "white," but continues to give some shifty, evasive, equivocating answer, which shall just cloak his ignorance. Now, with such an examinee, an examiner must get a little vexed, and perhaps may show it; most probably he does;—and small blame to him. Such things can't be helped. There used to be, in bygone days, both at Hall and College, a few testy and irritable men, who were the terror of all candidates, and were surly to all alike. But times are now altered for the better. Such things ought not to be, and not only so, but there should be no possibility of such things being dreamed of, or said in joke, or told, whether maliciously or falsely, or the reverse. Inoffensive young men, coming up for a great and anxious trial, ought to be protected from the rudeness and annoyance to which it is notorious they were occasionally exposed of yore; and examiners, like Cæsar's wife, should be exempt from even a breath of scandal. The remedies are simple. The first is a little publicity. The presence of some independent and competent witnesses, such as a deputation from the Medical Council, would act as a restraint on any ill-tempered examiner, and secure the condemnation of any ill-informed student. The second is "fresh blood." If there are any such offenders in a Court of Examiners, they are often amongst the oldest,—the men who look on their office as a fee simple, not to be disturbed, and to whom the duties are a mere routine. There is no Court of Examiners which is not improved by regular and frequent changes.

COUNTRY SCHOOLS OF MEDICINE.

At page 598 of the *Medical Times and Gazette* for June 6, 1863, will be found a memorial to the General Council from the Medical Officers of the Devon and Exeter Hospital and of the West of England Infirmary for Diseases of the Eye; and at page 599 will be found a resolution, moved by Mr. Teale, seconded by Dr. Stokes, and agreed to by the Council. The memorialists demanded justly that men of education, activity, and experience in the country should have a fair share in the education of their successors. They point out the abundant means of practical education which the three hundred County Hospitals and Dispensaries in England afford. They show that in the country pupils can easily see everything necessary for instruction in the practical part of their Profession, and can do with their own hands as learners what they will hereafter have to do under their own responsibility. They contrast with these facilities the scenes presented by the wards of London Hospitals, where the beds are surrounded by crowds, and where but few of the surgical pupils are really *dressers*; that is to say, that although all must pay, and that heavily, to see and hear, only the privileged few, who pay more heavily still, have the power of exercising their fingers. They therefore claim, reasonably, that a part of the Medical student's four years' pupilage should be spent in the country; and this part of their demand was granted by the above-named resolution of the Council. One of the four years may be spent with a "regular member of the Profession holding the appointment of Surgeon to an Hospital, Dispensary, or Union Workhouse." The rest of the request was wafted to the winds. The Council happily will not allow that the year so spent shall be the *first*, though it may be any subsequent year. Thus the student, who we hope will be kept at a good school and well grounded in languages and mathematics till past seventeen, will not be turned loose into a surgery, but will begin, as common sense dictates, by studying chemistry, natural philosophy and anatomy,—the alphabet of his Medical studies. Then he may go to a country Surgeon, with advantage to both parties. He may be of real use to his master, and he will be prepared to understand what he sees. Afterwards he can return to a Medical School, and will be ready for minute anatomy and physiology, and the nicer study of diagnosis. We would venture to suggest to our country brethren that they ought to set their faces against the monopoly which has been conferred by the College of Surgeons on "Medical Schools." It is perfectly unnecessary for the young student to have an elaborate museum, or a series of minute experiments in physiology. Can Exeter supply a young man with the means of studying the elements of natural philosophy, besides chemistry practically, and anatomy by means of bones and of bodies from the workhouse for dissection? If so, the first two years may well be spent in such a school instead of one subsequent one. But if not, we hope that the Council will resolutely oppose any return to the old vicious system of apprenticeship, in which one, two, three, or more of a youth's best years were spent, not only in not learning anything, but in losing the power of learning.

PARLIAMENTARY.

On Thursday, the 11th, in the House of Commons, the Attorney-General, in answer to a question put by Sir A. Agnew, said, that in his opinion the officials of railway and steam-boat companies were not justified by the common law in removing from carriages or vessels under their supervision persons obviously labouring under small-pox. Neither was he aware of any Act of Parliament which rendered persons who spread small-pox by wilfully travelling in public conveyances when suffering from the disease liable to penalty.

On the same evening, in Committee of Supply, on the vote of £122,881 for the Science and Art Department, the debate principally turned on the architectural exploits of Captain Fowke, which were severely criticised in reference to the ornamentation of the new buildings at Kensington. Mr. Smith's motion for the reduction of the vote by £10,000 was negatived by a majority of ninety-eight.

On Friday, the 12th, Lord Palmerston announced, in reference to a notice given by Mr. Coningham, that H.R.H. the Commander-in-Chief had determined that circumstances connected with the imprisonment of Sergeant-Major Lilley justified the subjecting the conduct of Colonel Crawley to an inquiry by a court martial. The speech of Mr. Coningham, which was characterised by indiscriminate invective, not only against the generals commanding in India, but against H.R.H. the Commander-in-Chief, was severely censured by the Marquis of

Hartington and Lord Palmerston. Their censure seems to have been justified by the subsequent explanation of his conduct given by the Duke of Cambridge in the House of Lords on Monday night.

The vote for the purchase of the land on which the Exhibition building stands was carried on Monday by a majority of 267 to 135. The vote for the purchase of the building itself was not taken. The sum to be given for the land is £120,000; £80,000 is to be paid for the building, and £284,000 for renovations and improvements, making a total of £484,000. The covered area thus obtained it is proposed to devote to the reception of the Natural History Department of the British Museum, of the Museum of Patents, and of the National Portrait Gallery. Of the seventeen acres, Professor Owen is to have five, and, as a consequence, the National Museum in Bloomsbury is to be shorn of its greatest attraction. It would be foreign to our pages to discuss the merits of the Exhibition building. As the House has agreed to buy the land, there can be little doubt but that the other purchase will follow. We all know that the building is the ugliest in Europe, that a large portion of it is dark, that it is badly drained, badly floored, and that it is not water-tight; but it may be that these defects admit of remedy. Neither do we enter on the question of whether the Commissioners and contractors are animated by the most high-souled self-sacrificing patriotism, or whether the whole thing be not one of the grossest jobs to which a Government has ever lent countenance. These matters we leave to non-professional disputants. But we do protest against depriving eight-tenths of the metropolis of their principal means of scientific education, by banishing the Natural History collections to a distant suburb. When the question of removal was before Parliament last year, we stated at length our reasons for objecting to it. The success which has attended the proposal of this year has not convinced us. For the scientific workers of the eastern and central districts, and for the great mass of the artisan and middle classes, the Natural History Museum will, from the time of its exportation to Kensington Gore, be utterly and hopelessly useless.

From a notice given by Lord Enfield on Tuesday night, it would appear that a rumour has got abroad that a report has been lately sent to the Treasury in which the value of the Exhibition building is estimated at £30,000 less the cost of pulling it down. Lord Enfield gave notice that it was his intention to ask if such report has been received, and whether there would be any objection to lay it on the table previous to the vote of £80,000 for the purchase being proposed.

A bad site and a bad building are dear at any price; but it is rather too much to be forced, for reasons of economy, to pay for the latter three times more than it is worth.

On Wednesday, Lord Raynham obtained leave to bring in a Bill for the protection of young persons under the age of sixteen years engaged as domestic servants and apprentices; also a bill to regulate corporal punishment in schools and elsewhere. The Bills were brought in and read the first time.

M. DEMARQUAY ON ENGLISH SURGERY.

M. DEMARQUAY has recently published in the *Union Medicale* (No. 70) some of the impressions he derived concerning English Surgery during his visit to London as a juror of the Exhibition. Upon the whole, we do not complain of the estimate formed by our *confrère*, who sees that there is something at least to be learned from our Hospitals and our practice; but one or two statements may be noticed. He seems to think that we administer chloroform in a far too free manner,—an observation to be expected from a Surgeon of the Paris Hospitals, in which this assuager of suffering is often very imperfectly employed. The reason M. Demarquay assigns for such imperfect administration is of that idealistical kind we have become in the habit of regarding as peculiarly French. He says that when the English patient is brought completely under the influence of chloroform, "a painful feeling is produced when we behold placed upon the operating-table a human mass brought there solely to undergo the operations indicated by art. As chloroformisation is continued during the entire period of the operation, and the patient is carried away while still under the influence of the anæsthetic, there results a complete isolation of the patient and the Surgeon, which is truly painful. The man is effaced by such a mode of procedure, the operator becoming a mere instrument, and the patient mere matter for operation. Those moral sympathetic ties, which become established between the operator and the operated prior to the operation, and at the moment when the patient returns to his senses, have no place in the English Hospitals, where this mode of procedure prevails. In this point of view ours is the better practice." Aye, in this point of view; but what is it in the patient's point of view? Freedom from pain, rather than a "moral sympathetic tie," is, we take it, the grand point with him.

The construction and convenience of our operating-theatres, their admirable illumination, the mode of transporting the patients to and fro, and the mode of dressing, receive great praise at the hands of M. Demarquay, contrasted as they are with what prevails in France. In comparing the results obtained in the two countries, he observes that we must bear in mind that the London patients can bear operations much better than the Parisians, who are of a far more nervous and impressionable temperament, whatever this may be due to, whether difference in race, in habits, or in manner of living. With respect to the diagnosis, he considers that French Surgery is more minute, precise, and affirmative, while in indications of treatment English Surgery is more bold and more hasty. Thus, in respect to the numerous and remarkable examples of excision met with in the London Hospitals, there has not first taken place in these cases that series of local and general treatment which would have been put into force in Paris. While English Surgery is so proud of the results of these operations, French Surgery is better pleased with avoiding such operations by medico-chirurgical treatment, and thus preserving the limbs in their entirety. In calculating the statistics, we may expect a greater proportion of favourable results from the English resections than from the French, as these latter are not resorted to until the last extremity, when all other means have been exhausted. The true object of inquiry should be the diseases of the joints themselves; are they best treated by these more prompt and hasty operations, or by more varied and more expectant therapeutical agencies? But M. Demarquay finds that if, in some respects, London Surgery is bolder than French, in others it is more timid. Thus, delicate operations for the removal of malignant tumours are much rarer in London than in Paris. This, he conjectures, may be due to the fact of such cases being treated at special Hospitals, and should be borne in mind in estimating the relative mortality of the general Hospitals of the two countries. We believe that this class of operations is of more common occurrence in our Hospitals than M. Demarquay supposes, and that their greater rarity, compared with what prevails in Paris, is not due to any predominance of special Hospitals, but to the increasing want of confidence entertained in their efficacy by our Surgeons.

THE MEDICAL PROFESSION IN AMERICA—ABOLITION OF THE USE OF CALOMEL AND TARTAR EMETIC BY AUTHORITY.

THE deplorable political convulsion which is now agitating the States of North America, and every day shaking them further and more completely asunder, has not failed to be reflected in the mirror of Medical journalism. War is the great and absorbing subject which now occupies the thoughts of American citizens, whatever their business or profession, whatever the station in society that they may hold, whether lawyers, surgeons, or merchants, citizens, or aliens. War infil-

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trates everything. The doings of the army, and the state of the army, are the almost sole topics which find place even in the Medical Journals. Everything smacks of war. We have now before us several numbers of the *American Medical Times*, published in New York. They contain, as might be expected, a distinct department for Army Medical Intelligence; but this is not all, for nearly every article relates to some question of Military Surgery, is a report of some military Hospital; tells a tale of fever, hospital gangrene, or erysipelas—those scourges of close and crowded wards; or, at any rate, proceeds from the pen of a military Surgeon. Well! foreign war is an evil, war at home a greater evil, and civil war the greatest evil of all; but out of even the last of these some good may be anticipated. America may be expected to gain what she has long needed—an indigenous and independent school of Surgery and Medicine. True, its first lessons will be learned amid the noise and slaughter of the battle-field. But this is just where British and French Surgeons first threw aside their leading-strings, and acquired the practice of independent thought, a reverence for the teachings of actual observation. Well will it be, too, if the fiery ordeal which it is now passing through acts also in the purification of the Profession from all that is gross in ignorance and whatever is unseemly in morality and behaviour.

It may be thought that we are using some harsh expressions when hinting thus at a need for improvement among our Professional brethren in the American States. We certainly should not do so without good reason; and, harsh as our words may appear, they are not nearly so condemnatory as the language of their own journalists, or the simple facts recorded in some recent numbers of the periodical we have mentioned. We mentioned some time ago the difficulty which was experienced at the outbreak of the war in obtaining a sufficiency of Surgeons, and the imperfect character of the qualifications of those whom the authorities were under the necessity of appointing to the charge of the sick and wounded. It was stated that new regulations were about to be put in force in this matter, that more strict examinations were to be instituted, and so on. But what a tale is unfolded by memoranda just recently issued from the Washington War-office! How do they warrant harsher language still than that which we have used! Here are some extracts. After naming three Surgeons dismissed the service "for absence without proper authority," they having failed to make a satisfactory defence before the military commissions, we meet the following:—

"Assistant-Surgeon J. P. Alcorn, 126th Ohio Volunteers, for accepting bribes for procuring discharge of soldiers. Assistant-Surgeon R. S. McGee, 100th Regt. Indiana Volunteers, is hereby dismissed the service of the United States, he having been a convict in the Illinois State Prison on the charge of robbery and counterfeiting."

If anything will show the straits to which the authorities are reduced, the possibility of such persons ever obtaining a Surgical appointment at all would suffice to do so. Such a thing degrades every Army Surgeon, however fit himself to associate with "officers and gentlemen." We are told in one page of the journal we have been quoting that the Medical Hospital stores embrace "a more liberal supply of articles and drugs than is furnished to any army in the world," but in another there appears an order issued from the office of the Surgeon-General, which could not possibly be the result of parsimony, since the drugs referred to are among the cheapest that could be prescribed. We can only infer that, as a body, the Army Surgeons of the States are not sufficiently careful or sufficiently instructed to be trusted with such dangerous weapons. In contemplating the following remarkable order we cannot avoid thinking,—

"Quid leges sine moribus,
Vanæ proficiunt?"

It runs as follows:—

"Surgeon-General's Office, Washington,
May 4, 1863.

"1. From the reports of the Medical inspectors and the sanitary reports to this office, it appears that the administration of calomel has so frequently been pushed to excess by Military Surgeons as to call for prompt steps by this office to correct this abuse; an abuse, the melancholy effects of which, as officially reported, have exhibited themselves not only in innumerable cases of profuse salivation, but in the not infrequent occurrence of mercurial gangrene. It seeming impossible in any other manner to properly restrict the use of this powerful agent, it is directed that it be struck from the Supply Table, and that no further requisitions for this medicine be approved by the Medical directors. This is done with the more confidence, as modern pathology has proved the impropriety of the use of mercury in very many of those diseases in which it was formerly unfailingly administered. 2. The records of this office having conclusively proved that disease prevalent in the army may be treated as efficiently without tartar emetic as therewith, and the fact of its remaining upon the Supply Table being a tacit invitation to its use, tartar emetic is also struck from the Supply Table of the Army. No doubt can exist that more harm has resulted from the misuse of both these agents in the treatment of disease than benefit from their proper administration.

(Signed) "W. A. Hammond, Surgeon-General."

There are other edged tools in the Surgeon's hand which are rather awkward playthings. We wonder what the next order will be, probably this:—"It having been conclusively proved by official records that numerous unnecessary amputations have been performed by the Army Surgeons, and that thus many officers and men have been rendered incapable of further service in the army of the United States, the Medical directors are required to approve no further requisitions for amputating instruments, and to see that those now in use be returned to store. This is done with the more confidence, as modern Surgical experience has proved that wounded limbs may often be restored under judicious treatment without having recourse to their entire removal. No doubt can exist that more harm has resulted from the misuse of these instruments than benefit from their proper use."

Γιατρὸς γὰρ ἀνὴρ πολλῶν ἀντάξιος ἄλλων.
Ἰσον τ' ἐκτάμνειν ἠπί τ' ἤπια φάρμακα πάσσειν.

REVIEWS.

A System of Surgery: in Treatises by Various Authors. Edited by T. Holmes. Vol. III. 1862. Pp. 916.

This third volume of Holmes's comprehensive work, embracing the subjects of Operative Surgery, the Diseases of the Organs of Special Sense (the ear and nose), of the Air-Passages, and of the Organs of Circulation, Locomotion, and Innervation, is in no respect inferior to the two preceding. Like them, it includes Essays of widely dissimilar value and literary ability. Some few of these Essays, it must be confessed, are scarcely worthy of their company; but others—and we are glad to say the majority—may fairly challenge comparison with any of their kind in the English language.

Among the former we must, we fear, place the first article of this volume, that by Mr. Smith, on Minor Surgery. Crude and insufficient throughout, it is scarcely redeemed from insignificance even by its series of neat diagrams. For we cannot regard illustrations of bandaging, and of such matters as are familiar to the student from the earliest period of his career, as of any great value.

Far more useful would it have been if the artist's skill had been transferred to the succeeding article, by Mr. Lister, on Amputation. Here, in a greater degree, perhaps, than in any other part of this otherwise admirable book, is felt the great want of illustrations. It is, indeed, scarcely possible without their aid to make an account of an operation clear, or even intelligible. Setting aside this drawback, which we hope to see remedied in future editions of the work, Mr. Lister's essay is in the highest degree able and instructive. In a clear and concise history of the operation, he compares the various methods that have been, or are still in vogue. He gives full credit to Mr. Teale for his method of carrying out the important principle of removing the cicatrix from the points of subsequent pressure on the limb, but enforces the undoubted objection to the operation in very muscular subjects, viz., the extreme length of anterior flap which it requires. He directs

attention to Mr. Spence's modification of the operation as partly remedying this objection, and suggests the advantage of a still further curtailment of the anterior flap, eking it out by a small posterior one. Mr. Lister's remarks on the after treatment are equally sound and judicious. Adopting the same line of argument as before, viz., that drawn from the history of the operation, he points out how, from the earliest times, the success of the operator has been strictly proportionate to the simplicity of his after-treatment.

Equally able, and still more original, is the same writer's essay on Anæsthetics. We regret that we have not space to give a full analysis of this important Essay. Mr. Lister's observations have led him to form decided opinions on many points connected with the administration and mode of operation of chloroform widely different from those usually held in the Profession. He points out that chloroform, by its primary action on the cerebro-spinal centre, is the great antagonist to shock. He therefore believes, and advances strong reasons for the belief, that many deaths which have happened suddenly at the commencement of operation have been improperly set down as deaths from chloroform, and might, on the contrary, have been prevented by the full action of this powerful narcotic. While admitting that some few deaths may have been due to fear of the chloroform itself, (which, indeed, it would be difficult to doubt,) he ascribes the great majority to an overdose of the anæsthetic from careless administration. He also proves, by some well-contrived experiments, that there is no better mode of giving it than on a folded cloth; having ascertained that "so far from the amount of chloroform given off from the cloth being in dangerous proportion to the air inhaled, the whole quantity which evaporates from the under surface, even when the rate is most rapid, viz., just after the liquid has been poured upon it, is below Dr. Snow's limit of perfect security against primary failure of the heart."

In threatened death from asphyxia (the usual cause), he lays great stress on the efficacy of drawing the tongue forcibly forwards by a pair of forceps, the good effect of which he believes to be due to a reflex stimulation. There is much that is new, we might almost say startling, in this article; quite enough to show that there is still much to be learned on the subject. Doubtless, in the investigation now in the hands of a committee of the Medico-Chirurgical Society, the opinions of so able and trustworthy an observer will be subjected to a fair scrutiny.

The next Essay, on Plastic Surgery, by Mr. Holmes Coote, is, like the contributions of the same author in former volumes of this work, scarcely worthy of his reputation, and far below the level of his earlier writings. Careless and superficial, it takes but little cognisance of the labours of others in this field. This is the more to be regretted, in that the subject is one of such vast and increasing importance. We question, moreover, how far Mr. Coote's teaching can be accepted as in accordance with the present condition of Surgery. When he lays it down as a rule, almost without exception, *that a cicatrix should never be touched with the knife*, we can scarcely believe that he is expressing, as he says, the opinion of most Surgeons of experience of the present day, or that so sweeping a condemnation of this class of operations is justified by statistics.

We pass rapidly over the four next articles, which, though leaving little to be desired, offer no special points for remark. Mr. Hinton treats us to an admirable *resume* of the vast store of knowledge which has been accumulated, chiefly in our own times, concerning diseases of the Ear. Mr. Ure revels in the uninviting subject of Diseases of the Nose, which appears to have been his first Professional love, and of which he certainly makes the most. And the late Henry Gray has left us a sufficiently comprehensive account of the Surgical Diseases of the Larynx, though unfortunately marred by his literary deficiencies. The description of the laryngoscope and its uses, left unfinished by Mr. Gray, forms a separate article, or rather sketch, susceptible of improvement, by Mr. Durham.

Then follow the Essays on the Circulating System. Mr. Moore describes Diseases of the Absorbents, which are among the most interesting, and, at the same time, the most puzzling, affections to which the animal body is liable. The peculiar physiological questions to which they give rise are not overlooked by Mr. Moore; but it will be long, we fear, before a sufficient explanation can be given of such an apparently simple phenomenon as the arrest of the inflammation by the intervention of a gland. Mr. Moore treats with equal ability and completeness the Diseases of the Arteries.

Scarcely inferior in interest to Diseases of the Absorbents are those of the Veins, which receive full justice from Mr. Callender. He introduces some original experiments, tending to support the doctrine of those pathologists who deny the occurrence of inflammation of the lining membrane of veins; and his creed on this point necessarily affects his description of phlebitis. The whole subject of this disease must indeed be considered as still *sub judice*.

We come now to what must be regarded as the gem of the volume, if not of the whole work—the Essay, viz., On Aneurism, the joint production of Mr. Holmes himself and Mr. Hart. Of this masterly Essay it is not too much to say that it is the most complete, the most talented, and original work on the subject in any language. It will well repay the attentive study of any Surgeon. To attempt even an outline of its leading features would be but to mar its fair proportions. But the subject of the treatment of aneurism has in modern days received so large a share of attention, that a rapid glance at this portion of the Essay will not be out of place. The authors (for Mr. Hart is entitled, we believe, to a full share of the credit of the article) do not absolutely reject the old method of operating (recently revived by Mr. Syme) in certain cases to which no other known treatment is altogether applicable, as in axillary and gluteal aneurism, and traumatic aneurism at the bend of the elbow. In describing the Hunterian operation, we are glad to see that they take occasion to vindicate in an eloquent protest the fame of our great Surgeon from the senseless vanity of the French writers, who, by ignoring the essential distinction between it and Anel's operation, would claim the merit of its invention. Almost all French writers speak of it as the "methode d'Anel." It is, therefore, a timely protest, especially as, in Mr. Holmes's words, "the operation still is, and probably will long remain, the last resource of Surgeons in the graver cases of aneurism." Other methods of treatment of more modern date, some of which, indeed, may be considered as still on their preferment, are thoroughly analysed. There is the fashionable compression, the exact value of which has yet to be determined; the treatment by flexion, the chief merit of whose introduction belongs to Mr. Hart himself, and which appears destined to meet with great success; and other minor methods of treatment, the applicability of which is, to say the least, very limited; viz., by manipulation (the idea of Mr. Fergusson), by galvano-puncture, and by injections.

Mr. Holmes writes two other articles in this volume, those, viz., on Diseases of the Bones and on Excision. In both he shows the same knowledge and mastery of his subject which render him a good and safe guide to the student. This is especially the case in the latter of these two articles (which, in conformity with the arrangement of the book, should, we think, have been classed among the articles on operations). Mr. Holmes is himself no mean authority on the subject of excisions; and, after the keen controversies of late years, the opinions of so temperate and sound an advocate will be received with respect.

Diseases of the Muscular System are, for the most part, so obscure and so little understood, that Mr. Tatum's Essay may well be accepted as a good *resumé* of what little is known on the subject. He especially insists on a form of circumscribed inflammation found to occur in the course of tertiary syphilis in women, some cases of which were described by him in 1846; but the nature of the affection is obscure and doubtful.

Dr. Little's paper on Orthopædic Surgery is a full and admirable exposition of his well-known views on the pathology of deformities, and their treatment. That the whole subject of their pathology is, however, still in an unsettled condition is evidenced by the recent publication of Mr. Barwell's views on the subject, which threaten to revolutionise this department of Surgery.

The Essay on Diseases of the Joints, by Mr. Athol Johnson, is the work of a Surgeon whom we would rather accept as a guide in the treatment of these affections than in their pathology. How wide are the gaps in our knowledge of this latter is indeed conspicuous, from the uncertain manner in which Mr. Johnson speaks of the various forms and results of inflammation in its different stages.

Of the remaining Essays by Mr. Shaw, on Diseases of the Spine, and by Dr. Brown-Séquard, on Diseases of the Nerves, it will suffice to say that the names of their authors are a

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guarantee of their excellence. Mr. Shaw's is, as it were, the complement of his equally admirable Essay, in Vol. II., on Injuries of the Back. And no one, we presume, has greater claim to speak, *ex cathedrâ*, on diseases of the nerves than Dr. Brown-Séquard.

The volume finishes with the article on Diseases of the Tongue, by Mr. H. Coote, which is dissociated from the remaining Essays on the Organs of Digestion, we presume, because it happened to be ready for publication. The whole volume fully maintains the high character of the work, and amply justifies the promises of its able editor.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

AMERICA.

Near Falmouth, Virginia, May 25.

A long time has now elapsed since I last wrote to you, and that simply because nothing particularly interesting to the Profession had, until lately, occurred—a dearth of news was the cause of my silence. Now, however, the late battle at Chancellorsville gives me occasion to pen you a few lines.

During the months of March and April, as indeed during the whole of the time we have spent in our present camp before Fredericksburg, the health of the army has been such as armies are seldom blessed with. Acute cases of disease have been rare, and such chronic cases as have not recovered or died, have been discharged the service. Free issues of fresh bread, potatoes, and onions have completely rooted out all traces of the scorbutic taint, which the hardships of the Peninsular campaign had implanted in many of the men; and at the same time cases of rheumatic pains which had obstinately resisted every mode of treatment the Surgeon could devise, succumbed to the dietetic change. The end of April thus found the army in fine condition, the few cases that were on the sick reports of the different regiments were sent off to Hospitals lying along the line of the Fredericksburg and Aquia Creek Railroad, and we commenced the campaign from which we have but now returned.

For some two or three weeks previous to the commencement of active operations the ambulance corps of the army, lately reorganised, and considerably augmented, was daily drilled under the superintendence of the Medical officers, so that during and after the battle, the care and expedition with which it performed its duty rendered its services of infinite value.

About the same time, too, corps and division badges were distributed to all the troops; these badges, consisting of pieces of cloth worn upon the cap, indicate, by their form, the army corps; the division by their colour; thus the first corps wears a circular piece of about one inch in diameter, and the colour red, white, or blue, tells whether the soldier belongs to the first, second, or third divisions of that portion of the army. The second corps is known by a club, the third by a diamond, and so on. The stretchers, ambulances, supply wagons, all bear upon them their distinctive mark, and on the battlefield, in front of each division hospital, a flag or placard, displaying on it the badge, directed the wounded soldier to the Surgeons of his own command.

Most of your readers know the history of the action at Chancellorsville, that the fighting continued more or less for five days, but that the battle itself took place on the latter part of Saturday, May 2, and on the Sunday from 5 a.m. to shortly after midday—how on the one day we lost ground, *finite de* Sigel's corps, or rather the corps that was once Sigel's—the eleventh—and on the other, although we had to draw in our lines, the ground we yielded up was inch by inch contested and thickly strewn with the fallen of both parties.

Of the wounded in the Saturday fight many of the severe cases fell into the hands of the enemy, and, along with a few Surgeons that were likewise captured, were removed to the rear of the Confederate lines, while all those who could walk and those whom our stretcher carriers conveyed from the field, were lodged in their respective Hospitals. Upwards of 300 wounded men, some fifty of whom were Confederate soldiers were sheltered in the large brick-house, which, known as the Chancellor-house, gives a name to the fight which then raged around it. This building, unfortunately in the course of the evening caught fire, probably from some random shell. The flames spread rapidly, and although every exertion was made to have the wounded removed in time, a few, it is said, certainly not many—but in the confusion who can tell—perished.

On the following morning, shortly after the renewal of the battle, your correspondent had occasion to ride to the front, and for some distance along the rear of the fighting line. What a scene of apparent confusion was there! yet it, when less superficially noted, resolved itself into perfect order. In front, the fighting line of infantry, with, on every eminence around, the field-pieces hurling grape and canister on the advancing foe; the regimental Surgeons but a few yards in rear of this line, and their only shelter from the hot-bed of death in front of them a tree, or, if peculiarly favoured by fortune, a small but valuable rising ground. Two hundred yards still farther in the rear the hospitals of divisions, and between these various points the stretcher carriers actively engaged, with measured pace proceeding to the rear with their burden, or at double-quick to the front for a fresh one. The Hospitals were but rude affairs, consisting of uprights supporting a roof of blankets, branches, anything, in fact, that would shelter the wounded from the scorching rays of the sun. The quiet and calmness prevailing beneath these shades contrasted strongly with the din of battle reigning in the outer world. Although the roll of musketry was unbroken, except when drowned by the roar of the artillery, though the air was laden with the hoarse cooing of the shell and shot, with the wild cheers of the combatants, and the nervous neighing of horses excited by their surroundings, yet here so deep the silence seemed that the ravings of a semi-chloroformed patient, or the rasping of the amputating saw as it cut its way through the bone, sounded harshly on the ear. Moving about, deaf to every external impression, calm and self-possessed, the Surgeons, the presiding genii of the temple, in the discharge of their all-important duties, imparted a false sense of security to their patients, who, on their first entrance, were clamorous to be taken farther to the rear, so as to be completely out of range.

About ten o'clock, while on one table chloroform was being administered, while at another the Surgeon had just transfixed the limb, a shell pierced the frail roof of one of the Hospitals, and, bursting, killed two stretcher carriers and wounded some of those already lying wounded. The shock this intruder had occasioned to the nervous systems of every one present was barely recovered from, when a second coned over our heads, and burst beyond. The enemy were, unawares, shelling our Hospitals, the woody nature of the country preventing them from seeing our flags. This was a trying time for the Surgeons unprotected to operate when every man capable of moving had ensconced himself behind the trunk of the largest tree he could find, and when those whose wounds rendered that impossible with anxious looks grovelled still closer to the earth; yet nobly did they do their duty.

During the afternoon of Sunday advantage was taken of the comparative cessation of hostilities which then occurred to remove the Hospital still further to the rear. On Monday long trains of ambulances carried the wounded across the river to the neighbourhood of Potomac Creek; but whether this was preparatory to a retreat, or to an expected general engagement on the following day, we could not then determine. Retreat, however, was the order, and on the Tuesday evening the operating staffs of the division Hospitals were dismissed to join their various regiments, then moving towards the pontoon bridges, knee-deep in mud, and drenched by the rain, which in torrents accompanied the thunderstorm which favoured the movement. Shortly before sundown of the next day most of the troops, wearied, footsore, and feverish, had joyfully hailed the sight of the ground they had occupied during the winter.

Arrived at Potomac Creek, after a short delay for rest and refreshments, those of the wounded that could bear further transportation were despatched to Washington, while the others, the more severe cases, were carefully attended to in the canvas city formed by the field Hospitals established in the neighbourhood of the Creek. Leaving these now as comfortable as they could be made, let me refer to those, less fortunate, left upon the battle-field, and now prisoners in the hands of the enemy.

On Saturday, May 9, a flag of truce was permitted to cross into the Confederate lines, accompanied by a few Surgeons, to assist those who had been captured in the discharge of the

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heavy duties which fell to their lot. Some wagon-loads of supplies were also sent across the river at the same time. Your correspondent accompanied the white flag, and can speak from personal observation of the state of the twelve hundred men that Hooker left in the wilderness around Chancellorsville. These men had all been severely hurt. Struck down, and unable to accompany their retreating comrades, they had lain on the field, while the tide of battle swept over them, the bullets of friend and foe proving alike dangerous. Many while thus exposed were killed, and others a second, even a third time hit. The majority of them were gunshot fractures of the bones of the leg or thigh, penetrating wounds of the cavities, or extensive shell wounds. There, where they had fallen they lay for one, two, some for three days, suffering the agony of thirst under a burning sun, and subsequently exposed to the chilliness of the night succeeding the thunderstorm; some fearful, others hoping that a renewal of the struggle might send a random shot to end their misery. The woods, fired in several places during the heat of the battle, added the fear of a horrible death to their other sufferings; but, so far as I could ascertain, and I paid attention to the subject, none were injured from this cause. They were then collected into five groups, and the Surgeons—one to every hundred men—divided themselves accordingly; but what could they do?—so few among so many, when every one required particular attention, and when no instruments, lint, bandages, etc., were attainable; for, these being Government property, had been confiscated by the Confederates. Even the food which was at their command was hard bread and coffee found in the knapsacks which strewed the battle-field. This state of matters having been represented to General Coultson, who was then in command, he caused instruments, however, (for he had no lint) and morphia to be placed at their disposal, and what his commissary had he freely gave, viz., flour, sugar, bacon, and hard bread, permitting at the same time a few of the Union prisoners he had in charge to act as nurses. The Surgeons now laboured assiduously at the operating table; yet, active though they were, numberless cases in which operation was indicated remained untouched.

On Sunday, seven days after the fight, the Surgeons and supplies sent by the Union Government reached the field. Supplies in plenty there were, but certainly a larger posse of Surgeons might have been detailed. Half-a dozen crossed at Bank's Ford to reach the wounded of Sedgwick's army, and a like number at United States' Ford for those that had fallen under Hooker. This reinforcement, small though it was, infused fresh vigour into the hearts of the worn-out Medical men, who had been on the field since the battle, and much good was done. The wounded, likewise, were cheered by the arrival of the flag of truce; for, in addition to the so much required supplies, a prospect of at some early date being transported to the North bank was opened to them. They were overjoyed at the idea of leaving the place where they had suffered so much from wounds, from exposure, from want of food, of drink, of Surgical assistance, while the sickening odour wafted by every breath of air from the carcases of the horses which in hundreds lay around; and that, scarcely less noisome, emanating from the unhealthy discharges of their own uncleansed wounds, seemed sufficient to wound, and that mortally, the health of the strongest. Diarrhœa was common among them, and in many instances formed a most distressing addition to their afflictions; for, from the lack of sufficient attendants and the nature of their wounds—fractures—the unwilling patient was often obliged to let nature have her course in bed.

The ambulance train did not disappoint them. On Wednesday morning it appeared, and was greeted by the patients with a feeble cheer. On that day 250 were ferried across on a raft formed of two pontoon boats and some planking; but as this was very slow work, on Thursday a bridge was thrown across, with the consent of the rebels, and 600 were removed, —Friday, at noon, finding every Union man on the north bank.

About half a mile from the river side the Sanitary Commission had established themselves in a house, and here each train on its way to Potomac Creek rested for a time to allow of the distribution of food and stimulants.

If my letter had not already assumed such proportions, I should have found much pleasure in dilating on the care and attention the wounded now receive in the Creek Hospital, and on the cleanliness and air of comfort that now surrounds them; but, instead, I must think of drawing to a conclusion.

It may be interesting to mention that in the battle of Chancellorsville one Surgeon was killed, and three wounded, one of whom has since died.

I may observe, in conclusion, that, since the army has returned to its old quarters, it has been gradually moving,—one division one day, another the next,—from the grounds occupied during the winter to new and previously uncamped-upon soil, while the provost guards are consuming the *debris* left about the old quarters. The warm—nay, hot weather, to which we are now exposed here, renders this sanitary measure one of necessity.

LIVERPOOL.

June 8.

Since my last letter, Liverpool has lost one of her truest benefactors—Dr. Duncan, the Medical Officer of Health for this borough. Those who look into the history of the improvements which have raised the sanitary condition of this town from that in which it was an opprobrium to the civilisation of this country, to its present state—which will bear comparison with the best districts of the country—will find that no individual took a more efficient part in the efforts which have brought about this result than the late Dr. Duncan. It was mainly owing to his investigations and reports that the municipal authorities were stimulated to bring before Parliament and carry, in spite of much local opposition, the Sanitary Act of 1846. Many good men and true had attempted the same end long before, but had failed. So long ago as 1788, the Physicians of the town brought its abominably unhealthy state under the notice of the authorities, and in 1802 the Corporation went to Parliament with an Act based upon the recommendations of the celebrated Dr. Currie, and other Medical men, which, had it become law, would have anticipated many of the improvements which resulted from the Act which came into force more than forty years after; but the influence of those whose property was said to be menanced sufficed to secure the rejection of the bill, and to prolong the *régime* of dirt and disease; while, as a sort of salve for the official conscience, "a Fever Hospital was erected to mitigate the scourge, and a new cemetery bought to hide its victims."(a)

In July, 1846, the Liverpool Act, the first sanitary act in the kingdom, received the Royal assent, and early in 1847 the sanitary staff was appointed. Dr. Duncan, whose previous course had marked him out as the fittest man for the post of Medical Officer of Health, was requested to undertake its duties. At first it was proposed that he should retain his appointment as Physician to the Infirmary and his private practice, and should receive a salary of £300 per annum. To this arrangement the Home Secretary very properly demurred, believing it to be most important that the health officer should be entirely independent of the influences to which any one in practice must be exposed, and he insisted that the whole time of the Medical officer should be devoted to his duties This arrangement was therefore made, and Dr. Duncan resigned his office as Physician, and took the appointment, which he held till his death.

One of the first and most important measures under the new act was the clearing out of cellars used as habitations. More than fourteen thousand were found to be thus used, and from these in the four years from 1847 to 1851 more than twenty-two thousand persons were removed. The time which was allowed for this wholesale and wholesome eviction prevented any harm, as the demand for more decent habitations very soon produced an adequate supply of them. The sewerage also was so vigorously attended to, that, in about ten years from the passing of the act, a hundred and forty-six miles of sewers and drains were constructed, at an average cost of 17s. per yard. Proper arrangements were made for emptying ash-pits; the smoke nuisance was abated; and slaughter-houses and knackers'-yards were put under proper control. The result of these efforts amply justified the labour and expense which they entailed, since the proportion of deaths to population soon began to decline, and continued to do so with such rapidity, that by 1860 Dr. Duncan was able to report a saving of life at the rate of 800 a-year, and in 1857 of more than 3000 a-year. It is easy

(a) "Liverpool Past and Present in Relation to Sanitary Operations." By Jas. Newlands, Borough Engineer, of Liverpool.

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heavy duties which fell to their lot. Some wagon-loads of supplies were also sent across the river at the same time. Your correspondent accompanied the white flag, and can speak from personal observation of the state of the twelve hundred men that Hooker left in the wilderness around Chancellorsville. These men had all been severely hurt. Struck down, and unable to accompany their retreating comrades, they had lain on the field, while the tide of battle swept over them, the bullets of friend and foe proving alike dangerous. Many had lingered on a second time, and others a second, even a third time hit. The majority of them were gunshot fractures of the bones of the leg or thigh, penetrating wounds of the cavities, or extensive shell wounds. There, where they had fallen they lay for one, two, some for three days, suffering the agony of thirst under a burning sun, and subsequently exposed to the chilliness of the night succeeding the thunder-storm: some fearful, others hoping that a renewal of the struggle might send a random shot to end their misery. The woods, fired in several places during the heat of the battle, added the fear of a horrible death to their other sufferings: but, so far as I could ascertain, and I paid attention to the subject, none were injured from this cause. They were then collected into five groups, and the Surgeons—one to every hundred men—divided themselves accordingly; but what could they do?—so few among so many, when every one required particular attention, and when no instruments, lint, bandages, etc., were attainable; for, these being Government property, had been confiscated by the Confederates. Even the food which was at their command was hard bread and coffee found in the knapsacks which strewed the battle-field. This state of matters having been represented to General Coulston, who was then in command, he caused instruments, however, (for he had no lint) and morphia to be placed at their disposal, and what his commissary had to freely gave, viz., flour, sugar, bacon, and hard bread, pertaining at the same time a few of the Union prisoners he had in charge to act as nurses. The Surgeons now laboured assiduously at the operating table; yet, active though they were, numberless cases in which operation was indicated remained untouched.

On Sunday, seven days after the fight, the Surgeons and supplies sent by the Union Government reached the field. Supplies in plenty there were, but certainly a larger posse of Surgeons might have been detailed. Half-a dozen crossed at Banks's Ford to reach the wounded of Sedgwick's army, and a like number at United States' Ford for those that had fallen under Hooker. This reinforcement, small though it was, seemed fresh vigour into the hearts of the worn-out Medical men, who had been on the field since the battle, and much good was done. The wounded, likewise, were cheered by the arrival of the flag of truce; for, in addition to the sorely required supplies, a prospect of at some early date being transported to the North bank was opened to them. They were overjoyed at the idea of leaving the place where they had suffered so much from wounds, from exposure, from want of food, of drink, of Surgical assistance, while the sickening odour wafted by every breath of air from the carcasses of the horses which in hundreds lay around; and that, namely, the health of the strongest. Scurvy, and that naturally, the health of the strongest, Typhoid was common among them, and in many instances proved a most threatening addition to their afflictions; for, from the lack of sufficient attendants and the nature of their wounds—the unwilling patient was often obliged to let nature take her course as he lay.

The commissary train did not disappoint them. On Wednesday morning it appeared, and was greeted by the patients with a hearty cheer. On that day 250 were ferried across on a raft formed of two pontoon boats and some planking; but as this was very slow work, on Thursday a bridge was thrown across, with the consent of the rebels, and 600 were removed. On Friday, course, finding every Union man on the north bank, about half a mile from the river side the Sanitary Commission had established themselves in a house, and here each of the distribution of food and stimulants.

It may be interesting to mention that in the battle of Chancellorsville one Surgeon was killed, and three wounded, one of whom has since died.

I may observe, in conclusion, that, since the army has returned to its old quarters, it has been gradually moving,—one division one day, another the next,—from the grounds occupied during the winter to new and previously uncamped-upon soil, while the provost guards are consuming the *débris* left about the old quarters. The warm—nay, hot weather, to which we are now exposed here, renders this sanitary measure one of necessity.

LIVERPOOL.

June 8.

Since my last letter, Liverpool has lost one of her truest benefactors—Dr. Duncan, the Medical Officer of Health for this borough. Those who look into the history of the improvements which have raised the sanitary condition of this town from that in which it was an opprobrium to the civilisation of this country, to its present state—which will bear comparison with the best districts of the country—will find that no individual took a more efficient part in the efforts which have brought about this result than the late Dr. Duncan. It was mainly owing to his investigations and reports that the municipal authorities were stimulated to bring before Parliament and carry, in spite of much local opposition, the Sanitary Act of 1846. Many good men and true had attempted the same end long before, but had failed. So long ago as 1788, the Physicians of the town brought its abominably unhealthy state under the notice of the authorities, and in 1802 the Corporation went to Parliament with an Act based upon the recommendations of the celebrated Dr. Currie, and other Medical men, which, had it become law, would have anticipated many of the improvements which resulted from the Act which came into force more than forty years after; but the influence of those whose property was said to be menanced sufficed to secure the rejection of the bill, and to prolong the *régime* of dirt and disease; while, as a sort of salve for the official conscience, "a Fever Hospital was erected to mitigate the scourge, and a new cemetery bought to hide its victims."(a)

In July, 1846, the Liverpool Act, the first sanitary act in the kingdom, received the Royal assent, and early in 1847 the sanitary staff was appointed. Dr. Duncan, whose previous Medical Officer of Health, was requested to undertake its duties. At first it was proposed that he should retain his appointment as Physician to the Infirmary and his private practice, and should receive a salary of £300 per annum. To this arrangement the Home Secretary very properly demurred, believing it to be most important that the health officer should be entirely independent of the influence to which any one in practice must be exposed, and be devoted to his duties. This arrangement was therefore made, and Dr. Duncan resigned of the Medical officer should be instructed that the whole time held till his death.

One of the first and most important measures under the new act was the cleaning out of cellars used as habitations. More than fourteen thousand were found to be thus used, and from these in the four years from 1847 to 1851 more than twenty-two thousand persons were removed. The time which was allowed for this wholesale and wholesome eviction prevented any harm as subsequently resulted from it, that in about very soon produced adequate supply, so that, in about sewerage also was so vigorously attacked, that in about ten years from the passing of the act, a hundred and forty-six miles of sewers and drains were constructed, at an average cost of 17s. per yard. Many were constructed on an made for emptying cesspools, the result of which was shortly and slaughter-houses, and much nuisance was abated; proper control, expense which they either simply put aside the labour and expense which they found to be thus used, and portion of deaths to population was reduced from 1 in 28 to 1 in 36. Duncan was able to report a saving of life at the rate of 1,000 a-year, and in 1856 of more than 3,000 a-year.

(a) Liverpool Past and Present in Relation to Sanitary Reform, by Jas. Newlands, Borough Engineer, of Liverpool.

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to compute how many lives have been prolonged, how much disease has been prevented; but it is impossible for any human intelligence to know, it is difficult even to imagine, how much suffering has been spared, how much happiness has been bestowed, how much of the highest moral and social good have gone hand-in-hand with these sanitary improvements. I hope, for the sake of the credit of Liverpool, that the memory of such a man may not be left without some public and permanent recognition of the honour which it deserves. We ought to be proud of having had here the first Medical Officer of Health appointed in the kingdom. We ought to be ashamed of ourselves if we do not fittingly perpetuate the acknowledgment of the gratitude which Liverpool owes to him "*ob cives servatos.*"

The first annual meeting of the Liverpool Auxiliary to the Edinburgh Medical Missionary Society was held this week. Some notice of it may be interesting, especially just now that the subject of Medical missions seems to be attracting a good deal of notice in the Profession as well as out of it. The chair was worthily occupied by one of our oldest and most respected Professional brethren, Mr. Batty, Lecturer on Midwifery in the School of Medicine. The Society has as yet simply aided the funds of the parent Society; but it is hoped that some more proper missionary work may be effected by its agency. It has been most favourably received by the clergy, and ministers, and laymen of all denominations. At the meeting the most important speech was that of Mr. Thompson, the Superintendent of the Mission Dispensary in Edinburgh. The accounts which he gave of the proceedings at that Institution were most interesting in themselves, and most valuable as a proof of the efficiency of Medical missionary effort; for, as he said, if there be such success attending the work of such an institution in Edinburgh, where Medical aid is so easily accessible by the poor, what must it be in a city where the Medical missionary is the only one from whom such help can be obtained? The number of cases relieved annually, Mr. T. stated, had risen from three thousand in the first year of their operations, to about eight thousand in this, the fourth. It was at first supposed that, if the poor looked on the mission dispensary as an institution, the first object of which was to benefit their souls, and that the Medical help offered was regarded as a means to this end, they would avoid it; but such is not the case. The managers are careful that their purpose shall be unmistakably avowed. The doors are opened at 1·30, and from that time till 2, while the patients are assembling, a lady reads the Bible to them. At 2 the doors are closed, an address is then given by the superintendent, after which the patients are attended to as in any other dispensary. Those who require home visitation are seen by the resident Medical officer and by the students who attend the dispensary for the purpose of obtaining practical training in Medical mission work. The population of the Cowgate, where the dispensary is situated includes no small amount of "home heathenism," among whom many are found as ignorant of Christianity and as hostile to it as any Mahomedan or Hindoo. Yet among "the *élite* of the ragamuffinism of Edinburgh"—among the outcasts and infidels who crowd the rooms of the Dispensary, many are to be found who not only come and hear, who not only allow the Dispensary Doctors to tell them the good news of salvation which their obstinate prejudices would not let them hear from the lips of any minister of religion, but in whose changed character and conduct there is the evidence that the truths taught them have become the germs of a new and higher life.

To turn, now, to more purely Professional matters, I am glad to have to record a successful case of the treatment of aneurism on the plan re-introduced by Mr. Syme. A man, aged 42 years, was admitted to Mr. Bickersteth's Ward, in the Royal Infirmary, on account of a large aneurism occupying the left axilla. It had existed for four or five months, and the day before his admission had suddenly become much enlarged. It was evident that the aneurism had ruptured, and it was resolved to lay it open and tie the ends of the vessel implicated. An incision was made, through which the subclavian artery could be compressed against the first rib, and the circulation was controlled by the finger of an assistant, kept upon the vessel in this spot. The aneurism was exposed and then freely opened. It was found that nearly the whole of the axillary artery was converted into a fusiform aneurism, the vessels given off from it partaking in the dilatation of their parent trunk. This gave rise to considerable difficulty; a large vessel was tied, which appeared to be the artery itself; but on the pressure being for an instant relaxed, a gush of blood from another orifice showed that the one just tied was not the upper end of the vessel. The real vessel being now evident was secured. The lower end of the artery, and the dilated origins of some of its branches were tied. Very little blood was lost in the operation. The patient is doing well, but unfortunately there has been gangrene of the hand and a portion of the fore-arm. The ligatures all came away between the twelfth and fifteenth days, so that the success of the operation may be regarded as secured. I hope that a fuller account of this most important case will be published hereafter.

GENERAL CORRESPONDENCE.

TRAUMATIC TRISMUS TREATED BY INDIAN HEMP AND CHLOROFORM.

LETTER FROM DR. FRANCIS H. PARSONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Having read with great interest the report of a case of trismus algidus treated by Indian hemp, by Dr. Fraser, in the *Medical Times* of February 7, I am induced to send you the following case of traumatic trismus, treated in a similar manner, and with a like favourable result. Perhaps you may not think it unworthy of a place in your valuable journal.

CASE OF TRISMUS TRAUMATICUS TREATED BY INDIAN HEMP AND CHLOROFORM.

Rosario G., aged 38, a native Hindoo, employed on board ship, applied to me on April 11, 1863, complaining of pain and stiffness of the muscles of mastication, with inability to open his mouth. He stated that about a fortnight previous he had received a blow on the side of the head, which caused considerable pain, followed by slight bleeding from the left ear. His previous health had been good. For some days he had been unable to open his mouth to the full extent. His jaw had now become firmly fixed, and, having taken no food during the last twenty-four hours, he felt faint and hungry. I placed him under the influence of chloroform for upwards of an hour. This caused a sufficient relaxation of the spasm to enable me to insert a cork between the teeth on the right side. The left temporal and masseter muscles were more tense than the right. Fluid nourishment was now given.

April 12.—The bowels being constipated, ℳij. of croton oil were administered on sugar; this was followed by free evacuation of the bowels. He now complained of difficulty in swallowing, pain in the sternum, and a sense of suffocation; he was seized with severe spasms, affecting not only the neck, but the extremities, causing him to fall to the ground. The jaw was almost as firmly fixed as on the previous day. I again placed him under the influence of chloroform. Ordered Ext. Cannabis Indicæ, gr. ¼; chloroform, ♏ v., dissolved in tinct. card. co., ʒi., to be given every two hours.

14th.—The mouth remained open to a slight extent; he could bring the lower jaw forward so as to make the lower incisors project beyond the upper ones; there was also free lateral motion in the jaw. He could not masticate, but was able to swallow beef tea without pain; the pain in the sternum was less severe, and respiration more easy; the spasms were now very slight.

18th.—The mouth could be opened to the extent of an inch; the spasms had subsided; pain in the sternum gone; respiration easy. The bowels being again costive, ordered another dose of croton oil. The medicine to be given every three hours.

By the 22nd he could eat meat; was free from pain, and able to walk; treatment was discontinued.

P.S.—As regards the small doses of Indian hemp administered, it must be borne in mind that the extract prepared in India direct from the "Gangah" is much more active than that made in England. I have seen gr. ¼ administered to a European followed by complete loss of muscular power, sound sleep, and delirium. A period of two hours is generally essential to obtain the full action of the medicine.

I am, &c.

FRANCIS H. PARSONS, C.M., M.D.,
Surgeon P. and O. Company's Steam-ship Jeddo.

Bombay, May 14.

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REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 9, 1863.

Mr. PARTRIDGE, President, in the Chair.

A PAPER by GEORGE HARLEY, M.D., was read on

THE ORDEAL BEAN OF OLD CALABAR; ITS ACTION ON THE ANIMAL BODY COMPARED WITH THAT OF WOORARA AND CONIA.

The author began his communication by a brief account of the literary history of the ordeal bean. He next alluded to the botanical characters of the plant. It is a long twining shrub, with papilionaceous flowers and leguminous fruit, the kernels of which, both in taste and appearance, resemble the common white haricot bean. The natives call the plant Eséré, and it was by the missionaries named the ordeal bean, in consequence of its being given to persons suspected of witchcraft, with the view of discovering their innocence or guilt. The paper was illustrated by diagrams of the plant, specimens of the bean and its preparations; and its effects on the pupil of a human being and of a cat were shown by Dr. Harley. The conclusions drawn by the author are as follows:—1. The ordeal bean may cause contraction of the pupil when taken internally as well as when applied locally. 2. That atropine and the Calabar bean are physiologically antagonistic. 3. That the ordeal bean paralyses the motor nerves, and leaves the intelligence and muscular irritability unimpaired. 4. That it excites the salivary and lachrymal secretions. 5. That it destroys life by paralysing the nerves supplying the respiratory muscles—being, in fact, a respiratory poison. 6. Although it may weaken the heart's power, it neither stops the circulation nor arrests the heart's action. It is not, in fact, a cardiac poison. 7. It is closely allied in its effects to woorara and conia, most closely, perhaps, to the latter; but it differs from both in its tendency to produce muscular twitchings, and in its power of inducing contraction of the pupil. Neither woorara nor conia exert generally or locally any such effect on the iris. 8. The ordeal bean will prove a most valuable addition to the Pharmacopœia, by not only giving us a useful myopic, but also a powerful anodyne, capable of soothing nerve-irritation without either destroying intelligence or endangering life by arresting the heart's action.

Mr. SOELBERG WELLS was somewhat surprised that, in enumerating the peculiar properties of the Calabar bean, Dr. Harley had not called more attention to its singular power of causing contraction of the ciliary muscle, and thus affecting the accommodation of the eye, as this was of far greater importance than its action upon the pupil. The impairment of vision which follows the application of atropine is not due to the dilatation of the pupil, but to the paralysis of the accommodation. This is proved by the fact that if we employ a sufficiently weak solution of atropine, so that the constrictor pupillæ alone, and not the ciliary muscle also, is paralysed, vision will be but very slightly impaired. Now the Calabar bean possesses the peculiar power of not only causing contraction of the pupil, but also of the ciliary muscle, thus changing the normal into a short-sighted eye. It also counteracts the paralysing effects of atropine upon these muscular structures. In a case of rheumatic paralysis of the constrictor pupillæ and of the accommodation (ciliary muscle) of the eye, which he (Mr. Wells) published in the *Medical Times and Gazette* a few weeks ago, the action of the Calabar bean was fully illustrated, and its power of causing contraction of the paralysed parts traced step by step. With reference to this case he might state that it was now all but cured, the pupil having almost regained its normal size, and vision being nearly perfect. He would not, however, attribute too much of this good result to the effect of the Calabar bean, as it was well known that such cases of paralysis of the pupil and the accommodation, more particularly when they occurred after severe illness, often got well of themselves when the patient's health improved. He, however, believed that in this case the Calabar bean considerably accelerated the cure. With respect to the local action of the bean he might remark, that Professor Czermak and he had been trying its effect upon the eyes of rabbits, directly after decapitation, and that they had found that it produced marked contraction of the pupil within about twenty minutes of its application. He was, however, still engaged upon these experiments, and had hoped to have concluded them before the reading of Dr. Harley's paper before this Society, which he had not expected until the next meeting.

Mr. J. W. HULKE communicated briefly the results of three experiments which had been made with the alcoholic extract of the bean on patients under his care at the Royal London Ophthalmic Hospital, by Mr. Workman, the House-Surgeon. The first patient, a sailor, had paralysis of both third (cranial) nerves, and mydriasis from syphilitic periorbitis. Two hours after the application of the extract to the right eye, the nearest point of distinct vision was sixteen and a-half inches, and the diameter of the pupil was one line, the proximate point having been previously twenty-six inches, and the pupil two and a-half lines broad. In the same time the near point of the left eye had become twelve and a-half instead of twenty inches, and the pupil one line instead of three lines across. The second patient had paralysis of the left third cranial nerve, with mydriasis, of four years' duration, the consequence of traumatic periorbitis with abscess. In one hour the proximate point had become six instead of eight and a-half inches, and the pupil had contracted from three to three-quarters of a line. In the other unaffected eye the application of the extract effected in the same time an alteration of the proximate point from eight and a-half to four inches, and reduced the pupil from one and a-half to three-quarters of a line. The third was a case of paralysis of the left third cranial nerve, with mydriasis from periorbitis, possibly rheumatic, which had been twice previously cured with iodide of potassium. In an hour the proximate point of distinct vision was brought from ten to five inches, and the pupil changed from three to three-quarters of a line in diameter. Mr. Hulke thought these cases confirmed generally the statement of Dr. Robertson, who was entitled to great credit from his practical inquiry into the physiological action of the bean on the eye.

Mr. SPENCER WELLS gave an account of

A PATIENT UPON WHOM OVARIOTOMY WAS PERFORMED TWICE—WITH REMARKS.

The author believed that this case was unprecedented, but he has lately learned that Dr. Attee, of Philadelphia, has performed ovariotomy successfully upon a patient from whom Dr. Clay, of Manchester, had removed an ovarian tumour sixteen years before. The patient whose case, before, during, and after operation, is now narrated to the Society, was forty-two years of age. One ovarian tumour was removed in May, 1862; another in January, 1863. The propositions the author believes to be established by the case are—That ovariotomy may be performed twice on the same patient without unusual difficulty. That it may be advisable to make the incision, in the second operation, at some distance from the cicatrix left after the first operation. That whenever one ovary is removed the opposite ovary should be carefully examined; and that in all penetrating wounds of the abdomen the divided edges of peritoneum should be brought accurately and closely together.

Mr. BAKER BROWN said that as he was the Surgeon who had done the first operation, he would make a few observations on the case, which was one of great interest. The patient had been sent to him for operation by Sir Charles Locock. She recovered quickly, and left the house quite well. A few weeks later he again saw her. She had then pain in the other side of the abdomen, and a tumour the size of a fist, and this in a few weeks became larger and more distinct. He (Mr. Brown) recommended that a second operation should be performed. About this time he was ill, and his son saw the patient. The tumour had then increased very much. He afterwards heard that the operation had been performed by Mr. Wells, and that the patient had died. As he had stated, he had himself recommended the operation, and thus agreed with Mr. Wells in his practice. He could, however, scarcely expect that three months after so serious an operation as ovariotomy the patient could undergo a similar one with success. Yet there was no other alternative, as the disease was increasing very rapidly. It was his invariable practice to examine the other ovary, and both he and Mr. Wells had cut open little cysts in the comparatively healthy ovary, and the patients had done well. As to the method of uniting the

wound, there was a considerable difference of opinion. Dr. Clay, who had had a very great experience in this operation, did not think it of great consequence. He (Mr. Brown) did not think it mattered much. Sometimes he included the peritoneum, and sometimes he did not.

A paper, by Dr. Robert Lee, was read on

THE INDUCTION OF PREMATURE LABOUR IN CASES OF PREGNANCY COMPLICATED WITH ALBUMINOUS URINE, DROPSY, AND AMAUROSIS.

Dr. Lee related the case of a lady, whom he saw in consultation with Mr. Bowman and Dr. Ferguson, suffering from disease of the retina and albuminuria. From having previously seen a case in St. George's Hospital, in which albuminuria and dropsy, occurring in a pregnant female, had disappeared on the spontaneous expulsion of a dead fœtus, Dr. Lee advised the induction of premature labour. This was not at once carried out, but after some delay some convulsion occurred, and it was then determined not to wait any longer. At this time there was amaurosis, albuminuria, and œdema of the face. The membranes having been punctured, labour ensued, and a dead fœtus of four months was expelled. After this the albumen gradually diminished, and the vision improved. In a postscript, Dr. Lee reported the particulars of an analogous case, for which he was indebted to Mr. Bowman.

Mr. W. R. Beaumont, F.R.C.S.E., Senior and Consulting Surgeon to the Toronto General Hospital, Canada West, gave a description of a

NEW IRIS-FORCEPS.

The instrument consists, like Langenbeck's and Graefe's, of a fixed and a sliding blade, but differs from theirs inasmuch as the point of the hook is not only more concealed, but its concavity is quite filled by the end of the sliding blade when the blades are closed, so that the whole of the piece of the iris taken up by the hook is securely held. The form of the hook is less curved, and rather larger. The author commented on the disadvantages of the instruments used by Langenbeck and Graefe, and stated his belief that the instrument he had invented was free from these. The mode in which his forceps are used was next described; and the paper concluded by the relation of some cases of operation in which the forceps was successfully employed. The newly-invented instrument was exhibited at the meeting.

WESTERN MEDICAL AND SURGICAL SOCIETY.

Friday, May 1.

Dr. Barclay, President, in the Chair.

The Seventeenth Annual Meeting of this Society was held at their rooms in Sloane-street. The meeting was well attended by members and several visitors. The Report of the Council and Auditors having been read, the following officers were elected for the ensuing year:—*President*—Dr. Barclay; *Vice-Presidents*—Mr. Cumberbatch, Dr. Baines, Mr. J. Lane, Mr. Prescott Hewett; *Treasurer*—Dr. Baines; *Hon. Secretaries*—Mr. W. Milner and Mr. C. Hunter; *Hon. Librarian*—Mr. Thomas Dickenson; *Members of Council*—Dr. Cahill, Dr. Anstie, Mr. Bannister, Dr. Godwin, Mr. Pollock, Mr. Keen, Dr. Fuller, Mr. Rouse, Dr. Martyn, Mr. Brodhurst, Mr. Vasey, Dr. Way; *Auditors*—Dr. Marcet and Mr. Whitmore. The rest of the evening was devoted to the detail of cases and exhibition of specimens.

Dr. Martyn related a case of

EMPYEMA, WITH PARACENTESIS—DEATH.

The patient was a boy, six years old, who had been subject to cough from his infancy. The present illness commenced with feverish symptoms, of a typhoid character, nor were there any chest symptoms, except slight cough, till about the fourteenth day, when he had pain in the chest for the first time, and quick breathing. The chest now showed signs of much effusion in the left pleura, there being complete dulness over the greater part of this side, and vocal resonance was entirely absent. The left side now measured half an inch more than the other. There was, however, no bulging between the ribs. On March 16, no improvement resulting from a blister and diuretic medicines, the breathing becoming more rapid and difficult, with orthopnœa, and Mr. Pollock concurring, the trocar was inserted a hand's breadth below the axilla, a teacupful of thick matter escaped, and the breathing was the next day better. Two days after a larger trocar gave vent to about twelve ounces of matter, and again temporarily relieved the symptoms till the 24th, when more fever set in, and the matter on that day had become more offensive. The patient died on the 26th. No post mortem could be obtained.

Dr. Martyn then mentioned a case of

PERFORATION OF THE STOMACH AND SUDDEN DEATH.

This was in a young female, aged 19, who suddenly, at her tea, was seized with pains in the stomach and attempts to vomit. Half an hour afterwards the pulse was rapid, the face flushed, the belly excessively tender, and there was great pain all over the abdomen. She died in thirteen hours. The stomach, which was exhibited, had a large rounded opening in its posterior wall, near the lesser border; the mucous coat was elsewhere inflamed and thickened. This patient had been treated by Dr. Martyn for ulcerated stomach during some months.

Dr. Martyn also exhibited the

STOMACH OF A CASE OF OXALIC ACID POISONING.

The patient, a female, aged 44, had been addicted to spirits, and had taken the poison in solution. The stomach had the usual black appearance, and the duodenum was highly inflamed.

Dr. Way mentioned a case of

PTYALISM FROM THE USE OF TOYS COLOURED WITH RED PIGMENT.

A small unglazed cup, coloured with red paint, was exhibited by Dr. Way, from the use of which a child, 18 months old, had suffered with profuse salivation, with enlargement of the sub-maxillary glands, sponginess of the gums, fissured tongue, and ulcers with herpetic patches on the external surface of the cheek. A sister of the patient suffered in the same way, but to a less extent. The red paint on the cup gave, when examined, evidence of mercury.

Dr. Way also gave the details of

A CASE OF SUPPRESSED SMALL-POX,

and showed a kidney and portion of the mesentery from the patient, a child two years old, who died from the undeveloped variola. There was great engorgement of the kidneys and of the mesenteric glands. The other viscera were healthy. Four days before death the patient was in good health; symptoms of fever were followed by minute florid papules on the face, limbs, and trunk; these still existed on the third day without a tendency to become vesicles or pustules. Death, apparently from exhaustion, was preceded by petechiæ and bleeding from the ears, but by no convulsion or coma. Two children of the same family were simultaneously attacked with variola, which ran the ordinary course. All the children had been vaccinated in infancy.

LEGAL INTELLIGENCE.

COURT OF QUEEN'S BENCH.—June 12.

(*Sittings in Banco; before the* Lord Chief Justice *Mr. Justice* Wightman, *Mr. Justice* Crompton, *and Mr. Justice* Blackburn.)

THE QUEEN *v.* THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

This case raised a question of great importance to the Medical Profession (and also to the public, on account of the deep interest they have in the character of that Profession), under the important Act of 1858, "passed to regulate the qualifications of Practitioners in Medicine and Surgery." The question was as to the functions of the Council in regard to registration of Medical Practitioners. The Act imposes on the Council the duty of keeping such registry; and the 14th section provides as follows:—

"It shall be the duty of the registrars to keep their respective registers correct, in accordance with the Act, and to erase the names of all registered persons who shall have died, and shall from time to time make the necessary alterations in the addresses or qualifications of the persons registered under the Act; and it shall be lawful for the registrar to write a letter to any registered person, addressed to him according to his address

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on the register, to inquire whether he has changed his residence or has ceased to practise, and, if no answer shall be returned within six months, to erase the name of such person from the register, provided that the same may be restored by direction of the General Council, should they think fit to make an order to that effect."

Another section (28) provides that for certain causes names may be struck off the list. In the present case the applicant, a Mr. Sergeant, was a Member of the College of Surgeons, and had been upon the registry. The registrar sent the usual letter in 1860, and, owing to the applicant's absence, he did not get it, and in April, 1861, the six months having elapsed without an answer, they struck his name off. He did not hear of it until December, 1861, and in November, 1862, he applied to the Council to restore his name. This was not done, and a correspondence ensued, and in the result, in March, 1863, the Secretary intimated that it would be referred to the General Council, which only met once a year. They met on May 26 last, and referred the matter to the Executive Committee, who were ready to consider the application on being satisfied as to character and qualification. The real question was whether the Council had any authority to entertain this question, or were under an absolute duty to restore the name.

Mr. Henry James had, on the part of the applicant, obtained a rule for a *mandamus* to the Council to register his name, or to hear and determine the matter.

Mr. M. Smith, Q.C., and Mr. Horace Lloyd, appeared on the part of the Medical Council to show cause. The Council, they said, were under this difficulty, that by the Act they could only meet once a year, and had now referred the matter to the Executive Committee. This was done at the next annual meeting after the application.

The Lord Chief Justice said he thought it could not be contended for a moment that the Council could arbitrarily refuse to re-enter the name of a Practitioner merely on account of the miscarriage of a letter through his accidental absence; and it was not reasonable that the question of a re-entry of his name should be hung up for nearly a year. Surely, the Council should meet oftener for such purposes.

Mr. M. Smith said they had now delegated such matters to the executive committee, which sat permanently; and were now ready to hear and determine the matter.

Mr. Henry James, on the part of the applicant, said he insisted that the Council had no right, in such a case of a mere accidental omission from the registery, to enter into any inquiry into character, but were bound absolutely to re-enter the name; but

Mr. Justice Wightman pointed out that there could be no *mandamus* to the Council to register, because the duty of registry was on the registrar. The duty of the Council was to hear and determine the matter.

Mr. Horace Lloyd referred to the case of Mr. Bell against the Pharmaceutical Society, in which it had been so held.

Mr. James still urged that the Council in such a case had no right to enter into any inquiry as to character, etc.; but

The Lord Chief Justice pointed out that the words of the Act were "if they shall think fit," and thus implied that they were to exercise some judgment.

Mr. Justice Crompton said it could not be contended that the Council could not consider under what circumstances the applicant in such a case had been absent or abroad, as they might have been disgraceful, though it might not be so in this case; yet they could not be precluded from inquiry into that matter.

The Court said the applicant could not possibly be entitled to more at present than a *mandamus* to the Council to hear and determine the matter, and that they were ready to do, it appeared, without a *mandamus*. If, indeed, they decided against him on a wrong ground, there might be a ground for a *mandamus* to register; but it could not be anticipated that they would decide wrongly, and therefore, though the rule for a *mandamus* might be made absolute, the writ need not issue unless the decision should be adverse to the applicant, and he should desire to have the ground of the decision considered.

VIENNA UNIVERSITY.—It is intended, in the year 1865, to have a grand celebration of the 500th anniversary of the Vienna University, at the same time that the International Exhibition is held in that capital. Invitations are to be addressed to all the Universities and scientific institutions of Europe.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a general meeting of the Fellows, held on Saturday, June 13, the following gentlemen, having undergone the necessary examination, and satisfied the College of their proficiency in the Science and Practice of Medicine, Surgery, and Midwifery, were duly admitted to practise Physic as Licentiates of the College:—

Edward Sutcliff, 1, Champion-grove, Camberwell; William Henry Fleetwood Buckle, Royal Mint; James Davy Rendle, M.D. St. Andrews, Brixton-hill; William Henry Embling, 30, Oakley-square, Regent's-park; Keith Norman Macdonald, Bath; William John Hunt, Hatherseige, near Sheffield; and Alfred Rickards, Armley, near Leeds.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members of the College, having undergone the necessary Examinations for the Fellowship on the 26th, 27th, and 28th ultimo, were reported to have done so to the satisfaction of the Court of Examiners, and at a Meeting of the Council on the 12th inst. were admitted Fellows:—

John Thompson, Bideford, Devon, Diploma of Membership dated November 4, 1842; Frederick James Brown, Rochester, November 1, 1844; Edward Lund, Manchester, April 9, 1847; Victor de Meric, Brook-street, Grosvenor-square, June 11, 1847; James Rouse, Coleshill-street, April 11, 1851; John Edward Tuson, H.M. Indian Army, April 25, 1851; William Carr, Gamersel, October 26, 1855; George Frederick Helm, Cambridge, January 14, 1859; Frederick Marsdin, Stamford, March 2, 1859; Walter Rivington, Upper Holloway, March 18, 1859; William Fairlie Clarke, Curzon street, May-fair, January 30, 1862.

At the same Meeting of the Council, the following Members of the College, who had been elected Fellows at previous Meetings of the Council, were admitted as such:—

Thomas Spry Byass, Cuckfield, Sussex, Diploma of Membership dated August 7, 1829; Thomas Edward Eden, Brighton, March 27, 1835; John Henry Hutchins, Rochester, September 2, 1831; George Lowe, Burton-on-Trent, May 5, 1837; Charles Edmunds Thomson, Ross, June 13, 1828.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, June 11, 1863:—

John Harman, Canterbury; Thomas Evans, Llandrsayl, Cardiganshire; William Laidlow, Newcastle-on-Tyne; Thomas Creswick Jackson, 24, Wimpole-street.

As an Assistant:—

John Kilshaw Kenyon, Liverpool.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.—The following Candidates passed the Major Examination as Pharmaceutical Chemists on June 17:—

Christopher Allcock, Nottingham; John Bourdas, London; Samuel R. Broughton, Wrexham; Marcel A. Gras, Mauritius; Thomas Grundy, London; Louis E. Guiot, Mauritius; Etienne N. Merle, Mauritius; William Thos. Trollope, Yarmouth

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APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

CHRISTIE, JOHN, M.D. Aberd., has been elected Medical Officer to the Aberdeen Dispensary.

JORDAN, MYLES J., L.K.Q.C.P.I., has been elected Medical Officer to the Union Workhouse, Castlebar, County Mayo.

LAKIN, JAMES H., M.B. Lond., has been appointed Surgeon to the Lying-in Charity, Sutton Coldfield.

LITTLE, D., M.D., has been appointed House-Surgeon and Secretary to the Eye Hospital, Manchester.

ROUSE, T. M., has been elected Junior House-Surgeon to the West London Hospital.

WOLFE, JOHN R., M.D. Glasg., has been elected Surgeon to the Aberdeen Ophthalmic Institution for Diseases of the Eye.

DEATHS.

COATES, JOHN, at South Yarra, New South Wales, on March 15, aged 51.

HODGES, THOMAS, M.R.C.S.E., at 104, Guildford-street, Russell-square, on June 11, formerly of the H.E.I.C.S.

JOHNSON, W. H., M.R.C.S. Eng., at Clarendon-street, Dublin, on June 2.

NEWTON, WILLIAM, M.R.C.S. Eng., at Newcast-e-on-Tyne, on May 30, aged 44.

PEARSON, JOHN ARMITAGE, F.R.C.S. Eng., at Buxton, Derbyshire, on June 6.

RHIND, H., Assistant-Surgeon Bengal Army, at Fort William, Calcutta, on May 4.

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THE LONDON HOSPITAL.—Mr. Hutchinson has been unanimously elected Surgeon to this Hospital, a vacancy having been caused by the resignation of Mr. Critchett. Mr. Hutchinson's promotion will make a vacancy in the staff of Assistant-Surgeons, and we understand that Mr. Walter Rivington is a candidate for the latter appointment.

HEALTH OF THE KING OF THE BELGIANS. — Nous tenons d'une source certaine que la santé du Roi a éprouvé dans ces derniers temps une amélioration notable. Les dernières opérations ont été exécutées par M. Henri Thompson, Chirurgien de l'Hôpital de l'Université de Londres, et qui a été recommandé au Roi par S. M. la Reine Victoria.—*L'Indépendance Belge*, June 14.

SIR CHARLES LOCOCK.—On Tuesday morning Sir Charles Locock sustained a serious accident by a fall from his horse. It appears that he rode on horseback in Rotten-row during the morning, and on his return to his residence at the corner of Hertford-street, Park-lane, his horse suddenly stumbled, and threw him with some violence, and then rolled upon him. Assistance was promptly rendered, and Sir Charles was extricated as soon as possible, and taken into his residence. Upon examination, it was discovered that the injuries consisted of a fracture of the right arm just above the elbow, and much straining of the muscles of one of his legs. We are happy to say that the result of inquiries at the house last evening was that Sir Charles was in no danger, and progressing very favourably.

HOSPITAL FOR SICK CHILDREN.—The eleventh anniversary festival of this institution was celebrated on Tuesday, the 9th inst., at the Albion Tavern, Aldersgate-street, the Right Hon. the Earl of Shaftesbury, K.G., in the chair. The subscriptions and donations announced amounted to upwards of £1000, of which 40 guineas were new annual subscribers.

SPECIALTIES IN GENERAL HOSPITALS.—The Medical Board of the Bellevue Hospital, New York (one of the largest in the world), has recommended that wards should be opened for the following specialties:—Diseases of the eye and ear, skin, nervous system, and orthopædia. Two Physicians and Surgeons are to be appointed for each division.

FARRELL *v.* POUND.—The widow of the man Farrell, who, it will be recollected, was killed by oxalic acid sold in mistake for Epsom salts at the shop of Mr. Pound, druggist, in Leather-lane, Holborn, has, in an action brought against Pound, at Westminster, on June 13, recovered damages of £100 in compensation for the loss of her husband.

THE MEDICAL AND CHIRURGICAL SOCIETY.—The Fellows of this Society have been summoned to attend a special general meeting on Tuesday next, for the purpose of removing Evan Thomas, of Manchester, from the Fellowship of the Society. It will be recollected that this person was convicted of perjury at the last assizes, and sentenced to imprisonment.

THE Croonian Lecture on the Coagulation of the Blood was delivered before the Fellows of the Royal Society by Professor Lister, F.R.C.S. Eng., of Glasgow, on the 11th inst.

CAPTAINS SPEKE AND GRANT arrived at Southampton on Wednesday, the 17th inst.

AN extra evening meeting of the Royal Geographical Society will be held at Burlington House on Monday, the 22nd inst., at nine p.m., to receive Captains Speke and Grant on their return from Africa.

PRESENTATION OF A TESTIMONIAL TO MR. GRAINGER.—A meeting of the subscribers to the Grainger Testimonial took place at the London-bridge Terminus Hotel on the 4th instant, at 4 p.m., to present an address to Mr. Grainger commemorative of his disinterested liberality in founding the Grainger Prize for Physiology at St. Thomas's Hospital. Dr. J. R. Bennet occupied the chair, and delivered a glowing eulogy on the veteran teacher, and Medical and sanitary reformer. Mr. Grainger acknowledged the honour done him in an eloquent speech. A vote of thanks to the chairman was proposed by Mr. F. Le Gros Clark, and seconded by Mr. T. Carr Jackson.

ALLEGED NEGLECT OF A MEDICAL OFFICER. — Under this title there appeared in the *Evening Standard* of June 12 an account of an inquest held by the Deputy-Coroner for Middlesex, on the body of a man named George Knowles. Deceased was a drayman, and on Whit-Monday last received an injury to his leg by slipping off his dray. He kept his bed until Wednesday, the 3rd, when his wife came home and found him much worse. She, with a lodger, went to the workhouse, and they were referred to Mr. Bletchley, the parish Surgeon. They went to Mr. Bletchley's, who refused to go at that time, on the ground that they had brought no order. It appeared from the evidence that it was late at night, that Mr. Bletchley was much engaged at the time, and that he was not bound to attend without a written or printed order. The women were very abusive. The man died shortly after without Medical attendance. The verdict of the jury was simply one of accidental death. Ten of their number, however, wished a censure to be passed on the Surgeon, but to this there were two dissentients. A censure would have been most certainly unjust. Mr. Bletchley was clearly not under legal obligation to go. At the same time, we may repeat what we have often said before, that if our Medical brethren value their own peace of mind and good names they cannot safely refuse their services under any circumstances short of those which produce utter inability.

COLLEGIATE ELECTIONS.—(*From a Correspondent.*)—The forthcoming elections of Fellows into the Council of the Royal College of Surgeons promises to be a spirited one, as there are six candidates for the three vacant chairs caused by the resignation of Mr. Coulson and the retirement in the prescribed order of Messrs. Hawkins and Tatum, who, however, offer themselves for re-election. The following is a copy of the particulars supplied to each Fellow of the College, from which he will have to make his selection:—Mr. Samuel Armstrong Lane, of Grosvenor-place, nominated by Messrs. W. White Cooper, Edward Cutler, Alexander Ure, Henry Lee, George Pollock, and H. Spencer Smith. Mr. George Busk, of Harley-street, nominated by Messrs. John Simon, Prescott Hewett, Charles Hawkins, James Paget, James Dickson, and George Pollock. Mr. Thomas Blizard Curling, of Grosvenor-street, nominated by Messrs. James Paget, Prescott Hewett, George Critchett, Jonathan Hutchinson, T. P. Teale, and J. E. Erichsen. Mr. Henry Hancock, of Harley-street, nominated by Messrs. Francis Hird, Edwin Canton, Henry Smith, Richard Barwell, Henry Power, and Sir J. W. Fisher. These gentlemen are all Hospital Surgeons and good men, and it remains to be seen which has the greatest interest to displace Messrs. Hawkins and Tatum, and to secure the chair vacated by Mr. Coulson. His Hospital colleague, Mr. Lane, appears to be a great favourite, and is receiving the support of two of our contemporaries. It would appear to be the opinion of several distinguished Fellows that new blood should be occasionally infused into the Council, judging from the list of those nominating candidates, more especially with reference to Messrs. Paget, Hewett, and Pollock, who each nominate two new candidates, and as the two first-named are ex-professors of the college, it is rather significant. The Fellows will no doubt admire the independence of these gentlemen. But what are the provincial voters about? It was generally expected that Mr. Turner, of Manchester, would have come forward. Where is Mr. Teale, of Leeds, Mr. Wiblin, of Southampton, who have made reputations beyond their own localities,—are deservedly well known in this metropolis, and in these days of railways and telegrams—annihilators alike of time and space—they would be placed on nearly an equal footing with the London councillors. So little interest do the provincial fellows appear to take in these elections, that, with the exception of Mr. Teale, not one has even signed a nomination paper. With regard to the approaching election it will be more difficult than usual to diagnose the result; some of the knowing ones state that a coalition is formed of the friends of the first three candidates, viz., Messrs. Hawkins, Tatum, and Lane, to bring in these gentlemen, and as all three are or were connected with St. George's Hospital, there is no doubt but that they will receive considerable support The more scientific portion of the Fellows will support Mr. Ex-Professor Busk, and although Mr. Hancock appears last in chronological order, he appears a decided favourite, and is coming, if a sporting phrase may be allowed, well into the betting. The election will take on Thursday, the 2nd proximo, and in the evening the Fellows will dine together at the Albion Tavern, under the presidency of Mr. Turner, of Manchester, when, judging from the unusually large number of stewards, the party will be a very large one.

DU CHAILLU'S COLLECTION.—The Museum of this indefatigable explorer has just been dispersed by auction, and one of the most valuable lots, viz., 93—described as a magni-

ficent series of gorillas, male, female, and young, in fine condition, the two adults having been beautifully prepared by Mr. Wilson, the eminent taxidermist—was knocked down to a private member of our Profession, Dr. Edwards Crisp, M.R.C.S., for the large sum of £110, being much below its real value. Mr. Flower, the Conservator of the Hunterian Museum, and Professor Clark, of the University of Cambridge, made judicious purchases for their respective collections; several specimens also went to the University of Oxford.

SUDDEN DEATH OF JOHN ARMITAGE PEARSON, ESQ., F.R.C.S.—On Saturday, the 6th inst., the above-named gentleman appeared in his usual health and spirits, and in the afternoon went to dine with his friends, Dr. Sheridan Muspratt and Mr. J. L. Hutton, of Liverpool, at St. Ann's Hotel. At dinner, Mr. Pearson was about to take a glass of wine, when he could not grasp it—he stretched forth his other hand with a like result, and immediately became insensible. Dr. Robertson and Mr. Shipton were instantly sent for, but in a few minutes he ceased to breathe, death being caused by apoplexy. This sudden and melancholy end of one so well known created a deep sensation, and cast a gloom over the whole town, being a great shock to all who witnessed it. Mr. Pearson, formerly of Woolton, near Liverpool, had resided and practised in Buxton during the last eight years. He was one of the Medical staff of the Devonshire Hospital, and was twice elected a member of the Buxton Local Board. His remains were interred at St. John's Church, on Thursday.—*Buxton Advertiser*, June 13.

TESTIMONIAL TO DR. CHADWICK, OF BOLTON.—We have great pleasure in announcing that the articles forming the testimonials to Dr. and Mrs. Chadwick are now complete, and for several days have been on view to the subscribers, at Mr. Monk's, jeweller, Deansgate. The testimonials consist of a beautiful silver candelabrum, a splendid silver salver, and a handsome dressing-case, with toilet service complete. The candelabrum is for three lights, and is richly embellished with ornamental foliage. The base of the stand is round, and in the main part its dimensions are thirteen inches diameter. The stand is neatly engraved, and has a plateau richly chased. In the front the following inscription, commemorative and explanatory of the purpose of the testimonial, is engraved in ornamental letters, with floriations:—"Presented (with other plate) to Samuel Taylor Chadwick, Esq., M.D. Edinburgh, F.R.C.S. England, J.P., etc., in testimony of the grateful appreciation of the inhabitants of Bolton and the neighbourhood, of his long-continued and valuable services as a learned Physician and skilful Surgeon, and of his gratuitous devotion of time and ability to the poor of Bolton. May 13, 1863."—*Bolton Guardian*, June 13.

A SHAM "DR."—At the Hartlepool Police-court, on Tuesday, Thomas Hetherington was summoned, at the instance of the Secretary to the Hartlepool Medical Registration Association, for using the title of "Dr.," thereby implying that he was recognised by law. It was stated that defendant had a large brass plate on his door with "Dr. Hetherington's Private Dispensary" thereon; that he circulated bills under the same title; that he had no qualification for such title, and was not in the Medical Registry. Mr. Marshall, for the defence, said the prosecutor had not proved whether his client was in practice as a Surgeon before 1815; that he was not the holder of a diploma from any foreign body or otherwise; and that "Dr." did imply doctor of medicine. He read some cases which had been heard before the Queen's Bench, in which parties had been convicted by magistrates for adding Surgeon to their names, and that such appeals had been decided in their favour.—The Bench said they were of opinion that "Dr." had been evidently used to imply he was a Doctor of Medicine, and not having his name registered as such, they fined him £5 and costs, or two months' imprisonment.—Mr. Marshall applied for leave to state a case at Queen's Bench, which was acceded to.—*Leeds Mercury*.

ON RE-VACCINATION.—M. Vleminckx, the distinguished Medical Director of the Belgian army, has been for some years past engaged in investigating the subject of re-vaccination, and the following are the conclusions he has arrived at, based upon 2000 re-vaccinations performed with the greatest care:—1. The re-vaccination of well vaccinated subjects generally produces but very slight useful effect. 2. Re-vaccination is much more called for in the case of persons who have had the small-pox than in those who have been vaccinated 3. Re-vaccination is more successful in proportion to the length of time that has elapsed from the period of the first vaccination or an attack of variola. 4. Prior to the age of 25 re-vaccination is generally useless. 5. From that age until the 35th year, it gives rise to useful results in a certain number of individuals, but still in an exceedingly limited number, so that, without proscribing it, it should not be very strongly recommended. 6. After the age of 35 it becomes truly a preservative, and consequently necessary. 7. When it gives rise to no result on a first occasion, this is no reason why it should not be resorted to at another epoch, there being no proof that the receptivity may not have become developed in the period between the two operations. 8. The re-vaccination of pupils of schools and seminaries is useless. 9. The same may be said respecting the soldiers of the Belgian army. These conclusions were arrived at by M. Vleminckx in 1858, and none of them were shaken by the results of other investigations conducted on a large scale in 1861-62; and an epidemic of variola which broke out in East Flanders in 1862 has still farther confirmed their accuracy.

TRANSMISSION OF SYPHILIS BY VACCINATION.—An able writer in the *Presse Méd. Belge* (No. 25) strongly protests against the fashion, which now seems to be prevailing, of adopting every case, however defective in its particularisation, brought forward in proof that syphilis can be propagated by vaccination. A careful examination of these cases fails to exhibit a single instance in which the syphilitic infection, if syphilitic it be, which in many cases is doubtful, may not have been conveyed by other means. Dr. Max thinks he has clearly shown that the famous Rivalta cases were quite destitute of satisfactory proof of their syphilitic nature; and his objections have been supported by observers of the highest authority, as Sperino, Cullerier, and Ricord himself. In Belgium, at all events, these Rivalta cases had been buried in well-deserved oblivion, the faith in the efficacy and safety of vaccination being in no wise shaken, when the Profession was startled by the announcement that Ricord had become converted into a believer in the reality of vaccino-syphilitic inoculation by a case brought before the Academy of Medicine by Devergie. This is preposterous, for the case is acknowledged by its own relater as devoid of all particulars requisite to ensure its accuracy, and has been referred back in order that such may be sought for. That an observer of thirty years' experience, and so incisive a critic as M. Ricord should, upon such slight grounds, abandon his views—so recently announced—is indeed incomprehensible, and is much regretted by reason of the temporary triumph thus given to erroneous conclusions. Vaccinal syphilis has been hastily admitted as an acquired certainty, long experience, common sense, and the absence of well authenticated facts notwithstanding.

BARBER-SURGEONS AND THEIR HALL.—The pole, which even now, in country places, projects over the shaver's shop door, indicated at first that persons might be bled there, as the patient, when phlebotomy was performed, grasped a tall rod, to keep the arm steady. Of course clever men soon appeared amongst the barbers, and in no long time began to practise as Medical men—on the whole, no doubt, with advantage to the humbler classes; their right to do so was quickly recognised by custom, and Henry VIII. granted them a charter of incorporation, which for several centuries was the sole document which made their occupation legal. On entering from Monkwell Street, the building shows signs of neglect and disrepair, and first you come into a rather spacious hall, which is not often used, and, though elegant in its proportions, is bare and dirty. Quitting this, you enter an inner hall, probably sixty feet long by thirty wide, full of objects of the highest interest. There are several windows at the back, but the light is principally derived from a circular lantern in the centre, and this is a singularly beautiful specimen of the architect's talent. It is very lofty, and is encrusted at every point with exquisitely delicate carvings of fruit and flowers in every possible variety, "not done in plaster," said our cicerone, "but cut out of the solid wood." The walls are covered with extremely fine original paintings, and they look wonderfully fresh and well preserved, scarcely any of them showing the slightest appearance of decay.—*London Scenes and London People*.

SUPERNUMERARY FINGERS.—M. Gaillard, Surgeon to the Hôtel Dieu, Poitiers, states that he has met with three varieties of this deformity. 1. The finger is only bifid, articulating with the metacarpus by a single head. 2. Two

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fingers are placed in juxtaposition, being articulated side by side, only one articular capsule surrounding the head of the metacarpal bone. The author met with the case of a young child which exhibited four thumbs and four toes (all the children of the family having this deformity). Two thumbs were removed, leaving *in situ* the articular apophysis of the supernumerary thumbs. 3. The supernumerary finger is entirely isolated and implanted on a special articular surface of the metacarpus, the superfluous part almost always being a thumb or great toe. This is the rarest variety, and M. Gaillard relates an example occurring in the person of a tailor, who wished the thumb to be removed in consequence of the obstruction it caused him in his occupation. The synovial membrane of the additional thumb had no communication with that of the normal one. Disarticulation was performed, and although the healing of the wounded surfaces was tedious, the case did very well, the man being well contented to get rid of his incumbrance.—*Gazette Med.*, 1862. No. 43.

BOOKS RECEIVED.

On the Occurrence of the Malignant Pustule in England. By Wm. Budd, M.D. London: Richards. 1863.

. A curious and valuable collection of facts. We have several times called the attention of our readers to the significance of *flies, i.e.*, the presence of these pests is proof that there must be some organic matter at hand on which they fed whilst in the shape of maggots, and in which the larvæ were undisturbed. Still more does Dr. W. Budd show the manner in which they may be considered as propagators of disease.

Parturition without Pain or Loss of Consciousness. By James Townley, M.R.C.P. Ed. London: J. W. Davies. 1863.

. The substance of this book is alleged to be a reprint from the *Lancet*. It is perfectly worthless in itself, and is garnished with a series of puffing testimonials from women, which (if genuine) do little credit to the writers, and less to the author, contrivers, and publisher of this not first-class book.

The Third Annual Report of the Acclimatisation Society of Great Britain, Ireland, and the Colonies. 1863.

. This Society is doing well. It has a good balance at its banker's, and its members are now fairly working out the difficulties of the problems before them. Difficulties there must be, and some failures. The Chinese sheep possess wonderful fecundity, even when crossed, and are described as good sucklers; but they require to be very well fed. Of course they do, for *ex nihilo nihil fit*. They also have very tender feet, a malady which the lambs show at a month old, and which Lord Powerscourt's steward cannot cure even "by dressing with the most approved compositions." If we had to treat such a malady in the human subject, we should prescribe greater variety or quantity of food, or both. Some kinds of deer, and the Moufflon, or Sardinian sheep, thrive at Powerscourt; not so the Eland. "The climate of Ireland," says his lordship, "is, I think, too damp for the Antelope tribe, as I had two pairs of Nylghaie, all of which died sudden deaths, the animal being apparently healthy in the evening, and found dead next morning. These Nylghaies were all examined after death, and the only verdict given by a Medical man was slight congestion of the lungs, and death from the excessive wet. My experience is, that many of these animals will bear a very great amount of dry cold without harm, but wet, *continual* wet, as is proverbially the case in Ireland, makes it an unfavourable climate for experiments with tropical animals. It stands to reason, as far as I see, that the Eland, an animal inhabiting, in his native country, dry, sandy deserts, and able to live without water for days and weeks, and having a capacity of containing his supply of water like the camel, is an animal difficult to accustom to a climate where it rains four days in the week!" Mr. Grantley Berkeley speaks hopefully of the Prairie Grouse, Brazilian Geese, and Pintailed Duck. But besides birds fit for the table, we are promised some which will be of singular use—the Trumpeter Bird, from Central America. "These fine birds, which are expected to breed well in this country, are easily domesticated, and become attached to the human race in a most extraordinary manner. In their own country they will trustily watch a house, like a dog, and they give warning of danger by an arrangement in the windpipe which enables them to give forth a trumpet-like sound—whence the name. The Trumpeter Bird may also, it is said, be trained to watch a flock of poultry, and even to shepherd a flock of sheep. It possesses great courage, and is beautiful in form and colour." Of fish there is nothing to add to our report of Mr. Buckland's late lecture. The prosperity of the Ailanthus silkworm seems to promise that ladies shall, in time, grow their silk dresses in their own gardens. Amongst vegetables, the Chinese Yam seems to require a good deal more study and experiment; the arrowroot and certain pease do not promise much, but the Bunch Grass, an importation from the Mormon district of North America, may probably prove to be a capital crop for sandy and desolate pastures at home. We strongly advise our country friends who have gardens to join the Acclimatisation Society.

The Aural Surgery of the Present Day. By Dr. W. Kramer. Translated by Henry Power, M.B. Lond. London: New Sydenham Society. 1863.

A Year Book of Medicine, Surgery, and their Allied Sciences, for 1862. London: New Sydenham Society. 1863.

The Watering Places of England. Fourth Edition. By Edwin Lee, M.D. London: John Churchill and Sons. 1863.

Two Cases of Murrain in Man. By J. B. Hislop, F.R.C.S. Ed. With Remarks, by George W. Balfour, M.D. Edinburgh. 1863.

The Principal Baths of Germany, France, and Switzerland. Fourth Edition. By Edwin Lee, M.D. London: John Churchill and Sons. 1863.

Atlas of Portraits of Diseases of the Skin. Fasciculus Third. New Sydenham Society. 1863.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. J. Henderson, Shanghai.—Cyropædia, undoubtedly.

Dr. Gerris.—We should have been happy to have inserted the Report, but it is dated June 4, and, in this busy age, things are soon forgotten.

"*Constitutional Tendency.*"—Captain R——, a naval officer of high character, was compelled, by painful indications of nephritic disease, to call one morning on an eminent Physician. Sir Henry listened with deep concern to the captain's symptoms, looked at his tongue, and felt his pulse, but drew his conclusions chiefly from the captain's rubicund nose. "For the next two or three months," said Sir Henry, "I must beg you to abstain entirely from wine, and from all spirituous and fermented liquors." "From beer and spirits, if you like," said the captain; "but after dinner I must have my glass of wine. I can't do without my glass of wine." "You really must do without it," replied Sir Henry, "if you wish to get well." "Get well, Sir Henry!" answered the captain. "Why, I came to you, expecting you would give me something to make me well. I can't do without my glass of wine." (N.B.—The glass of wine, without which the captain could not do, was a glass out of the second bottle.) Sir Henry, finding remonstrance vain, gave a general turn to the conversation, and presently the captain rose to take leave. Sir Henry, with extraordinary courtesy, attended him towards the front door. While they were passing through the hall, Sir Henry, as if struck by a sudden thought, paused opposite the door of his front parlour. "By the by, Captain R——," said he, "this is my museum. Perhaps you would like to walk in and take a look. There are some curious things." They entered. The museum consisted entirely of anatomical preparations, made by Sir Henry himself. The captain looked first at one, then at another, with interest, but also with awe, such as others have felt under similar circumstances. "Now this," said Sir Henry, taking down a bottle which contained something preserved in spirits, and placing it in the captain's hands, "is the kidney in its healthy state." The captain surveyed it with much gravity. "This," said Sir Henry, taking down another bottle, "is a kidney in that state of incipient disease in which yours is at the present time." The captain viewed it with comical concern. "This," continued Sir Henry, taking down a third bottle, "is what your kidney will be a few months hence." The captain stood aghast. "And this," added Sir Henry, taking down a fourth bottle, "is what your kidney will become in its last and fatal state." The captain bolted! However, the captain gave up his glass of wine, which he couldn't do without, and, thanks to Sir Henry's original mode of dealing with a refractory patient, recovered his health. Nevertheless, the captain used always to maintain that he had a "constitutional tendency" to nephritic malady; in support of which thesis he was accustomed to state that his father the admiral had a tendency to the same form of disease. I can just remember the admiral, and of one thing I have a perfect recollection—the admiral, like his son, had a very red nose.—*Blackwood's Magazine.*

BETHLEHEM AND ST. THOMAS'S HOSPITALS.

A deity in the shape of Sir George Grey, with Lord Shaftesbury and the Commissioners of Lunacy in his train, has at last interposed to expedite the negotiations between the Governors of Bethlehem and St. Thomas's. Whatever be the logic of establishing one Hospital on the site of another, which has just been pronounced by the Home Secretary unfit for its purpose, it is something to know that at least there is a probability that the lunatic Hospital will be erected in pure air away from the din and excitement of the city. The authorities of St. Thomas's, however, are by no means unanimous in desiring the site of Bethlehem. The Medical staff are said to be in favour of a piece of ground, to be reclaimed from the river, opposite to the new Palace of Westminster; and a deputation from the Grand Committee of St. Thomas's had, on Wednesday, the 17th, an interview with the Thames Embankment Committee for the purpose of discussing the subject. The following are the official letters on the subject of the removal of Bethlehem:—

"*The Royal Hospitals of Bridewell and Bethlehem.*

"Whitehall, June

"Sir,—I am directed by Secretary Sir George Grey to transmit to you, herewith, a copy of a letter which has been received from the Commissioners in Lunacy, stating their views in reference to the question of the purchase of Bethlehem Hospital by the Governors of St. Thomas's Hospital, and the removal of the former institution to a healthy and suitable locality in the neighbourhood of London; and I am to request that you will submit the same to the Governors of Bethlehem Hospital, with the expression of Sir George Grey's concurrence in the views of the Commissioners in Lunacy, and of his hope that the Governors will carefully consider the subject of the unfitness of the present site and buildings of Bethlehem Hospital for the purposes of the institution, and not allow the opportunity now offered of removing the Hospital to a suitable locality to escape.

"I have the honour to be, Sir, your obedient servant,

"H. WADDINGTON."

"The President of Bethlehem Hospital, &c."

"Office of Commissioners in Lunacy,

"19, Whitehall-place, June

"Sir,—The Commissioners in Lunacy have watched with much interest the proceedings and discussions which have for some time past been before the public in reference to the question of the purchase of Bethlehem Hospital by the Governors of St. Thomas's, and the removal of the first-named institution to a healthy and suitable locality in the neighbourhood of London. It was the earnest hope of the Commissioners that the pro-

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tacted negotiations which have so long occupied the attention of the promoters and wellwishers of both those important and wealthy charities would ere this have eventuated in an arrangement so desirable, and recommended by such obvious considerations of the great benefits which would thence be derived by the unfortunate objects of the respective institutions.

"It is, however, with Bethlehem Hospital and its insane inmates that the Commissioners are specially concerned, and it is with the view, ere it be too late, of urging upon the Governors the expediency and duty of availing themselves of the present favourable opportunity to give the insane the advantages of pure air and cheerful scenery, so essential to health, mental and bodily, that the Commissioners are induced to address to Secretary Sir George Grey the present communication.

"It has for many years been the opinion of the Board that the site of Bethlehem Hospital, as respects its limited extent and situation, in the centre of a dense and rapidly increasing population, is most unsuited to the due Medical care and treatment of the insane, for whose sole benefit the administration of its ample property and income is intrusted to the Governors. Outdoor exercise and recreation, and freedom from disturbance and observation, so indispensable to the proper treatment of insanity, especially in its earlier stages, require an ample extent of grounds and gardens within the boundaries of the institution. In all these respects Bethlehem Hospital is essentially defective, and the Commissioners are unwilling to believe that the Governors can have finally closed the door against the offer of an eligible site in the country, and within a convenient distance of London, of which they have it in their power now to avail themselves.

"The views above expressed have always been entertained by the Commissioners, and were embodied in a communication to Mr. Secretary Walpole as far back as November, 1858; wherein, with reference to a collateral question, the Commissioners adverted to the consistency of the opinion conveyed with the reasons they had 'given for suggesting the removal of Bethlehem Hospital from its present populous locality into the country.'

"The observations above made have been confined to the question of the site; a most important objection to Bethlehem Hospital, as a place for the treatment and cure of insanity, remains to be noticed, viz., the unfitness, according to modern opinions, of the building in respect to its construction and arrangements. The general aspect of the Hospital, externally and internally, notwithstanding the efforts made within the last few years to enliven the long corridors and day-rooms, cannot but exercise a depressing influence upon the inmates, whose means of out-door exercise are so limited and inadequate. The Commissioners, in the case of asylums for pauper lunatics, would never sanction plans upon the principle of Bethlehem Hospital.

"The new Hospital, which the Commissioners still trust will be built in the country, will of course be constructed upon a plan embodying all the improvements suggested by modern experience and the advanced state of science.

"The large funds at the disposal of the Governors confer upon them almost unprecedented means of improving the care and treatment of the insane, and, consequently, impose upon them, in an especial manner, the duty and responsibility of applying those funds in the manner best calculated to promote and extend the objects and benefits of the institution, which cannot be done upon the present site. The opportunity now offered to remove the Hospital to a suitable rural locality may never occur again.

"It will be for Sir George Grey to consider in what way effect can be best given to the views which the Commissioners have thus endeavoured to bring under especial notice, and in the greatness and importance of which they doubt not he will concur. "I am, &c.

"W. C. Spring Rice, Secretary.

"H. Waddington, Esq., Home-office."

The Value of the St. Andrews Degree.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you have the kindness to answer the following question, whether, in the appointment of a Physician to an Infirmary, an M.D. of St. Andrews, taken under the new regulations this year, is not equal, so far as Medical qualifications go, to the same degree taken at London or any other University. I am, &c.

June 10. M.D. St. And.

[*.* Yes.—Ed.]

The Permanganate of Potash.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I shall be greatly obliged if some one of your chemical readers will enlighten me in your pages on the value and mode of use of the permanganate of potash. 1. As a disinfectant; naming the colour change in the solution. 2. As a test for the existence of organic impurities in water. And further, as an individual pestered beyond measure by beetles and crickets, I should like to know some agent for their destruction.

I am, &c. Habitans in Fano.

Small-pox in Pregnant and in Parturient Women.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—My experience during the present epidemic of small-pox tends so far as it goes to favour the idea that in this disease an exception must be made to the rule laid down by Dr. Simpson and others regarding the eruptive fevers in the puerperal state.

During the last few months I have met with three cases of small-pox in my own practice where the eruption appeared from two to five days after confinement, and I have been informed by Medical men here of three others which have occurred to them. All these were mild cases, and made good recoveries. Another case, however, which probably ought to come under this head, proved fatal. The patient was first seen by a Medical man on the fifth day after delivery; the eruption then appeared to be four or five days old, but the friends had not noticed it until the day before she was visited.

On the other hand, I have had one case where the eruption appeared during the fifth month of pregnancy, and have been informed of two others where it appeared during the third and ninth months respectively. In each case the disease assumed a severe form, labour came on, and the patients died a few hours after delivery.

All the patients were reported to have been vaccinated when children. These numbers are of course too few to admit of a positive conclusion being drawn from them, but perhaps others may be induced to add to them. I am, &c.

Barnsley, June 15. Michael T. Sadler, M.D. Lond., &c.

Advertisement for a Medical Servant-of-all-Work.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I beg to forward to you another specimen of "Board of Guardians" work. The wording of this advertisement, taken from the *Times*, is in itself a curiosity. I thought when I began reading it the Union was advertising for a cook, "duly qualified." I pity the poor fellow who undertakes this appointment, if all we hear by the papers of the character of the population of Aldershot be correct; but, to be sure, "the Board" offer a liberal salary for so small a population, and so circumscribed an area. I fear there will be a severe contest for the post. I am, &c.

Civis.

"Farnham Union, Surrey.—Wanted, a duly qualified Practitioner, as one of the Medical Officers of this Union. His district will be the parish of Aldershot, the area of which is about 4144 acres, and the population 4957. His salary £30 per annum, and he will be required to reside at Aldershot. Testimonials to be sent to the Guardians, at the Board-room, Farnham Workhouse, by ten o'clock in the morning of the 18th inst., when the appointment is intended to be made.—Wm. Hollest, Clerk to the Union. Farnham, June 4, 1863."

Astigmatism.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In speaking of the word *astigmatism* as having been "lately introduced," I meant that it had lately been brought into common use, and I ought so to have expressed myself. I was quite aware that the word, as Mr. Carter remarks, had been used by Mackenzie; indeed, it was from his treatise that I learned the fact of the peculiarity of vision thus designated having been described by Young and Airy. But I confess to have read Mackenzie's notice carelessly, and thus to have overlooked the statement as to the word astigmatism having been suggested by so great an authority as Professor Whewell. I quoted Snellen, because he is one of the latest writers on the subject.

It seems very presumptuous to question the accuracy of Professor Whewell's nomenclature, and I wish to do so with due deference, inasmuch as I am not well acquainted with the terms which the Greeks employed to express optical phenomena.

Is *στιγμα* the true Greek equivalent of *focus*? If so, astigmatism would seem to imply the absence of any focal point. But this is not the condition of an eye said to be the subject of astigmatism. In such an organ rays parallel to its vertical meridian and those parallel to its horizontal meridian have different foci, but still both these foci exist within the eye. It seems to me, therefore, that if *στιγμα* be the equivalent of *focus*—and on this point I seek information—an eye with the optical peculiarity just noted should be described as being the subject of *Distigmatism*, not of *Astigmatism*. I am, &c. Quærens.

May 11.

Bitartrate of Potash in Small-pox.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The subjoined details of three recent cases of variola, treated with the bitartrate of potash with remarkable success may prove interesting:—

On the 9th ult., a girl in her seventh year, daughter of a basket-maker, who had just become convalescent after a severe attack of small-pox, was seized with the usual premonitory symptoms of variola. On the 12th an eruption appeared, and on the evening of that day assumed a pustular form. At 6 p.m. a 22-gr. dose of the bitartrate was administered, and in three hours after an 11-gr. dose. The latter dose was continuously repeated at the same interval. A diminution of the fever was apparent after the third dose. The eruption on the following morning was more copious, but a very remarkable change was perceptible in that appearing after the fourth dose. The modified eruption was of a vesicular character. On the 15th both the primary and modified eruption were evidently yielding to the action of the medicine. Within a week the latter had completely disappeared, and the former was fast fading.

It is worthy of note that a mistake was made by the attendant in diminishing the quantity of the second and subsequent doses. The modified character of the secondary eruption, and its disappearance before the primary, palpably show, however, the effect of the medicine. The girl had been vaccinated in infancy.

A boy of ten years, a member of the same family, was attacked on the 17th ult. On the following morning febrile symptoms were apparent. A 45-gr. dose of the bitartrate was administered at 9 a.m. The fever abated in two hours. The same dose was repeated in six hours after the first, and shortly after its administration the febrile symptoms had entirely left the patient. The bitartrate in this case was administered before the appearance of an eruption. Three spots of a papular nature were afterwards visible, but these faded in two days, and in a week afterwards not the slightest trace of them remained.

A girl in her sixth year, sister to the other patients, failed on the same day as her brother. A 22-gr. dose of the bitartrate was administered at 4 p.m., and the dose repeated in six hours. The fever had quite left the patient on the third day. The eruption in this case was of the same character as in the preceding one, but more copious. In a week it had entirely disappeared. I am, &c.

June 10. C. R.

Synopsis of a Case of Purpura Combined with Typhoid Fever.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I beg to forward for publication the following case of purpura and typhoid fever:—Robert M., aged 26, farm servant, married, the father of three children. First seen on the evening of February 26, 1863. *Symptoms.*—Patient had been ailing for ten days or more. Gums bleed freely when pressed; raised or nodulated pink or purplish spots, from the size of the point of the little finger to that of a shilling, observed on both legs; patient observed them several days ago; has passed very little urine for two days, evidently from a congested state of the kidneys. On the fourth day from the first day I saw him, a distinct eruption of typhoid spots is observed over the body. A day or two after this, considerable head symptoms during the night, somewhat drowsy during the day, and complains of headache; pulse 108; tongue coated with a dark brown fur; considerable thirst; appetite not quite gone. On the tenth day is seemingly better. Tongue cleaner, and pulse not so frequent; this favourable change lasted little more than a day, the patient gradually returning to his former state, and on the fourteenth day is markedly worse, breathing is more frequent, and he seems also to breathe with difficulty. Was exposed to a current of very cold air yesterday. Fine crepitus is heard at the inferior half lower lobes of both lungs; two days after this,

bronchial ronchi heard higher up. Hepatization inferior front of right lung; great debility; bed sores; diarrhœa about the 24th day. Crisis from 28 to 30 days.

Treatment.—For the nephritic symptoms. First evening (26th).—Dover's powder, warm gruel, mustard poultice to loins.

27th.—No improvement. Venesection to 16 oz. A dose of ol. ricini, liquor. ammon. acet. every four hours in warm gruel A large linseed meal poultice to region of kidneys. Made urine rather freer after the bleeding, but did not make it very free for more than a week.

Kephalic Symptoms.—A vinegar and spirit lotion to the shaven head; a few small doses of calomel; not much relieved by these means. Leeches to the temples; marked benefit from them.

Pneumonic Symptoms.—Hydrarg. sub. mur., with pulv. ipecacuanha, and blisters to the chest. For the fever itself he took nitro-muriatic acid in a small quantity of compound infusion of gentian. The bed sores were painted with a solution of gutta-percha in chloroform, as recommended by Dr. Corrigan, of Dublin. Sheet gutta-percha, ℥ss.; chloroform ℥j., solve. The diarrhœa was controlled by ipecacuanha combined with chalk. The strength was supported with beef-tea, wine, chicken-soup, etc., etc. No solid food was allowed for upwards of seven weeks.

Remarks.—As purpura combined with typhoid fever is a rare disease, it may be thought there has been a mistake in the diagnosis. Now, what are the facts? We have then an eruption of purplish spots on the legs; these are large, and do not disappear on pressure, and the gums bleed freely when pressed. Eight days or more after the appearance of the purple spots we have a second eruption of small spots (over the body), with a red zone and elevated centre, which disappear on pressure; after these have made their appearance the whole train of symptoms point to typhoid fever. I am, &c.

THOMAS DOWNIE, M.D. St. And., L.R.C.P. Edin.

Blantyre, June 10.

DR. G JOHNSON ON THE USE OF THE LARYNGOSCOPE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The admirable paper "On the Use of the Laryngoscope," by Dr. George Johnson, which recently appeared in your Journal, is calculated to draw forth some remarks on the optical bearings of the question, especially in relation to the frontal reflector, which he so strongly recommends; and before proceeding to the scientific part of the subject, its historical aspect may perhaps be allowed to claim our attention.

Though it is well known that Garcia's observations were not credited till verified and extended by Czermak, all honour is claimed for the former; whilst the latter, who, in point of fact, created the art of laryngoscopy, is described as "a diffuser of it throughout the civilised world." If Garcia's paper was "the fountain-head of our knowledge," it would certainly have remained buried in the depths of the *Proceedings of the Royal Society*, had not Czermak, with truly Artesian genius, succeeded in boring through the intervening crust of apathy and incredulity, and reaching its source. This is not a mere form of speech, for those who are acquainted with the literature of the subject must well know that Czermak's paper (March, 1858) was really the first publication which gave an *impetus* to laryngoscopy.

Had not the necessary limits of Dr. Johnson's article prevented him from going too minutely into details, after stating "that Dr. Türck lent his mirrors to Dr. Czermak," he would doubtless have added, that "for some months, Türck had entirely given up his fruitless attempts to use the laryngeal mirror." This occurred in November, 1857,—not "in the early part of the year 1858;" and though this slight inaccuracy may appear scarcely worth mentioning, it has a certain importance when considered in relation to Professor Czermak's article, already alluded to.

To discuss now the practical part of the question.

1. That it is not absolutely necessary to look through the centre of the reflector was pointed out by me more than a year ago (*Medical Times and Gazette*, April 19, 1862). Indeed, on the ground of its "diminishing the difficulty of managing the reflected light," the plan of not looking through the hole "is strongly recommended to the beginner." On the other hand, the inconvenience of looking through the hole in the mirror is experienced only by the beginner, and a very little perseverance soon overcomes it.

2. When the reflector is perforated, there is no inequality of focal distance; and when the glass is left in the centre (but not silvered), the inequality, is not perceptible for it must be remembered that the reflector is only very slightly concave, and that both its surfaces are parallel.

3. With regard to the eyes being shaded from the direct rays of the lamp, it is to be observed that this is effected by Tobold's condensing illuminator (a), which is infinitely the best lamp that can be used.

4. The more free movement which the frontal reflector allows, though it may be of use for the method of auto-laryngoscopy, recommended by Dr. Johnson, is of no use in examining patients.

5. "The dark spot in the centre of the luminous disc" can only be discovered when a very feeble light is used. With an ordinary Argand gas-burner, it can be seen at a distance of three inches from the reflector, but at five inches it completely disappears. Of course, the reflector is still further from the patient in ordinary laryngoscopy. With an inferior oil-lamp, the dark spot disappears near the focus (of the luminous cone), which ought to be thrown on the laryngeal mirror, whilst with a strong light, such as that of Tobold, there is no dark spot at all.

6. Dr. Johnson asks, "Are there advantages in looking through the centre of the reflector?" The answer to this question is, that where the larynx is large, the frontal reflector can be used, because then the rays, proceeding both from the reflector and the eye, may be able to impinge on the laryngeal mirror, so as to be reflected into the larynx. The advantage, therefore, of looking through the centre of the reflector consists in the rays both from the reflector and the eye proceeding from the same spot; so that if the light is thrown on the laryngeal mirror (properly introduced), the observer cannot fail to see. On the other hand, should the patient be unable to open the mouth widely, or should the opening into the larynx be at all small, the laryngoscopist who uses the frontal reflector will find that both rays (viz., that proceeding from the eye and that from the reflector) cannot strike the laryngeal mirror so as to fall within the larynx.

In conclusion, it is to be observed, that though "we do not look down the tube of the trachea," the same optical laws are in force as if we did. I need hardly say, that "in these days of stereoscopes," everybody knows that reflected images appear behind the surface of the mirror exactly as if they were the real objects (not as though they were drawn on a flat surface).

These observations do not at all detract from the general value of Dr. Johnson's interesting paper, which I have no doubt was read by others with as much pleasure as it was by Yours, etc.

MORELL MACKENZIE, M D. Lond.

June.

(a) This lamp can be obtained from Mr. Krohnl, 241, Whitechapel-road.

COMMUNICATIONS have been received from—

APOTHECARIES' HALL; ROYAL INSTITUTION OF GREAT BRITAIN; DR. SMART; DR. THOMAS DOWNIE; CIVIS; QUÆRENS; DR. TAYLOR; KING'S COLLEGE HOSPITAL; M.D. ST. AND.; MR. CHAS. ROSE; DR. R. DUNDAS THOMSON; MR. FREDERICK TAYLOR; THE COUNCIL OF MEDICAL EDUCATION AND REGISTRATION; ROYAL COLLEGE OF PHYSICIANS; DR. T. G. WOLLASTON; DR. J. HENDERSON; MR. C. CARTER BLAKE; DR. MORELL MACKENZIE; DR. H. GERVIS; DR. R. G. HARDWICK; DR. WILDE; DR. W. NEWMAN; DR. CHARLES DYCER; DR. M. T. SADLER.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 13, 1863.

BIRTHS.

Births of Boys, 995; Girls, 1000; Total, 1995.
Average of 10 corresponding weeks, 1853-62, 1628·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	626	560	1186
Average of the ten years 1853-62	544·6	495·3	1039·9
Average corrected to increased population..	..	..	1143
Deaths of people above 90	..	2	2

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	4	15	8	3	4	4	4
North ..	618,210	15	10	14	3	5	6	6
Central ..	378,058	4	4	12	..	6	8	..
East	571,158	11	5	20	2	7	17	4
South ..	773,175	9	11	18	5	14	10	7
Total.. ..	2,803,989	43	45	72	13	36	45	21

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·444 in.
Mean temperature	54·7°
Highest point of thermometer	68·3
Lowest point of thermometer	45·7
Mean dew-point temperature	47·9
General direction of wind	S. W.
Whole amount of rain in the week	0·76 in.

APPOINTMENTS FOR THE WEEK.

June 20. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Lock Hospital, Dean-street, Soho, 1 p.m. Royal Free Hospital, 1½ p.m.

22. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital 1½ p.m.; Samaritan Hospital, 2½ p.m.

23. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

ANTHROPOLOGICAL SOCIETY OF LONDON, 7½ p.m. W Winwood Reade, Esq "On the Bush Tribes of Equatorial Africa."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m Mr. Curling, "On Sterility in Man." Mr. Moore, "On Strangulation of the Stomach in an Umbilical Rupture." And Papers by Dr. Cockle, Dr. Kramer, and Mr Geo. Southam.

24. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m. Middlesex, 1 p.m.; London, 2 p.m.

25. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m.; Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

26. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

EXPECTED OPERATIONS.

King's College Hospital.—The following Operations will be performed on Saturday (to-day) at 2 p.m.:—

By Mr. Fergusson—Tapping an Ovarian Cyst; For Phimosis.

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ORIGINAL LECTURES.

LECTURES ON ECZEMA,

(INCLUDING ITS IMPETIGINOUS, LICHENOUS, AND PRURIGINOUS VARIETIES,)

DELIVERED AT THE

Dispensary for Skin Diseases, Glasgow.

By T. McCALL ANDERSON, M.D., F.F.P.S.
Physician to the Dispensary for Skin Diseases; Physician to the Deaf and Dumb Institution, etc., Glasgow.

LECTURE III.(a)

GENTLEMEN,—At our last meeting, I referred to some of the varieties of eczema, to the causes which predispose to, or occasion an attack, and to the diseases for which it may be mistaken. We are now prepared to form an estimate of the gravity of the affection.

The *prognosis* is rarely serious, for, while the eruption causes great irritation and disfigurement while present, it is almost invariably curable. The most serious cases are those in which the eruption covers the greater portion of the cutaneous envelope, especially when they occur in very young infants or in old or infirm persons. In these instances, the natural functions of the skin are interrupted, and the itching may give rise to serious symptoms, such as convulsions, fever, exhaustion from anorexia, loss of sleep, etc. It is a very rare circumstance, however, for eczema to terminate fatally.

It is curious and interesting to watch the effect of intercurrent inflammations or fevers upon eczematous eruptions, a very good illustration of which occurred the other day in my practice. I was attending two children for very severe attacks of eczema erythematodes affecting the greater portion of the skin. One of them took measles, and two or three days thereafter the eczematous eruption had almost disappeared. The eruption on the other child continued to flourish for a few days longer, when she likewise was seized with measles, and in her case, too, the eczematous eruption vanished. There could be no doubt that these children were affected with measles, for, while it was difficult to make out the rubeolar eruption on their skins, owing to the existing eczema, their younger brother presented about the same time all the characteristic symptoms of measles. When the rubeola had run its course in the cases of the two first-named children, the eczematous eruption gradually but perseveringly returned—a circumstance which unfortunately happens in most instances, and which must therefore be borne in mind with reference to the prognosis.

A great deal of nonsense has been written about the danger of suddenly "driving-in" (as the expression goes) a severe or chronic eruption, such as eczema. For, while I have treated hundreds of cases of eczema, many of them covering the greater portion of the skin, I have rarely witnessed any bad effect even from the rapid removal of the disease. That deleterious effects are occasionally witnessed, however, I am quite prepared to allow. I call to my recollection just now, for instance, the case of a gentleman, almost the whole of whose body was covered with an eczematous eruption. This I succeeded in removing in a few weeks, and, as it went away, he began to pass some blood by his bowels; but, as he himself wrote, he was "not conscious of any uneasiness in the region of the rectum, as if it arose from piles." The same symptoms, he informed me, appeared during his recovery from a previous attack, for which he had been treated by Mr. Startin. In both instances it was slight, and soon passed away without producing any injurious effects; indeed, I have never observed any enduring bad results follow upon the removal of an eczematous eruption where proper precautions were taken, no matter how quickly it was accomplished. To this I shall again refer when discussing the treatment.

Attacks of eczema vary much in their duration, according to the constitution of the patient, the site, extent, and severity of the eruption, and the course of treatment pursued. Some cases get well without treatment in a few weeks; others last for months, or even years. Some would never disappear entirely at all without treatment; but the natural tendency of the disease is to diminish now and then, the change for the better being dependent upon the seasons, atmospheric influences, changes of diet, improvement of the general health, etc.

Relapses are very much to be feared, more especially in the case of those who are apparently in very good health, and in whom the occurrence of the eruption seems to be connected with some unknown peculiarity of the system. They are much less common in those who have suffered from the disease from the use of bad food and the like, for we have here tangible causes, by removing which the eruption is less apt to recur.

Now, supposing that we have a case of eczema under our observation, how do we know that the eruption is on the decline? What, in fact, are the *symptoms of amendment?* It is a good sign when the disease does not tend to spread by the extension of old patches or the formation of new ones, and when no new crops of eruption make their appearance upon the old patches. It is always a favourable occurrence when the infiltration, exudation, and itching diminish. When these symptoms are nearly gone, erythematous and scaly patches are usually left; but, if the disease is progressing towards a cure, the redness gradually subsides, the scales disappear, and the skin resumes its healthy appearance and feeling. It requires, however, to be mentioned, to avoid disappointment, that, when the eruption appears to be rapidly declining, sometimes for some obvious reason, oftener without any assignable cause, the improvement suddenly ceases, a retrograde movement takes place, and, in a few days, the cure is as far off as ever.

When the disease has disappeared, there is usually no trace left of the previous eruption, unless ulceration has occurred, and even then the surface usually resumes its healthy appearance, as the ulcers are for the most part superficial, and do not destroy the deeper tissues of the skin. When they are deep, however, as happens sometimes on the legs, cicatrices are of course left, which vary in size and appearance in proportion to the size, dep h, and site of the previous ulceration. Cicatrices likewise follow the application of escharotics, which, though powerful agents for good, are too often injudiciously used in the treatment of eczema. It need hardly be mentioned, however, that any caustic which has been used so freely as to destroy the deeper structures of the skin, and to leave permanent cicatrices, has been employed by an unskilful hand.

Sometimes, after the cure of an eczema, the skin, which had previously been affected, is much darker in colour than natural, owing to the previous determination of blood to the part, and the increased deposit of pigment thereby induced. This appearance is oftenest observed, and lasts longest upon the legs, for the reasons before alluded to as predisposing to the occurrence of ulcers. It is identical with the coloration which so often follows the application of a blister, instances of which are daily met with in practice; but, in both cases, the colour generally fades and finally disappears, and the skin resumes its healthy hue.

Having now discussed the symptoms of eczema in its various forms, the causes which are fruitful in calling it forth, the diseases with which it may be confounded, and its results as far as they are indicated by the features of individual cases, we are prepared to enter upon the object of our previous investigations, the *treatment* of the affection.

It appears to me that no treatment can be more routine and ineffectual than that frequently adopted in this country for the cure of eczema, and cases of this disease are often allowed to go on for months and years, when judiciously selected applications could have removed it in the majority of instances in as many weeks; for there are few diseases more curable than even severe forms of eczema. The means of cure, which we may divide into the constitutional and the local, must vary, however, according to the age, existing state of health and constitution of the patient, and the seat, extent, and severity of the eruption.

Let me, first of all, direct your attention to the *constitutional treatment:*—

It is necessary in this, as in all other diseases, to make a careful examination of the internal organs, and to rectify, as far as it is within the scope of medicine, any deviation from the normal standard which you may detect, and which may be keeping up or aggravating the skin affection. You will be aided in this investigation by calling to mind what I said

(a) These Lectures have been carefully revised, and many alterations and additions made.

with regard to the causes of eczema, and with regard to those states of the system which are most likely to produce, or to intensify the severity of, the eruption. In fulfilling this indication, you must be guided by broad general principles, with which, I take it for granted, you are already familiar. But I must say a few words with regard to derangements of the digestive organs, and more especially to the regulation of the bowels.

Purgatives are very useful in cases of eczema, though, with few exceptions, they must be looked upon merely in the light of adjuvants to, or forerunners of, other treatment, and the medicine which is selected will depend upon the inclination of the Practitioner, and the features which each case presents. If the tongue is loaded, the appetite bad, the liver torpid, as indicated by the light colour of the evacuations, and the bowels costive; and if, in addition, the patient is not very strong, small doses of grey powder, in combination with rhubarb and salicine or quinine, may be administered with excellent effect.(b)

If the digestive organs are in the state just mentioned, and the patent robust, and especially if fulness in the hepatic region is complained of, occasional doses of calomel, alone or in combination with scammony, may be resorted to with advantage, as they have the effect not only of correcting the torpidity of the digestive organs, but also of "cooling the blood," as the saying is, and of diminishing the cutaneous inflammation.(c) They may therefore be given with the latter end in view, although the liver and bowels are not in a torpid condition. A calomel purge may likewise be prescribed occasionally, if the eruption is extensive, causing much irritation, and exuding copiously; and if you fear the occurrence of any untoward symptoms from its too rapid removal, by other, and more especially by local, means. (See Prognosis.)

With the same object in view, and much more universally employed than calomel, though, on the whole, not so useful, small doses of sulphur, in combination with magnesia or bitartrate of potash, may be taken every evening, and as good a preparation as any is the sulphur confection (Confectio Sulphuris) of the Dublin Pharmacopœia, of which about a teaspoonful may be prescribed. Besides being less effectual, in my opinion, than calomel, it has this additional drawback, that the sulphur is converted into sulphuretted hydrogen, and the secretions have accordingly a very unpleasant odour. It has this advantage over calomel, however, that it is in part eliminated by the skin, and acts beneficially upon that structure, so that it possesses alterative as well as purgative properties. A more pleasant and more elegant preparation is a solution of three or four drachms of sulphate of magnesia in water, with the addition of two scruples of bicarbonate of soda, and made to effervesce by the addition of half a drachm of tartaric acid.(d) This may be repeated every second night. If the patient is of a full habit of body, and if, in addition, he lives too freely, and cannot be prevailed upon to live sparingly, a smaller dose of sulphate of magnesia (say ʒi to ʒii) may be administered twice daily, from a sixth to half a grain of tartar emetic being added to each dose, so as to deprive him in great part of his appetite for a time. In this case the solution should not be administered in effervescence, else the nauseating action of the tartar emetic may be counteracted.

The doses which I have recommended are for adults, and are merely approximative, for of course some constitutions are more susceptible of the action of purgatives than others, and care must be taken to avoid the administration of mercurials as much as possible in the case of those with whom they disagree. Not long ago, for instance, I gave a couple of grains of calomel and three of grey powder to a little girl, which gave rise to the most profuse salivation, ulceration of the mouth, and swelling of the gums and submaxillary glands. Now, this is far more remarkable than the production of similar symptoms in the adult, even with the same dose, for, as a general rule, as most of you are aware, it is much easier to salivate an adult than a child.

Having attended to the condition of the internal organs in general, and of the digestive organs in particular, the internal treatment now radiates in two directions, according as the eruption occurs in the case of those who are apparently in the most robust health, in whom the eczematous rash is called forth in virtue of some peculiar idiosyncrasy (see the causes of eczema) or of those who are scrofulous or debilitated from insufficient or unnutritious food, or from previous disease.

In the latter, nourishing food, tonics, especially those containing iron and cod-liver oil, are our sheet-anchors, and I have repeatedly cured very severe cases of eczema by the systematic administration, for a couple of months, of cod-liver oil and syrup of the iodide of iron, all other treatment of importance having been omitted. The following is a case in point, and you will probably remember that I purposely refrained from additional means of cure, in order that you might see the charming effect of the oil and iron alone:—

Lawrence D., aged about fifteen months, was brought by his mother to the Dispensary, on October 9, 1862, affected with eczema impetiginodes. The eruption covered almost the whole body, with the exception of the fingers and feet, was very itchy, constantly exuding, and studded with crusts. The child was dreadfully emaciated, "just skin and bone," as the mother remarked. It could neither sleep nor eat, and was so weak that it had to be brought upon a pillow. The case looked hopeless, and, indeed, the child had been given up by the previous attendant; but acting upon what I have observed in similar cases, twenty drops of syrup of the iodide of iron in a teaspoonful of cod-liver oil were prescribed, to be repeated thrice daily, and the dose of the oil to be gradually increased up to a tablespoonful.

On October 16 the child was better. The skin being still itchy, however, a lotion of dilute hydrocyanic acid (Ed. Ph.), containing twenty minims to the ounce of water, was ordered, to be used thrice daily. The oil was omitted for a week, as it produced purging. With this exception, the oil and iron were continued uninterruptedly till November 17, about five weeks after the commencement of the treatment, when the mother brought the child out of gratitude to show how well it was. There was hardly a vestige of the previous eruption, with the exception of a few dry crusts and discoloured spots on the buttocks, which were rapidly disappearing. The child appeared to be in robust health; it was quite plump, and its cheeks rosy; its skin soft and white; its appetite very good; and its sleep sound and refreshing. The medicine was to be continued for another month.

Here, then, is an instance of an infant cured of a frightful eczematous eruption, and rescued from the jaws of death by the internal administration of cod-liver oil and iron alone. In severe cases such as this, you will sometimes find it of advantage to rub the oil into the skin of the whole body two or three times a day in addition to its administration internally. Cod-liver oil is sure to do good in these cases if the stomach bears it, and especially if it is taken greedily and with relish by the patient. This is oftenest observed in children whose mother's milk is below par. When this is detected, the mother should no longer give her child the breast, and, amongst the higher classes, who can afford to have a wet nurse, a good one should at once be procured. Amongst the lower orders the child should be fed, in great part, "upon the bottle," a mode of nourishment which, though inferior to the employment of a good wet nurse, is much more desirable than the exclusive use of the deteriorated milk of the mother. Those children whose health has been deteriorated by imbibing their mother's milk too long—and instances are often met with, especially amongst the poor, of children being fed upon the breast, not for months but for years—should be weaned without delay, and appropriate nourishing food substituted.

These children often suffer from diarrhœa, but while specific remedies, guided by general principles, may be cautiously employed towards its removal, you must bear in mind that

(b) ℞ Sulphatis Quinæ, gr. xij.
Pulv. Rhei, gr. xxxvj.
Hydr. c. Creta, gr. xxx.
Sacchari Albi, ʒj.
Divide in Pulv. xij.
Sig. Two daily. (For an adult.) The dose to be so regulated that the patient has at least one full natural evacuation per day.

(c) ℞ Protochloridi Hydrargyri, ℈j.
Pulv. Scammonii co., gr. xl. M.
Divide in Pulv. iv.
Sig. One every week. (Dose for an adult.) Or,
℞ Protochloridi Hydrargyri, gr. iv.
Mas. Pil. Coloc. Co. gr. v.
Extr. Belladonnæ, gr. j. M.
Divide in pil. ij.
Sig. One at bedtime, and a seidlitz powder in the morning. (Dose for an adult.)

(d) ℞ Sulphatis Magnesiæ, ℥iij.
Bicarbonatis sodæ, ℈ij.
Aquæ, ℥ij. M.
℞ Sacchari Albi,
Acidi Tartarici, āā ℥ss.
Syrupi Limonum, ℥ss.
Aquæ, ℥iv. M.
Sig. Mix the two solutions in a large tumbler, and drink during effervescence. (Dose for an adult.)

is often the result of debility, in which case you may expect it to disappear spontaneously when the diet is altered and the general health improved.

In adults under similar circumstances, cod-liver oil and iron are almost equally serviceable, and in them, and likewise in the case of children, small quantities of stimulants may in some cases be superadded, though it is generally advisable to use them with caution.

Some patients, and adults oftener than infants—for the latter rarely refuse it if the system really requires it—cannot take cod-liver oil, in which case cream may be substituted, though it is not so beneficial; and, while taken with relish at first, it is more like to derange the stomach in the long run. So that if the case is undoubtedly one which calls for the use of the oil, do not let the patient put it aside lightly, but make repeated trials of it in varying doses, and always let the bowels be carefully regulated before administering it. Sometimes it is tolerated better by swallowing a small pinch of magnesia about half an hour after the oil is taken, as was recommended lately in some of the Medical journals.

When the appetite is very deficient, a pure tonic may be substituted for a ferruginous one with advantage, such as small doses of quinine and sulphuric acid in a bitter infusion; (e) or, if the stomach is too weak even for this, you may try a little dilute sulphuric acid, which should be given in half-drachm doses twice daily in a wine-glassful of cold water, and which is usually well borne.

But, let us now take the opposite class of cases—and very common they are—in which the patients are neither ill-fed, scrofulous, nor debilitated; but, on the contrary, appear, with the exception of the eruption, to be in a good state of health. In such instances, then, what means, operating upon the system at large, are we justified in having recourse to?

Some recommend the abstraction of blood by means of the lancet, but this is hardly ever necessary; indeed, I have neither had recourse to it myself, nor seen it employed by others; for, while many severe and extensive eruptions in plethoric persons have come under my observation, I have found purgatives—especially those containing calomel—answer all the ends in view. The local abstraction of blood by leeches, cupping-glasses, or scarifications, may sometimes be resorted to with advantage, if the patches of eruption are much inflamed, and especially if the lower extremities are affected, as these parts, for reasons formerly mentioned, are more liable than others to congestion and its results. Even local bleeding may, however, be dispensed with in the majority of cases, although I am aware that this opinion will be regarded in the light of a heresy by some.

The diet must be very carefully regulated, and the patient warned to eat very moderately and slowly, and to masticate his food well. A simple mixed animal and vegetable diet may be recommended, dressed dishes, pastry, pickles, spices, strong tea, and coffee, being particularly avoided. The use of wine, spirits, and malt liquors must, in general, be suspended for a time at least, though in some instances they may be taken sparingly. But you must be cautious, in the case of those who have previously been in the habit of taking them in excess, of discontinuing them all at once, and you must remember, in reference to prognosis, that the cure of an eczema is much more difficult when the patient has been much addicted to the use of stimulants.

In some cases you will find it of advantage to prescribe milk diet for a time, all animal food being avoided.

In the cases which we are now considering, and applicable, to a certain extent, to the class previously alluded to, in conjunction with the means then recommended, there are three classes of internal medicines upon which I place considerable reliance, but especially upon the first, for the removal of the eczematous eruption. These are the preparations of arsenic and sulphur and alkalies.

Of the arsenical preparations, the one which I am most in the habit of employing is Fowler's solution (Liquor Arsenicalis, Ed. Ph.), although any of the others may be selected, according to the taste of the Practitioner. I think it better, however, that the Physician should limit himself as much as possible to one preparation of arsenic, for he thus becomes more familiar with its exact mode of operation, and with the probable dose for different constitutions. An adult may commence with five minims thrice daily, and at the end of a week or so, if it agrees, the dose should be increased by a drop every second or third day, till the disease begins to yield or the medicine disagrees. I do not think it necessary to stop it if slight irritation of the eyes or puffiness of the face is induced; but if these symptoms are at all aggravated, and especially if they are accompanied by pains in the stomach and head, anorexia, and nausea, the dose should be diminished, or in some cases omitted for a few days. You must on no account stop its administration altogether, however, because these physiological effects are produced, and I thoroughly endorse the statement of Dr. Begbie, that, "in order to secure its virtues as an alterative, it will be necessary to push the medicine to the full development of the phenomena which first indicate its peculiar action on the system. Arsenic, as a remedy, is too often suspended, or altogether abandoned, at the very moment its curative powers are coming into play. The earliest manifestation of its physiological action is looked upon as its poisonous operation; the patient declares that the medicine has disagreed with him; forthwith the Physician shares his fears; the prescription is changed, and another case is added to the many in which arsenic is said to have failed after a fair trial of its efficacy." (f) It is necessary to observe, however, that the appropriate dose of Fowler's solution varies in different individuals, and that, while five minims thrice daily soon disagree with some, ten, fifteen, twenty, or even thirty may be taken by others with impunity and with benefit.

To prevent the medicine from deranging the stomach, it should always be given *immediately after* food, and in persons whose digestive organs are weak, a tonic infusion, such as the infusion of cascarilla or gentian, forms a very good vehicle for its administration, and in some cases even a few drops of morphia may be superadded (g) if the stomach is very easily deranged.

As the disease yields, the dose may be gradually diminished, but in no case should its use be suspended till some time after the complete removal of the eruption.

In the case of infants at the breast, it is advisable to administer the arsenic to the mother, whose milk thus furnishes not only nourishment to her babe, but likewise an antidote to its complaint. In children of one or two years one minim may be given twice daily, and the dose gradually increased.

In some cases you may think it advisable to combine arsenic with mercury, as in Donovan's solution (solution of the hydriodate of arsenic and mercury) of which ten minims may be administered thrice daily, the dose being gradually increased. Each drachm of the solution contains about $\frac{1}{12}$th of a grain of oxide of arsenic, $\frac{1}{8}$th of a grain of oxide of mercury, and $\frac{2}{3}$ths of a grain of iodine in the state of hydriodic acid in chemical combination. (h)

And sometimes you may find it beneficial to prescribe arsenic along with iodine, and without mercury, in which case you will find Neligan's prescription, which he names the iodiretted solution of the iodide of potassium and arsenic (i) a very good one indeed, and one which is much used.

I very frequently make use of a private mark, known to two or three Apothecaries, in prescribing arsenic, and I think with good reason. For instance, I know of a lady for whom Fowler's solution was prescribed, who, finding that she was improving under its use, increased the dose of her own accord, and thereby induced poisonous symptoms. Some time after this, she consulted Cazenave, and on her return from the Continent she came to her family Physician, and informed him that she had never been able to take arsenic since she had administered to herself the overdose. The

(e) ℞. Sulphatis Quinæ, gr. xvj.
Acidi Sulphurici Aromatici, ℥iv.
Syrupi Limonum, ℥ss.
Inf. Cascarillæ *ad.*, ℥viij. M., et cola per chartam.

Sig. A tablespoonful thrice daily, half-an-hour before food. (Dose for an adult.)

(f) Dr. Begbie's article "On the Physiological and Therapeutical Effects of Arsenic" will well repay perusal. See his "Contributions to Practical Medicine," p. 270. Edinburgh: Adam and Charles Black. 1862.

(g) ℞ Sol. Fowleri,
Sol. Muriatis Morphiæ, ℥ss, ℥ij.
Syrupi Limonum, ℥ss.
Tinct. Cocci Cacti, ℥ss.
Infus. Cascarillæ, ad ℥xij. M.

Sig. A tablespoonful thrice daily.

(h) "Medicines: their Uses and Mode of Administration." By J. Moore Neligan, M.D. Ed. 4. Dublin.

(i) ℞ Sol. Fowleri, ♏ lxxx.
Iodidi Potassii, gr. xvi.
Iodini, gr. iv.
Syrupi Florum Aurantii, ℥ ij.

Sig. A teaspoonful, in a wineglassful of water thrice daily.—("Medicines: their Uses and Mode of Administration." Ed. 4. P. 465.)

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Doctor, on looking at Cazenave's note, found that she was at that very time taking arsenic without knowing it, under his orders, and with good effect. Then again, some people who consult me have already taken arsenic without benefit, and either refuse to take it again, or are so sceptical of its efficacy, that they take it with great irregularity, and are convinced in their own minds they they are to derive no benefit from it—conditions which are very prejudicial to the due operation of any drug.

Very often, in these cases, the previous arsenical course had been improperly carried out, or not continued sufficiently long, and we are thus compelled either to give it in a concealed form, or to dispense with the use of a most powerful therapeutic agent.

ORIGINAL COMMUNICATIONS.

ON CHOREA: ITS RELATION TO VALVULAR DISEASE OF THE HEART, AND ITS TREATMENT.

By W. S. KIRKES, M.D.,
Assistant-Physician and Lecturer on Medicine at St. Bartholomew's Hospital.

(Continued from page 639.)

II. From all that has so far been said, then, one fact seems to be prominent, namely, that under whatever circumstances chorea may arise,—whether in association with rheumatism, with pregnancy, with disordered uterine function, worms, constipation, irregular dentition, or any other supposed determining cause, or even without any special attendant circumstance,—an inflammatory affection of the left valves of the heart, indicated by morbid sounds or excited action during life, or proved by structural changes after death, is a very frequent, if not invariable accompaniment of the nervous affection. This fact naturally suggests the belief that the affection of the valves plays an important part in the chorea. Then arise three questions—Does the chorea produce the affection of the valves? or does the latter lead to the former? or, again, are they both the result of some one common cause?

Dr. Branson, who many years ago drew attention to the fact of the cardiac valves being often affected in chorea, was of opinion that the state of the nervous centres producing the chorea occasioned the endocarditis also. It is difficult, however, to understand how this can be, and Dr. Branson does not offer any satisfactory explanation of it. Again, it has been suggested that perhaps the fibrinous concretions found on the cardiac valves in cases of fatal chorea result, not from valvular inflammation, but from simple coagulation of blood retarded in the cavities of the heart during the violence of the choreic movements. There are many objections to this view; among others a very weighty one, namely, that, if it were true, such concretions ought to be found in cases of cardiac obstruction in general, which is certainly not the case. Very often, moreover, the chorea is too slight to occasion any such obstruction to the circulation. An instance of this was furnished to me lately by a mild case of chorea, which terminated fatally from typhoid fever, and in which the mitral valve was freely studded with granular vegetations, although there had been no signs of obstructed circulation during life.

Moreover, the fibrinous concretions in fatal chorea are often found accompanied by other and unmistakeable signs of inflammation. It may be concluded therefore that there is no sufficient reason for believing the nervous affection to be the cause of the valvular disease. Before endeavouring to answer the inquiry whether the valvular affection can be regarded as explaining the chorea, let us look at the third question, namely, whether the nervous and cardiac affections may not both be due to a common cause. This is the view which Begbie, Todd, Sée, and others seem to favour. As already observed, they ascribe the choreic symptoms, the valvular inflammation, and the affection of the joints when it exists, to a rheumatic state of the blood. No doubt all these phenomena may, in predisposed persons, be developed by the rheumatic diathesis, when it really exists. Yet, since there are many cases of associated chorea and valvular disease, without the slightest evidence of a rheumatic tendency—as in at least half of the fatal cases of chorea that I have witnessed—I believe we are justified in looking for some other explanation of the chorea than that afforded by the above hypothesis. Then, too, against the view that the rheumatic diathesis is sufficient to explain the chorea, stands the fact that the choreic symptoms usually occur, not during the intensity of the rheumatic attack, when the diathesis may be supposed to be most concentrated and operative, but after the rheumatism has continued for some time, and expended its violence, or on its subsidence, often indeed some weeks or even months after its disappearance, and after the patients have been regarded as convalescent, and when the poison therefore may be supposed to have been thoroughly eliminated. Out of forty-eight cases of chorea associated with acute rheumatism analysed by M. Sée the chorea was preceded by the rheumatism in no less than forty-one. It is indeed very common, especially in Hospital out-patient practice, to meet with cases of chorea, in which, on inquiry, the nervous attack is found to have succeeded a rheumatic attack suffered some weeks or months previously.

In such cases there is usually evidence of cardiac disease still existing, and it is surely more natural to ascribe to this attendant mischief in the heart some share in the production of the chorea, than to refer the complaint to the bygone rheumatism.

These points bring us then to the other query, whether the valvular disease can of itself, in any measure, help to occasion the chorea in already predisposed subjects. There are various reasons, in addition to what has just been said, for believing that this may be so. It is quite intelligible, for example, that the valvular inflammation may account for many secondary evils in the nervous system and elsewhere, and this without ascribing anything to supposed sympathy of the nervous centres with the cardiac mischief. We can readily understand that the blood in such cases, often previously unhealthy from rheumatic poison, and now rendered still more impure by the introduction of inflammatory products and fibrinous particles from the diseased valves, is calculated to disturb very materially the functions of the various organs through which it circulates. To such influence may probably be ascribed much of the restlessness, nervous excitement, choreic agitation, or even delirium, in those persons who by age, sex, hereditary predisposition, or some attendant condition, such as exhaustion from prolonged pain and sleeplessness, occasioned by a rheumatic attack, are peculiarly disposed to disturbances of the nervous system. We can thus understand also the singular fact, already mentioned, of chorea often occurring several months after the subsidence of rheumatism, and during the continuance of valvular mischief only—whether this mischief be still of an inflammatory kind, or consist merely in the formation, softening, decay, and separation of fibrinous concretions on thickened, abraded, and still unhealed surfaces of the valves. So, also, we can understand the occurrence, in predisposed persons, of chorea in pregnancy, or during any temporary functional derangement of important organs, provided there be, as there so often is, attendant valvular disease. In all these instances, the cardiac affection, and not the mere pregnancy or functional disorder, is probably the medium through which the nervous phenomena are developed in those who by hereditary or acquired tendency are specially predisposed thereto. Partly by the mere circulation of morbid blood through the nervous centres, partly, also, perhaps, by temporary obstruction in the minute capillaries occasioned by fibrinous particles arrested therein (see *Case* I of puerperal chorea), the irritation leading to the development of the choreic or other analogous phenomena may be accounted for.

The cause of the endocarditis in those cases in which there are no signs of the rheumatic diathesis to explain it, is not very clear. There evidently are such cases; the occasional occurrence, for example, of valvular inflammation in the course of pyæmia, of the exanthemata, of pregnancy, and in other conditions wherein rheumatism appears to play no part, is strong evidence for the belief that endocarditis is not always of rheumatic origin. The view which would explain inflammation of the cardiac valves by referring it always to a rheumatic state of the blood, whether a rheumatic affection of the joints occurs or not, can scarcely be regarded as more than an assumption founded on our ignorance respecting the other conditions which may give rise to this affection of the heart. The object at present in view, however, is not so much to explain the endocarditis as to show that chorea, whether it occurs in rheumatism, in pregnancy, or in any other attendant condition, is intimately associated with the results of an

inflammatory affection of the valves of the left side of the heart, however this inflammatory affection be brought about. The frequency with which I have met with this association, and the number of recorded cases in proof of it, convince me that future observation will still more positively demonstrate that an affection of the left valves of the heart, with the presence of granular vegetations upon them, is an almost invariable attendant upon chorea, under whatever circumstances the chorea may be developed. There may, however, be some rare cases in which chorea may originate independently of endocarditis. Chorea in itself is essentially a nervous affection, just like epilepsy or hysteria, and, like them, it may be called into existence by any direct shock or other cause of great disturbance to the nerve centres in those who, by hereditary or acquired tendency, are specially predisposed to nervous disorders, and this quite independently of any cardiac or other organic lesion. Such, however, appear to be exceptional cases. In the great majority, especially of the severe and fatal instances of chorea, and probably in all those associated with the rheumatic diathesis, an inflammatory affection of the cardiac valves appears to be an essential link in the chain of phenomena, and probably plays an important part in the production or aggravation of the nervous disorder.

III. With regard to the treatment of chorea, especially in its acute and serious forms, where help is so urgently called for, we are aided largely by our experience as to the class of persons in whom the disease usually occurs. Such persons almost always exhibit in a more or less marked degree two main peculiarities. 1. They are of an unduly excitable and irritable nervous system. 2. They are weakly, feeble, often anæmic, and their tissues imperfectly nourished. A few remarks on each of these two points may be of service in guiding to the right plan of treatment:—

1. That chorea is very intimately associated with an unusually excitable and irritable state of the nervous system is an idea which has been maintained by many pathologists. (a) The view is supported by the following well-known circumstances:—

(a.) The subjects of chorea are commonly those who possess in a marked degree what is called the nervous temperament. As children they are restless and fidgetty, excitable, and easily alarmed. As they become older and approach puberty the peculiar nervous susceptibility and sensitiveness become even more marked. (b.) The disease is most common at the age when the nervous system is most impressible, namely, in early childhood, and about the age of puberty. (c.) It is much more common in the more excitable female sex than in the male. (d.) In females, too, it is especially liable to occur at those times, when, from sympathy with ovarian and uterine irritation, the nervous system is peculiarly susceptible of impressions; for example, about the first establishment of the catamenia, during disordered menstruation, and in early pregnancy, especially when contracted under circumstances entailing shame or mental excitement of any kind. (e.) It is often preceded by circumstances of prolonged mental depression, anxiety, or distress, and is often called into existence by some shock to the nervous system, such as fright.

2. That the subjects of chorea are of feeble frame and imperfectly nourished, is usually very evident. Generally they are thin, with small weak muscles; are soon fatigued; they often possess the signs of general anæmia, with pallid features and dilated pupils; their circulation is feeble, and although the heart's action may be, and occasionally is, unduly rapid from nervous excitement or valvular disease, yet the skin is often below the natural temperature, the hands and feet often remarkably cold, in spite of choreic movements. Most of the bodily functions, too, are imperfectly performed, and the secretions deficient, as in ordinary anæmia. Hence in great measure the constipated bowels so common in chorea.

It is probably owing to this feeble and imperfectly nourished state of the various tissues of the body that the badly-fed and badly-clothed children of the London poor are so especially liable to chorea,—the liability being increased, too, by the depressing conditions, physical and moral, under which they but too commonly live. Participation of the nervous system in this state of imperfect nutrition would help to explain much of this tendency to chorea, for it is well known that imperfectly nourished or exhausted organs are much more readily excited to morbid action than organs in a state of perfect nutrition. The nervous system especially illustrates this: witness the convulsions so readily excited in children exhausted by diarrhœa, or by insufficient or inappropriate food; the convulsions and delirium of puerperal women after great hæmorrhage, and of others similarly weakened by great loss of blood; the great nervous excitement so common in very anæmic persons; the delirium tremens of the drunkard, and of others whose nervous system has been exhausted by any great drain or trial; and some forms of temporary mania directly resulting from the nervous exhaustion consequent on deep sorrow, anxiety, or severe mental strain.

That the nervous system in choreic subjects does participate in this imperfect state of nutrition in general is in itself very probable. The view is supported by the fact that such subjects, although occasionally quick and precocious, are usually incapable of much mental or bodily exertion; their volition and self-control is generally small, and they are speedily fatigued by muscular efforts. Often the chorea is attended by an almost paralytic state of the affected muscles, voluntary power over them being greatly diminished. This is especially observed on the subsidence of the involuntary movements, the limb being then often left remarkably weak, almost powerless. Not unfrequently, too, a state of partial hemiplegia accompanies, or succeeds, or, in some rare cases, according to Dr. Todd (*loc. cit.*, p. 171), even precedes the choreic movements, and thus indicates the participation of part of the brain in the atomic state of other portions of the nervous system.

A state of imbecility, too, is not an unfrequent result of prolonged chorea, and equally indicates the lowered tone and enfeebled nutrition of the nervous centres. Then there is the evidence furnished by the great advantage often derived from such treatment of chorea as is directed to give tone to the nervous and general system, and to check, by means of sedatives, the waste of nervous and muscular force and tissue produced by the violent and prolonged involuntary movements. Lastly, there is the evidence afforded by post-mortem examination of fatal cases. On this latter point it may be well to offer a few further remarks. The morbid appearances after death from chorea have not been satisfactorily determined. The records of post-mortem examinations of fatal cases of this disease are often very incomplete. It is seldom that all parts of the body have been examined, or, if examined, that their state has been mentioned; often the spinal cord has been neglected; still more often has the heart been overlooked. According to Hasse, one of the most recent writers on the general pathology of chorea (Virchow's "Handbuch der Pathologie und Therapie") changes have been most frequently found in the membranes of the brain, consisting of exudations, chiefly serous. Such effusion, however, he properly ascribes to the mode of death. Seldom have traces of inflammatory action in the membranes of the spinal cord been discovered. Congestion of the brain and cord has been several times observed; but this hyperæmia, like the serous effusion, is no doubt, as Ingleby long ago pointed out (*Lancet*, 1840, vol. i., p. 783), the result of the convulsive mode of death. Softening of the brain and cord, as Hasse observes, has also been many times found, though no satisfactory explanation of this, he says, can be given. M. Sée's elaborate analysis of eighty-four autopsies of chorea cases (*loc. cit.*) does not throw much additional light on the subject.

The softened state of the nervous centres deserves especial attention. It appears to be always the pale kind of softening. This condition was observed in all the fatal cases of chorea examined by myself, and in a large number of those recorded by others. Sometimes the spinal cord alone, sometimes the brain alone, or parts of it, sometimes both these nervous centres, are mentioned as the seat of such softening. If in so many cases the brain and spinal cord, together or separately, have, when examined, presented unmistakable signs of pale softening, it is reasonable to infer that a like state may have existed in many of the other cases in which the nervous centres were not examined. Also, it is reasonable to believe that some close relation exists between the softening and the chorea. Respecting the probable cause of such softening, several circumstances perhaps concur to produce it. In the first place, it may be assumed that the nervous centres, naturally deficient in tone in persons possessing the choreic tendency, participate in the imperfect nutrition occasioned in all parts by the feeble circulation and impoverished state of blood so commonly present in such persons. This impaired state of nutrition may explain much of the want of tone and stability of the nervous centres

(a) See among others Todd (l. c.), Lever (l. c.), Bond (British and Foreign Medico-Chirurgical Review, 1860), Levick (l. c.), Blandford Jones (British Medical Journal, January 5, 1861.)

and the want of right control over their functions possessed by choreic subjects; it may also explain their peculiar proneness to be unduly excited and disturbed in their functions by ordinary impressions. Then, in addition to this naturally defective state, the nutrition of the nervous centres will probably be still more impaired by the unhealthy state of blood which commonly precedes and attends the development of the chorea. The rheumatic diathesis alone may in some cases account for this unhealthy state of the blood, though probably in the majority of cases it is mainly due to the associated valvular disease. Respecting the probable relation between the softening of the nervous centres and the chorea, it may be believed that their imperfectly nourished condition renders these centres unduly excitable by even ordinary impressions, and that, thus predisposed, they are subjected to the additional disturbing influence of blood vitiated and rendered peculiarly irritating by the attendant rheumatic or valvular disease, which thus becomes mainly instrumental in developing the nervous disorder.

Since, then, there are strong grounds for believing that in chorea the nervous system is, from hereditary tendency or acquired predisposition, in an unduly susceptible state, also that this state of morbid irritability is connected with imperfect nutrition of the nervous centres, and lastly, since the choreic phenomena resulting from such nervous irritability appear to be often developed by, or at any rate closely associated with certain other functional or organic disorders, such as mental shocks, disturbed digestive or uterine functions, rheumatism, but, above all, with affections of the cardiac valves, the indications for treatment become plain.

These are, first, to remove, if possible, and guard against the recurrence of, such of the just-named sources of additional irritation as may be detected, be they of nervous, digestive, uterine, cardiac, or any other kind of origin. In case of distinct evidence, or even a suspicion of a rheumatic diathesis, explaining the attendant valvular disease, the alkaline treatment of rheumatism may be safely employed in conjunction with other measures. Secondly, to give tone to the debilitated nervous system by promoting its more perfect nutrition. Hence the great good of generous diet, cod-liver oil, special neurine tonics, such as quinine, iron, zinc, and arsenic, in most forms of ordinary chorea. Hence, too, the great use of out-door exercise, gymnastics, and other methods of promoting nervous and muscular activity, for by thus increasing the healthy discharge of normal function, healthy nutrition is best maintained and increased. These, and other general measures of a like kind, such as cold sponging, or the shower-bath—provided it be borne well, and does not overshock and frighten, as it very often does—are applicable to nearly all forms of chorea, and are often sufficient to promote their cure. But when we have to deal with the acute and violent forms of this disorder, additional means have commonly to be adopted. The chief object, then, must be to put a stop as speedily as possible to the violent involuntary movements, and to the attendant sleeplessness, for if these continue long they tend almost certainly to kill by exhaustion, hence the indication, thirdly, to tranquillise the highly excited nervous system, and procure sleep. Nothing appears to accomplish this so readily as the use of opiates, combined with diffusible stimulants. Opium, morphia, or henbane, with ether or ammonia, in doses proportioned to the age of the patient, the degree of effect they produce, and the violence of the symptoms, and repeated at regular intervals, will often in a few hours mitigate the violence of the choreic movements, and in a few days lead to their almost complete removal. In the more furious examples, however, injections of laudanum into the bowels, repeated inhalations of chloroform, or the subcutaneous introduction of a solution of morphia, may be advantageously substituted for, or adopted in conjunction with, the preceding. In addition to these sedative measures, the employment of wine, or, in the more urgent cases, even brandy, often seems to be remarkably productive of good. The benefit resulting from this combined opiate and stimulating plan seems to prove, as before remarked, that the nervous excitement on which the choreic movements depend is in great measure the result of exhaustion; the opiates allay the excitement, and the stimulants counteract the exhaustion and retard tissue change, while, at the same time, the rapid waste of nervous energy occasioned by the involuntary movements and prolonged sleeplessness is greatly reduced thereby. Meanwhile, measures for repairing this waste and restoring the nutrition of the nervous centres can also be employed. Good nourishing food, with a liberal allowance of meat, eggs, and milk, should be given. Quinine, iron, zinc, or arsenic may also be administered simultaneously with the opiates and stimulants. A review of the treatment of the most violent forms of chorea recorded by others or treated by myself, has convinced me that the most successful and most speedily cured cases are those which have been treated on such a plan as that just advocated. Details of cases, and references to confirmatory facts and examples recorded by others are omitted here, in order to avoid lengthening still further a communication already too long.

Lower Seymour-street.

AN ACCOUNT OF THE

PHYSIOLOGICAL RESEARCHES OF THE REV. PROFESSOR HAUGHTON, M.D., TRINITY COLLEGE, DUBLIN.

DIABETES MELLITUS.

(Continued from page 396.)

The first point to which the Professor invites attention is the excessive excretion of urea, and he is sanguine that this phenomenon will throw much light upon the disease in question. In diabetes mellitus there is almost always a canine appetite, a relish for food, and an apparent assimilation of an amount of food from twice to thrice that which satisfies ordinary appetites, at the same time there is notoriously no work done by this food. Before offering an explanation of this physiological paradox, he makes the following calculation:—Assuming the following compositions for proteine, glucose, and urea:

Proteine	.	$C_{36}H_{27}N_4O_{12}$	. 393 atomic weight.
Glucose	.	$C_{12}H_{14}O_{14}$	. 198 ,, ,,
Urea	.	$C_2H_4N_2O_2$	. 60 ,, ,,

The following relation is evident:—

(1) Proteine + (23) water + (3) oxygen + (4) carbonic acid = (3) glucose + (2) urea.

This relation shows the possibility, at least, of proteinic compounds, by the addition of small quantities of water, oxygen, and carbonic acid (which all exist in abundance in the blood), becoming converted into glucose and urea; and an examination of the atomic weights will show that such a reaction would produce very nearly five grains of glucose for every grain of urea. We have now two sources for urea and two for sugar, as excreted by a diabetic patient. Some of the urea he ate and drank as food, or took in medicine, the rest was formed in his body by a perverted decomposition of nitrogenous tissues; similarly part of the sugar he excretes was derived from external sources, being formed from the starch contained in the food by the well-known reaction:—

(1) Starch + (4) water = (1) glucose.

and the other part originated in the same decomposition of proteinic structure which gave rise to an excess of urea—a destructive process which requires the system to be renovated by large quantities of nitrogenous food. In the case of Owen Murphy, the food ingested was, on the average, capable of producing 9321 grs. of glucose per day, and did actually produce, on the average, 9773 grs. These quantities, though practically equal, are not related to each other as cause and effect; the excreted sugar is divisible into two portions—

1. Sugar resulting directly from starch food .	4803 grs.
2. Sugar resulting from decomposition of proteinic compounds.	4970 ,,
Total	9773 grs.

The differences between 4803 grs. and the total sugar equivalent ingested, 9321 grs., not being employed in the manufacture of urea or of glucose, must theoretically have gone to produce carbonic acid and water. This difference amounted to 4518 grs. Glucose is converted into water and carbonic acid by the addition of oxygen, according to the following reaction:—

(1) Glucose + (24) oxygen = (12) water + (12) carbonic acid.

Reference to the atomic weight of these compounds shows that glucose produces carbonic acid in the proportion of 198 to 264, or exactly 3·4. Hence the 4518 grains of glucose, which was the difference between the total sugar ingested and

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the sugar directly formed from starch food, will be converted into carbonic acid and discharged by the lungs.

The most accurate determination of the daily excretion of carbonic acid by the lungs of a person in a state of quietude flows from the observations of Dr. Edward Smith, and gives 71·622 grains of carbonic acid per pound of body weight per day. Applying this to Owen Murphy's case, since his weight was 93·56 lbs., we find the carbonic acid to be excreted by him in a state of quietude to be 6701 grains; when this is compared with the result due to the oxidation of the glucose, the correspondence is too strikingly similar to be attributed to chance.

The minimum excretion of urea of a person in health, consuming the smallest amount of food consistent with bare existence, and observing a state of quietude of mind and body, is 2 grains of urea per lb. of body weight; this quantity representing the expenditure of work which every pound weight of living man requires per day to keep it alive, and prevent it from becoming subject to the ordinary chemical laws of inert matter. In the case of Owen Murphy, supposing him to be in health, but in the minimum condition of quietude of body and mind, the urea due to *opus vitale* (taking his weight at 94 lbs.) would amount to 188 grains, and this converted into work done—according to the rule alluded to in a former paper, viz., 39 grains of urea are equivalent to 100 tons lifted one foot—gives 482 tons lifted one foot. The minimum excretion of carbonic acid of the same person, weighing 94 lbs., at 72 grains of carbonic acid per lb., would amount to 6768 grains. From this, which is the total carbonic acid exhaled from the lungs, is to be subtracted a certain amount of carbonic acid, which is always formed in the healthy production of urea from proteinic compounds, in order to obtain the effective work due to the carbonic acid; and this amount which is to be deducted is found from the equation,—

(1) Proteine + (75) oxygen = (2) urea + (32) carbonic acid + (19) water,

in which the urea being to the carbonic acid as 120 : 704, it follows that 188 grains of urea correspond to 1103 grains of carbonic acid, so that in the case of Owen Murphy, the

(1) Minimum excretion of urea was . . . [94 lbs. body-weight at 2 grs. urea per lb. *(opus vitale)*]	188 grains.
(2) Minimum excretion of carbonic acid . . [94 lbs. body-weight, at 72 grs. carbonic acid per lb.]	6768 ,,
(3) Carbonic acid due to production of 188 grs. of urea	1103 ,,
	5665 grains.

To convert carbonic acid into work done, the Professor assumes, from Favre and Sillerman's experiments, that one grain of carbon will, by its combustion into carbonic acid, raise 8000 grains of water from 32° F. to 33° F.; and also from Joule's experiments, that the heat requisite to raise one pound avoirdupois of water from 32° F. to 33° F. would lift 772 lbs. through one foot. Hence it follows that the combustion of 100 grains of carbon is equivalent to 39·39 lbs. lifted one foot, the inference from which is that, if Murphy had been in health, the result in work done of the minimum excretion of urea and carbonic acid, consistent with health, in a state of quietude of mind and body, would have been,—

(1) 188 grains urea equivalent to 482 tons lifted one foot.		
(2) 5665 ,, carb. acid ,,	618 ,, ,,	
Total work done . .	1100 tons	

We must now contrast this amount of work with that which would result if the common theory were true, that the urea is produced as usual from the oxidation of proteinic compounds according to the formula—(1) proteine + (75) oxygen = (2) urea + (32) carbonic acid + 19 water; for in this case it should be accompanied by its usual and healthy equivalent of work done, viz., 100 tons per 39 grains urea, and the calculation would stand thus:—Murphy in diabetes excreted 1182 grains urea, equivalent to 3031 tons lifted one foot. But this is nearly three times the minimum amount necessary to have kept the patient alive, for the *opus vitale* of such diabetic patient is represented by 1100 tons, so that by the common theory we have a large surplus of work unaccounted for; it cannot be due to *opera mechanica* or *mentalia*, for in those prostrated by this disease there is the greatest incapacity for mechanical exercise, and peculiar aversion to mental exertion; the unhappy patient himself, by his vacillating and feeble mind and helpless body, is a living contradiction to the idea that the whole of the excessive excretion of urea is derived from the ordinary sources.

Calculated according to the Professor's theory, the amount of work done by an individual in the condition of Owen Murphy is exceedingly close to that which has been shown to be the minimum consistent with life.

Murphy (Diabetes).

(1) Urea of min. op. vitale, 188 grs., equivalent to	482 tons
(2) Carbonic acid excreted, due to the combustion of 4518 grs. of glucose = 6024 grs., equivalent to .	657 tons
	1139 tons
Deduct 79·5 tons equivalent to 729 grs. of carbonic acid, retained by the diseased production of 994 grs. of urea	79 tons
Total work done . .	1060 tons lifted one foot.

The Professor assigns a double origin to the urea excreted in diabetes; one is a healthy action, a true combustion, and equivalent to work done; it is represented by the relation—

(1) Proteine + (75) oxygen = (22) urea + (32) carbonic acid + (19) water;

the other is a decomposition, and he considers that in the diseased condition the proteinic compounds resolve themselves, without giving out work, into glucose and urea, which decomposition is represented by the relation—

(1) Proteine + (23) water + (3) oxygen + (4) carbonic acid = (3) glucose + (2) urea.

The two theories of diabetes mellitus he thus compares:—One theory assumes the sugar to be formed exclusively from starch food; the other assumes it to have a double origin, partly from starch food, and partly from proteinic compounds; these two origins giving about equal quantities of sugar. The first theory fails in two ways; it does not account for the presence of excreted sugar, when all starch food is carefully excluded; and it fails completely to explain the large excretion of urea, which, on this theory, ought to be accompanied by an amount of work done that is nowhere discoverable. The second theory explains the presence of sugar in the excretions on almost any description of food; and also gives a rational explanation of the large excretion of urea, by attributing it to a decomposition not attended by the development of work done.

On both theories a large proportion of the food consumed is wasted in the production of sugar. In the first theory this waste of food occurs in the conversion of starch into glucose, which is excreted as such, without giving out work; in the second theory a similar waste occurs in the spontaneous decomposition of protenic into glucose and urea, which is supposed not to be attended with the giving out of work; but the essential difference between the two theories is that while they both offer an explanation of the excretion of glucose, the first theory fails to explain the corresponding and equally remarkable excretion of urea, a phenomenon which is satisfactorily accounted for by the second theory.

PARTIAL INSANITY.—It has seemed to the Commissioners in Lunacy that it would be very desirable if arrangements were made for the reception in the lunatic Hospitals of persons of whom (say the Commissioners) "we have reason to know that there are many," not insane, but who, being conscious of a want of power of self-control, or of addiction to intemperate habits, or fearing an attack, or a recurrence of mental malady, but being in all respects free agents, may be desirous of residing as voluntary boarders in an institution for the care and treatment of persons of unsound mind, submitting to a modified control, and conforming to the general regulations of the Hospital. These Hospitals are in most cases mainly supported by endowments or annual subscriptions; a few are in a great measure self-supporting. The Commissioners have just taken the opinion of Mr. Welsby upon the subject. He states that he does not find in the statutes for the regulation of registered Hospitals any prohibition on such persons being admitted as inmates on the terms above suggested, and he is of opinion that they may be received accordingly, contracting alone, or jointly with others, to conform to certain regulations expressed or referred to.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

WESTMINSTER HOSPITAL.

RUPTURED POPLITEAL ANEURISM—LIGATURE OF THE FEMORAL ARTERY—SUPPURATION OF THE SAC AND SECONDARY HÆMORRHAGE MORE THAN TWO MONTHS AFTERWARDS—AMPUTATION—RECOVERY.

(Under the care of Mr. HOLTHOUSE.)

ELIZABETH L., aged 29, married, pale, and cachectic-looking, and a hard spirit-drinker, was admitted into the above Hospital, under the care of Mr. Holthouse, on December 2, 1862, with a large painful fluctuating swelling of the right ham and upper third of the leg. The patient says her attention was first attracted to it about eighteen months ago, in consequence of suffering from cramps in that leg, when she perceived a small swelling about the size of a nut at the lower part of the ham, and it has continued to increase gradually to the present time. She can assign no cause for it.

Examination of the Limb.—The knee is kept a little bent, and a small quantity of fluid occupies its synovial sac. A tape carried over the joint, and around the most prominent part of the tumour, gives fifteen and a-half inches as its circumference while the circumference of the corresponding part of the opposite limb, bent at the same angle, is only eleven and a-half inches. The skin over the upper and outer part of the tumour is of a dusky-red colour, and deep fluctuation is felt over every part, but it is more evident opposite this discolouration of the surface. A feeble impulse, synchronous with the heart's beat, is communicated to the hand placed on the tumour, and a very decided, though not a loud, bruit is heard over every part of it. Pressure on the femoral artery in the groin arrests the impulse and bruit, but produces no effect on the size of the tumour, neither can its size be diminished by any amount of pressure which the patient is able to bear. The pulsation of the posterior tibial artery behind the inner malleolus is less distinct than on the sound side; the superficial veins of the leg are slightly enlarged and distended, there is no œdema of the ankle or foot, and the temperature of both feet is equal and natural.

As the swelling was very painful, a large warm linseed-meal poultice was applied, which gave great relief, and on the 4th the whole tumour felt more solid and less painful.

December 10.—Is exceedingly irritable and impatient, and could not bear the flexion treatment, which was tried for forty-eight hours. The consistency of the tumour remains the same, but it has been less painful ever since the application of the poultice; it now measures sixteen and a-half inches in circumference. The treatment with the ring tourniquet was now tried, two being applied over the femoral artery at a short distance from each other. At her urgent request four ounces of gin were ordered.

11th.—As irritable and impatient as ever; has removed both the compressors, the limb was therefore put up on a McIntyre splint with a broad thigh-piece, and outside and around this an ordinary tourniquet was placed, having its pad on the femoral artery, and the thigh protected from the pressure of the band by the thigh-piece of the splint. Mr. Holthouse hoped, by treating her as if she had a fracture, to compel quietness, and thus more effectually control the patient's restlessness, and also the circulation of the limb; but two days afterwards she had loosened all the bandages and removed the tourniquet, which she declared she was unable to bear. She had very little sleep, although an opiate was taken every night, and she complained of having constant pain in the leg and foot. The circumference of the limb around the tumour was now seventeen inches. As it was obviously useless to persist in further attempts at treatment by compression, the patient was placed under chloroform on the 16th, and the femoral artery tied in the lower part of Scarpa's triangle, the tumour now measuring seventeen and a-half inches in circumference. After the closure of the wound the limb was rolled in a flannel bandage over a worsted stocking, and the foot and ankle enveloped in wool.

17th.—Has not slept well since the operation, but feels very comfortable and free from pain. The right foot is quite warm, though the wool has been removed, as she felt it too warm, and the heat excited formication. All excitement has disappeared, and the patient now is calm and rational, and expresses herself as feeling very comfortable and grateful.

21st.—Countenance has quite lost the expression of suffering it had, and is cheerful and healthful-looking. Has had scarcely any pain in the limb since the operation, but the foot continues quite numb, though warm.

22nd.—Removed the bandage and stocking to examine the foot, which is warm and of natural colour, though numb.

24th.—Continues improving in looks and cheerfulness, and has now a good appetite. For the first time says the foot is beginning to throb. Full diet. Porter, Oss.; gin, ℥iv.

January 3.—The ligature has not yet come away, but she continues in a satisfactory state. No pulsation or bruit can be detected in the tumour, which, however, is not smaller, and the skin over the most depending part of the ham is more livid and thinner, fluctuation being evident. The temperature and sensation of the foot good.

5th.—The ligature came away this morning without hæmorrhage.

12th.—Looks and feels well. Got up yesterday, and experienced only weakness of the limb, which she could not stand on. Appearance and size of the tumour have undergone no change: it is still livid, soft, and fluctuating.

31st.—Goes out with crutches nearly every day; her foot suspended in a sling; appearance and feel of tumour the same, but circumference less (sixteen and a-half inches).

February 14.—Went out a few days ago, and came back intoxicated; she has not been well since; tongue foul; appetite bad; took depressed.

21st.—Continues poorly, and without appetite; appearance of tumour the same, but feel very different,—quite soft, and fluctuating everywhere, and tender on pressure; foot also painful.

24th.—Whole leg hot, painful, and inflamed, and foot œdematous; skin over the most prominent part of the tumour thinner, the whole contents evidently fluid. Mr. Holthouse made an incision one inch and a-half in length, and gave exit to about sixteen ounces of bloody pus with a few soft coagula. A bandage was afterwards applied from the foot to above the knee, a large wet compress being applied to the wound.

25th.—At 7·30 p.m. yesterday evening a large gush of arterial blood took place, which was arrested by the tourniquet, and on Mr. Holthouse's arrival she was pallid, covered with a cold perspiration, and almost pulseless. Having cleared away the blood, and made her comfortable, a ring tourniquet was substituted; but on coughing another slight gush took place, which was immediately checked by tightening the instrument. She rallied under stimulants, and passed a good night, and up to this time, 3 p.m., had had no return of the hæmorrhage. She was taken to the theatre, and the wound enlarged, with the view of securing the bleeding vessel; but, not finding it, the limb was removed at the lower third of the thigh by the flap operation.

26th.—Is very comfortable, free from pain, and has a good pulse.

March 8.—The ligature on the femoral came away to-day, the other having separated previously. Has not had an unfavourable symptom, and most of the wound has healed without suppuration.

14th.—The whole of the incision has healed, though not cicatrised, the only dressing required being a strip of dry lint over the granulations.

April 4.—Has been up and about since last note, but is very pale and feeble. Goes to Walton this afternoon.

Examination of Limb.—The sac of the false aneurism, which afterwards suppurated, extended from the upper part of the popliteal space to about the junction of the middle with the lower one-third of the leg, and contained a few loose coagula and a little bloody pus; its walls were constituted by the boundaries of the popliteal space above, and by the condensed and infiltrated skin and the gastrocnemius muscle below, between which the cavity existed. On washing this well out, the true aneurismal tumour was seen, with the popliteal nerve flattened out over it, the popliteal artery also somewhat flattened, and apparently enlarged before it expanded into a fusiform aneurism, from two to three inches in length, about one and a-half in breadth, open in its whole length towards the cavity of the abscess, and containing a firm solid clot. The artery leading to the aneurism was

pervious from the point of section, and apparently healthy. The posterior tibial was small; one of the articular arteries very large.

THE ROYAL LONDON OPHTHALMIC HOSPITAL.

A CASE OF ENTROPIUM, PROBABLY SPASMODIC IN ORIGIN, SUCCESSFULLY TREATED BY THE REPEATED APPLICATION OF COLLODION.

Communicated by Mr. SPENCER WATSON.)

Ann S., aged 59 years, an unmarried woman of spare habit, came under treatment with severe purulent ophthalmia of the left eye on August 20, 1862.

22nd.—The cornea sloughed, and the lens escaped.

Since that date there has been great irritation going on, and the lower lid has become inverted, from irregular action of the orbicularis and tensor tarsi muscles.

On September 29 the corneal wound had cicatrised, and she now came under Mr. Hulke's care, and under my observation as clinical assistant.

On the 27th collodion was applied to the lower lid.

This was repeated twice a week until December 27, when the entropium was entirely overcome, and the irritation caused by it entirely ceased.

On March 21, 1863, she again presented herself. Since the last note she has had an attack of iritis in the right eye, from which she has made a good recovery. The lid of the left eye is still in good position.

This case is instructive, as illustrating the benefit of the persevering application of simple remedies, and, at the same time, the necessity of great patience during a somewhat tedious course of treatment.

The entropium in this patient was probably first induced by swelling of the lid during the attack of purulent ophthalmia. This swelling happening to affect the lower part of the lid more than its upper border, and the dermal rather than the conjunctival surface, the marginal fibres of the orbicularis were thrown into such a position that their contraction, during the continuous blepharospasmus accompanying the disease, caused the inversion of the ciliary margin. This tendency would be increased after the slough of the cornea and the escape of the lens, for the lids would then have lost the support usually given them by a full and healthy eyeball. Probably the looseness and flaccidity of the skin in this patient contributed to the result. It is well known to Surgeons that ectropium is a more common accident of severe purulent ophthalmia than entropium; this, therefore, may be looked upon as an exceptional case.

The collodion here used was rather less fluid than that usually employed, and it was brought to the necessary consistence by evaporation previous to each application. It was found that by this means a firm film could be applied, and would dry on so rapidly that the flow of tears, which was occasionally very copious, had not time to pass over the part and prevent adhesion. It was of the greatest importance to dry the surface thoroughly before applying the collodion, and it acted most efficiently when a portion of the film was attached to the upper part of the cheek.

It gave complete relief to the patient after each application, and the pellicle often remained attached for three or four days, so that the relief was thus made continuous. This plan had to be persevered in for three months.

University of Dublin.—At the Summer Commencements, held in the Examination Hall of Trinity College, on Wednesday, June 24, the following degrees in Medicine and Surgery were conferred:—*Licentiati in Medicinâ.*—David Gulielmus Telford, Edvardus Thomas French, and Jacobus Robertus White. *Baccalaurei in Medicinâ.*—Laurentius Edv. Desmond, Carolus Fleetwood Churchill, Giraldus E. Barron, Alexander Preston, Isaacus Waugh, Gulielmus F. Smith, Johannes M. Purser, Josephus Henry, Henricus F. E. Phillips, Robertus Morton, Carolus Baker Stoney, and Gul. Pierce. *Magistri in Chirurgiâ.*—Isaacus Waugh, Gulielmus Fawcett Smith, and Carolus Baker Stoney. *Doctor in Medicinâ.*—Laurentius E. Desmond.

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Medical Times and Gazette.

SATURDAY, JUNE 27.

THE NEW CIRCULAR FOR THE ARMY MEDICAL DEPARTMENT.

If anything were wanted to indicate the uncertain and vacillating course upon which Her Majesty's advisers have entered, the publication of two Circulars by two separate Ministers for War, within almost as many months, would declare it.

We make no apology for recurring to the present deplorable state of the Army Medical Department, for it is as much our duty as journalists to speak out freely as it is the duty of the Profession generally, and of our younger Surgeons in particular, to indicate plainly their opinions—so plainly, that "he who runs may read," although the runner be a Horse Guard's official.

If ever we are to hold our proper position as a Profession—if ever we are to enlarge our sphere of usefulness—it is essential that the acts of governing bodies should not be registered and passed over in silence.

We find this new Circular or Warrant, No. 825—for it will be soon as important for the War Minister to number effusions as for a journalist to distinguish his serials, if these official documents are to follow one another so rapidly—is to be substituted for that of March last (No. 808).

The present one is the same as the last—neither better nor worse! After enumerating that "relative rank shall carry with it all precedence and advantages attaching to the military rank with which it corresponds, and shall regulate the rates of lodging money, number of servants, rations of fuel and light, or allowances in their stead;" it goes on to add "*except for officers and others to whom special rates have been assigned.*"

What this means exactly, or why these few words needed a new Circular, we do not know. We are contented to believe that it is one of those things "which no fellah can understand;" but we can hardly imagine any one so sanguine as to deem the "exceptions" will be in favour of the Army Medical officer!

It is quite possible—nay, quite in keeping with the past history and present conduct of those who sit in high places—that "special rates" may be assigned below those to which an Army Medical officer's relative rank would entitle him.

When we happen to know—for we have heard it stated by them—that the best class of men in Her Majesty's army would resign the service if they had the power now to enter upon a new field, we ask ourselves—What do the younger men expect from it?

Time and space would prevent our going through all the causes of discontent; suffice it that there is a spirit of antagonism to the Army Medical Department in everything emanating from the Horse Guards, and—what is quite as bad, if not worse—there is no evidence that the present administration of the Department is conducted in the way that it might be.

We should like to know why an Inspector-General of

Hospitals should have to serve *three years* in that grade before he ranks as a Major-General, when an Inspector-General of Musketry, a Chaplain-General, and a Commissary-General takes that position at once on their appointment to their respective ranks?

The Commander-in-Chief, we take it, when he has to pour out "the vials of his wrath" upon a Colonel—Crawley, for example—and upon a member of the Medical Department, uses vials of very different capacities!

Let us take the Department from any point of view, and what do we find? There is a great reduction in the numbers of the higher ranks; there are vacancies in abundance that have not been—nor are they likely to be—filled up; there is, consequently, no leave of absence for Medical officers, and there is so little chance of promotion for any new Assistant-Surgeon, that one grows grey in the calculation of the probabilities as to the time!

That portion of the Medical Department serving in India are even worse off than their brethren at home!

Look at the Department socially! What is the position of a Medical officer at mess? Now we do not want to see Military Surgeons transformed into *officers* only,—we are *utterly opposed* to a man's endeavouring to appear as if his *relative* were an *absolute* rank. Nothing can be more ridiculous or reprehensible than this; but we do think that it is unjust to place the Surgeon-Major of a regiment, who pays more to the mess in subscriptions than the colonel, and whose relative rank is next to that officer's, in a lower position, at his own mess-table, than the youngest subaltern present, as is now done, if, as is said to be the case, the mess dinner is a "military parade," which, if he be an unmarried officer, he must, by the regulations of the service, attend daily.

If we turn to the internal working of the Department we find it no better.

There never was a period when men were subjected to such rigorous laws; there never was a period when men were so arbitrarily mulcted of money for expenses connected with rejected recruits or unregistered diets! The Army Medical officer is as much fenced and hemmed in by bands of red-tape as ever, and his hands are still more engaged with the pen and ink-bottle than the stethoscope or his patients. Medical officers are called upon to obtain the instruments for marking the letters D. and B.C., and they have to superintend and instruct the Hospital sergeants in the infliction of a punishment. As well might a Surgeon be called upon to supply the cat, and instruct the drummer in using it as to do these things!

The honest exercise of some discretionary power by a Medical officer never entailed so large a number of "reasons in writing" as now. The execution, too, of the so-called sanitary duties will soon render the post of Quarter-Master unnecessary, and we venture to suggest that a considerable saving might be effected if Medical officers had to superintend and instruct in barrack cooking! By some curious oversight on the part of the authorities, this has not yet been made the subject of any War-office or Departmental order!

We must not forget that the privileges—and they were but few—enjoyed by the Surgeons of Regiments in India have been ignored; for instance, the Surgeon has been denied the *privilege* of exchanging, which every other officer enjoys as a matter of *right*, and the whole patronage of Indian appointments is circumscribed within the limits of "Whitehall-yard."

But enough! We had hoped that with the late Sir George C. Lewis's eulogium upon the then forthcoming Warrant something would have been done effectually. We trusted that after the occupancy of Whitehall-yard by a man like Alexander there would have been a new era in the Medical Department. It is unnecessary to add a word about our disappointment!

In conclusion, one word. In August, the Army will advertise its vacancies, and we venture to predict—shall we add hope—that the daily papers will have to repeat their remarks how these vacancies were "plugged up" by the "sweepings of the schools," and how *Punch's* advertisement for "Medical snobs" met with numerous applicants.

THE WEEK.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—EXPULSION OF MR. EVAN THOMAS.

On the evening of Tuesday last, after the ordinary meeting of the Society, a special meeting was held in order to determine whether the name of Mr. Evan Thomas should be removed from the list of Fellows. He had in March last been sentenced to three months' imprisonment for perjury, and consequently his name had been removed from the roll of the College of Surgeons and from the Medical Register. According to a by-law of the Society it was necessary that four-fifths of the members present should vote for expulsion. Of thirty-six, thirty-four voted for it, and two against it. The President therefore erased the name from the list.

THE ELECTIONS AT THE COLLEGE OF SURGEONS.—VOTE FOR LANE AND BUSK.

The elections to the College Council continue to excite much interest, and various are the speculations as to the successful candidates. The feeling in favour of Lane continues steady; his claims cannot be set aside. Next to Lane comes Mr. Busk; and we say without hesitation to the country Fellows, that, if they do not support him, they will deserve ever hereafter to be snubbed themselves. Mr. Busk is an experienced and distinguished Hospital Surgeon,—a man of science *par excellence*. He is just the man whose opinion would be of service in the Council, and, if promoted to the Court of Examiners, as he ought to be, he would enable that body really to test the proficiency of students in physiological science. At present the complaint is, that students examined at the College are afraid to profess the most recent scientific doctrines, lest they should be reprimanded. With Mr. Lane and Mr. Busk, the opinion of most Fellows inclines in favour of returning one of the elder candidates, Mr. Hawkins or Mr. Tatum. After Lane and Busk comes the name of Mr. Curling. From the earliest point of his Professional life, when he published his standard work on "Tetanus," based on the Jacksonian Prize Essay, his career has been one of solid unobtrusive work. He is said to have been unwilling to come forward, lest by so doing he should interfere with the just claims of Mr. Busk; but of course his friends would be much to blame if they allowed him to be thrust aside, in order that a younger man, with certainly fewer titles to distinction, should be placed over his head.

THE SITE OF ST. THOMAS'S.

The Medical officers of St. Thomas's Hospital have made one more move, and a very significant one. It is well known that there are diverse interests at stake in the new site. The interests of the patients, of course, demand a pure air, an elevated site, and such space as can only be got a little way out of town. If there were one or two receiving houses in Southwark or Lambeth for such cases as really cannot travel further, it would suffice: but as for the majority of the sick and injured—a man who has to be removed at all, may as well be removed three miles into pure air as into foul. With railway accommodation, it would be easy to send 95 per cent. of the patients at once to a country Hospital. But the interests of the Medical officers point to a Hospital within an easy drive of Park-lane. Private practice and a flourishing Medical school—two objects which surely were "never contemplated by the founder"—give these gentlemen a leaning towards a conspicuous town site as near Belgravia as possible. Accordingly, "the intentions of the

founder, for the benefit of the Southwark poor," are now found to be quite compatible with the planting the Hospital westward, opposite the new Houses of Parliament. The site, it is true, has yet to be created, over the mud of the Thames; but then, the Medical officers flatter themselves that a good time is coming when the Thames shall no longer stink, when fog shall be unknown, and when the natural laws which connect miasm with low muddy sites shall be suspended, in order that the Southwark poor may have "the priceless benefit of a Medical School." We happen to know that a leading Medical officer so far forgot himself, that he congratulated the Treasurer of St. Thomas's on his improved health since living out of town; possibly we shall hear of people being recommended to go to Bankside for change of air.

PARLIAMENTARY.

In the House of Lords, on Thursday, June 18, after a conversation in reference to the purchase of the Exhibition building, when the dissentients were represented by the Duke of Rutland and Lord Hardwicke, the subject of vaccination was introduced by Lord Lyttleton, who quoted the suggestions of the Council of the Epidemiological Society for an alteration of the law on the subject. These suggestions were: —1. The making provision for the systematic local supervision of vaccination. 2. The providing more effectual means whereby the local authority or appointed superintendents might ascertain who were and who were not vaccinated. 3. An extension of the age within which vaccination must be performed in those districts in which, from the limited population, etc., vaccination from the arm could only be maintained periodically. And, 4. An extension of the powers of the Privy Council over local arrangements for vaccination, so far as was necessary to secure the more effectual maintenance of local supplies of fresh lymph. Lord Lyttleton wished to know whether it was the intention of the Government to introduce a bill for an amendment of the law in this or the next session of Parliament.

Earl Granville said that the Government were fully alive to the necessity of something being done, and were considering the best means of effecting an improvement in the law.

In the House of Commons, the most important event was the second reading of the Public Works (Manufacturing Districts) Bill. This measure is intended to provide for the unemployed in the factory districts, by engaging them in works wherein a certain amount of unskilled labour may be employed as supplementary to skilled. Such works are sanitary improvements, making drains and sewers, levelling waste lands, forming parks and recreation grounds, cleansing and improving rivers, forming reservoirs, etc. The million and a half to be lent to the local authorities for these purposes—£431,756 only of which is to be allotted to the payment of unskilled labour—however inadequate as a means of relief for the entire population of the factory districts, is still an instalment of good. If a better sanitary condition in our industrial towns be the result educed from the cotton distress, that calamity, like the Fire of London, may come to be hereafter regarded as a national benefit.

On Friday, June 19, the House of Commons went into committee on the Alkali Works Regulation Bill, sent down by the Lords, one great provision of which is to enforce the condensation of the muriatic acid gas evolved in the manufacture. The influence of the gas on vegetable and animal life was illustrated by Mr. Bruce, who said that in the neighbourhood of St. Helens and other towns trees and vegetation were injured and occasionally destroyed, residences were rendered uninhabitable, and cattle suffered so that the quality of their milk was affected, and they cast their young.

The various clauses of the bill were discussed, and most of them agreed to.

The Chancellor of the Exchequer, in answer to Lord Enfield's question as to the report said to have been received by Government assigning £30,000 as the value of the Exhibition building, said that no official report had been sent to the Treasury. It was true that Mr. Bowring, the Secretary of the Commissioners of 1851, had drawn up a statement in which he placed the minimum value of the materials at £30,000, but the maximum value at £200,000. No positive standard could be named, as the value depended on the nearness or distance of the market. It would appear, therefore, that the country is to pay a price out of all proportion to the intrinsic value of the materials, simply because it has bought the ground on which they stand.

From a question asked by Sir J. C. Jervoise, it appears that the sum of £434 10s. is to be expended in investigating the effect of vaccination on sheep and in the examination of sheep arriving at Irish ports, for the purpose of preventing the spread of small-pox amongst them. Sir G. Grey said that the experiments were not yet completed, but when they were there would be no objection to laying the results before Parliament.

On Monday, June 22, in answer to a question by Mr. Coningham, the Marquis of Hartington said that it had been decided that Colonel Crawley should be recalled to this country, where the court-martial in reference to his conduct in the case of Sergeant-Major Lilley will therefore take place.

The debate on the purchase of the Exhibition building is postponed until Thursday in next week.

On Tuesday, June 23, in the House of Lords, Lord Shaftesbury drew the attention of the House to the recent melancholy death of the unfortunate seamstress (the report of the inquest on whom will be found in another part of this Journal) alleged to have been caused by overwork and unfit sleeping apartments. He asked whether the Government were prepared to introduce a measure for the ventilation and sanitary regulation of the workrooms in which seamstresses were employed.

Lord Granville was not prepared to state that the Government intended to introduce any bill on the subject; but if Lord Shaftesbury himself would bring in a bill, it would meet with full consideration.

A similar question was asked in the House of Commons by Mr. Bagwell, and received a similar answer from Sir George Grey. The truth is, that, deplorable as the state of things revealed by this case is, interference on the part of the Government would be surrounded with difficulties. Many of the workrooms, as Sir George Grey said, form parts of private houses, and if they, with the sleeping apartments, are to be subjected to inspection by Government officials, the same surveillance might, with equal justice, be extended to the bedrooms of domestic servants, and the underground closets where butlers sleep. The only principle which can be safely asserted is that if any class are dependent, or, if sick, are likely to be dependent on public money, the health and wellbeing of that special class then becomes justly the public care. In the case of other classes no interference on the part of Government with habits of living can take place without trenching on the prerogatives of freedom of action and of choice. We know that this principle has been departed from in the case of the bakers, but it is one to which it would be dangerous to sanction many exceptions.

The House of Commons went into committee on the Vaccination (Scotland) Bill. The only amendment moved, and we regret to say carried, was one by Mr. Blackburn:—that the fee for the public vaccinator be 1s. 6d. within two miles, instead of 2s. 6d., and beyond that distance 2s. 6d., instead of 3s. 6d. Such is the idea held by the House of Commons of Professional remuneration—1s. 6d. for performing an operation requiring skill and care, whose importance cannot be overrated, at a distance of two miles from the operator's house —sixpence more than the law allows to a London cabman as his fare!

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CONDITION OF THE MILITARY HOSPITALS OF THE UNITED STATES—USE OF BROMINE IN PYÆMIC DISEASE.

TYPHUS, erysipelas, and Hospital gangrene, appear to have been very prevalent in many of the military Hospitals of the Northern States of America, those of Annapolis, Louisville, Nashville, and Meerfreesboro having especially suffered. At Louisville the disease occurred almost always in patients who had been wounded at the battle of Meerfreesboro, and who had been retained in crowded Hospitals for some time previous to their transportation to Louisville. The Medical director of the Nashville Hospitals asserts that no one upon whom the gangrene had already appeared was ever sent from Nashville, and yet many were so infected when admitted to the Louisville Hospitals. The development of the disease on the route seems to have been owing to the fact that the transportation of the wounded was effected by means of crowded and ill-ventilated boats, and that the trip by the Cumberland and Ohio rivers frequently occupied several days. During this time these patients, who had already undergone much suffering, were exposed to all the influences most apt to engender this disease. In contrast with this fact it was found that as soon as the Louisville and Nashville railroad was opened, so that the wounded could be conveyed from city to city in one day, all importation of gangrenous sores into Louisville ceased. A similar cause seems to have been operative in introducing Hospital gangrene into the Annapolis general Hospital. Erysipelas also was very rife in the Nashville Hospitals after the battle of Meerfreesboro, and both here and at Louisville special Hospitals were set apart for the reception of such cases. The treatment almost universally adopted in the Louisville Hospitals is that originated and introduced by Surgeon Goldsmith, U.S.V. It consists in the direct local application of bromine, either pure or in solution, to the surfaces of the sloughing sore. Due care is always taken first to remove as thoroughly as possible the sloughs, so that the agent may act on the living tissues, and permeate them to some extent. In cases in which the burrowing is so extensive and deep-seated as to render the application of the bromine difficult or incomplete, Dr. Goldsmith resorts to hypodermic injection of bromine at the circumference of the sore. The punctures with the point of the syringe are made at intervals of from one-half to three-fourths of an inch, and one drop of pure bromine is thrown into the tissues at each application. Dr. Goldsmith states that in forty-eight hours the specific character of any such sore can be destroyed. The arrest of the virulent process is at once evinced by the absence of the peculiar odour and by the marked change for the better which immediately ensues in the constitutional symptoms. Two methods are employed in the application of bromine to the treatment of erysipelas. In the first, the vapour is employed: the part affected is enveloped in dry lint, a cloth saturated with pure bromine is applied over this, and the whole dressing covered with a piece of oiled silk. The only objection to this method is the tendency of the bromine to soak through and produce blistering. The other method is to apply directly to the part a solution of bromine and bromide of potassium of the strength of fifteen to forty drops of the former to an ounce of water. It appears from a letter by Dr. Woodward, of the Park Barracks, Louisville, that he has been using bromine also as a remedy in diphtheria. For the treatment of this disease he says he has found no means so effective as inhalation of the vapour of bromine, and the exhibition of from half a drop to a drop in glycerine every four, five, or six hours. The same writer says that he is using bromine also in both primary and secondary syphilis with marked success. The vapour of bromine is also being used in the wards as a prophylactic against erysipelas. Before using it in the crowded wards, Dr. Woodward states that they used to get from five to eight cases of erysipelas per week, but since its use not one case has originated in the wards. He says that so well is its power established to prevent the spread of erysipelas, that even the ward masters and nurses, who used to dread the effects of being in the wards with erysipelas patients, no longer fear it in the least, for they see there is perfect immunity from danger. It is said that it is equally preventive of Hospital gangrene. Notwithstanding that the isolation of the gangrenous patients had not been enforced at Louisville, an Inspecting Surgeon sent from Washington reports the little tendency of the disease to spread from bed to bed. He regards the absence of this tendency to infection as telling strongly against the supposed virulence of the affection, and thinks that it should even throw doubts upon its true nature. At any rate, he thus sums up the impression left on his mind by what he saw there and at other Hospitals where bromine is used. 1. That the external employment of bromine in the treatment of Hospital gangrene has been attended in Louisville with the most marked and beneficial results. 2. That he has not observed any injurious consequences whatever to have resulted from its application, but the contrary. 3. That all the Medical officers with whom he had conversed in Louisville, Nashville, and Meerfreesboro unite in testimony as to the valuable therapeutic powers of bromine in the treatment of erysipelas, and that his own observation fully confirms their views. 4. That as a disinfectant the use of bromine in Hospital wards, and especially in Hospitals intended for the reception of infectious diseases, is to be recommended, and is eminently deserving of further trial. Dr. Woodward, we may add, thus sums up the physiological action of medicinal doses:—"Bromine has a directly stimulant and tonic action, as well as antiseptic. Under its use the volume of the pulse is increased, but not its frequency. The skin becomes warm, the secretions from the kidneys increased, and the deposits of the urine are largely increased."

REVIEWS.

Observations on Diseases of the Rectum. With Wood Engravings. By T. B. CURLING, F.R.S., Surgeon to the London Hospital, Examiner in Surgery to the University of London, etc. Third Edition, Revised and Enlarged. London. 1863.

MR. CURLING is no mere specialist, but a Hospital Surgeon, whose life has afforded him the broadest possible means of observation and experience over the whole of the art. His book therefore may be consulted with the full conviction that it will not merely contain those petty minutiæ which may be learned by treating the common maladies of large numbers of wretches in the out-patients' room, but that it will embrace whatever subjects show the connection between maladies of the rectum and the whole of surgery in the broadest sense.

The present edition contains eight new chapters,—on Nervous Affections of the Rectum; the Villous Tumour; Epithelial Cancer; Atony of the Rectum; Organic Contractions; Obstructions, and the Operations required for their Relief; Congenital Imperfections; and Colotomy in Cases of Imperforation. The last subjects have received special attention, and we may say that a careful perusal of them, showing the number of various complications which Surgical industry and ingenuity has collected and classified, and the results, gives us a most hopeful view of the increasing benefits which Surgery is destined to bestow on suffering humanity.

Mr. Curling's work is written in a good, clear, unaffected style, like the work of a man who has plenty of stuff, and does not want to eke it out unnecessarily. It is evidently written for the Profession; and we can promise any of our brethren who desire to add a new book on the subject to their shelves, that they will be well satisfied with Mr. Curling's.

CHANGES AT THE LOCK HOSPITAL.—The office of Surgeon to the Lock Hospital has become vacant by the resignation of Mr. Henry Lee, whose other Professional avocations prevent his being able any longer to hold the office. Mr. Gascoyen will now become Surgeon to the in-patients, and the office of Surgeon to the out-patients will be open for competition.

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PROVINCIAL CORRESPONDENCE.

EDINBURGH.

June.

No wonder that some of us cannot walk erect, for Dame Nature has not weighted us with our viscera in equal proportions, as was shown by Dr. Struthers in an elaborate paper read the other evening before the Medico-Chirurgical Society. He had carefully weighed the viscera of numerous subjects, and found that the right half of the body had the preponderance, which accounts, in his estimation, for us using the right arm, and resting on the right leg more than on the opposite limb. So it would appear that those are fortunate who happen to have an enlargement of a viscus on the left side, thereby tending (like John Gilpin's bottles) to keep a proper balance.

Dr. Struthers is at present investigating cases of supernumerary toes and fingers. However, he does not confine himself to open-handed mortals, but has recently gone the whole hog, and written a pamphlet on the solid-hoofed pig. Talking about viscera, Dr. Warburton Begbie exhibited to the Society a spleen which weighed close upon eleven pounds. The blood of the patient examined during life contained considerable quantities of white corpuscles. Dr. Begbie has some interesting cases in his wards in the Infirmary, and he has promised to read us a paper at no distant date, and, as he is an enthusiast in his Profession, and no mean observer, we may anticipate something worthy. I consider that the Medical School here is fortunate in having such a man as Dr. Begbie—one who can impart instruction so well, and elucidate the subject he takes in hand. Dr. P. H. Watson showed a very small probe-pointed steel catheter, No. 1, made of tempered steel, to be used in cases of stricture. It can be passed into the bladder much more easily than the No. 1 silver, as not being so liable to bend. Dr. M. Duncan has recently had a case of extra-uterine pregnancy. The fœtus was discharged per anum, and presented a breech presentation, and although the sphincter ani was dilated so considerably both by the passage of the fœtus and by the necessary introduction of the hand of the Accoucheur, it recovered its normal proportions in a few days, and in the meanwhile the patient had no difficulty about retaining the fæces.

The Edinburgh Artillery Militia are at present up for training and exercise, and are a fine body of men, none being enlisted under five feet six inches. The Government make a great mistake in serving out leather stocks to soldiers; they are a source of great discomfort, and, after our Crimean experience, I wonder that the men's tunics and jackets are not made with "tabs" inside the collar, similar to the officers'; it would be a great pecuniary saving, and avoid the annoyance of sore necks and threatened apoplexy. In the new artillery carbine exercise, I notice that in the "prepare to charge," and I would draw the attention of the Director-General Army Medical Department to this,—the rear rank comes to the "support," bringing the stock across the left thigh, the barrel slanting towards the right shoulder, and the sword right in front of the face of the right hand file, so that if the men advance at the double, there is every chance that some one or other gets a gash across the face, or an eye poked out, the more especially if the ground happen to be uneven. The old style of "support" was much more safe and effective, viz., the butt to the front, the barrel in the bend of the elbow, and the sword behind the head of the right hand man.

The other night I was called to a case of suicide by hanging, but which presented such very suspicious appearances that I warned the police, and desired that their Surgeon should be sent for; he consequently attended, and examined the body, coming to the conclusion that it was a case of self-destruction, and his report to the Procurator Fiscal was to that effect, and there ended the affair, my suspicions turning out, as it happened, to be groundless, the public prosecutor (so called, I presume, because he very seldom prosecutes, and that in private) being quite satisfied. Now, I hold that such a state of matters is not as it should be, and a public investigation should take place on all cases of sudden death. Our present police Surgeon happens to be a highly-accomplished and well-educated gentleman, a good toxicologist, and eminently well fitted for the post he holds; but supposing that a Surgeon not so well qualified or conscientious as Dr. Littlejohn occupies the situation, is the report by that single individual to influence the Fiscal as to the investigation of suspicious cases? and even then that functionary may be unwilling to prosecute inquiries, in order to save himself any trouble and annoyance. I have frequently heard it remarked that nowhere can a murder be committed with such secrecy as in Scotland, and although there may be disadvantages connected with "crowner's quests," still, on the whole, there is less chance of the escape of the guilty. Here the forensic duties of the police Surgeon are under the direction of the police authorities of the district, and it seems to me that the Procurator Fiscal is under the direction of the Surgeon of police. Mr. Spence has had two cases of tracheotomy for croup, one in the Royal Infirmary and one in private; both have done well. He has also had two cases of excision of the knee-joint. One of them primary, on a patient who was rash enough to leap from a railway-carriage while it was in motion. He uses two saws in the performance of the operation; a large one for the femur, and a small one, without a back, for the tibia. Almost all Surgeons have their fancy and pet instruments, which they consider to be the proper things for the several operations, and, although some cavil at it, there is no harm; for, after all, if the object in view is successfully obtained, little recks it whether it be attained by means of a fancy or orthodox tool.

Professor Simpson has had several new cases of vesico-vaginal fistula, in which he has had his usual success, using merely a vulsellum, knife, and a threaded needle. There are few operations for which the Medical man gets such grateful thanks as for this apparently a simple one, but in reality difficult of performance, giving such relief and comfort to the truly unhappy patient. Dr. Simpson has also a case of clitorotomy, performed on account of that distressing malady, nymphomania, where the poor sufferer is banished equally from public and private society,—a martyr to circumstances over which she has truly "no control."

Mr. Edwards has been using acupressure in lieu of the ligature, and with success. I wonder that it is not more frequently tried in the Profession, but there is, has been, and ever will be, an indisposition to generalise any new system. We like the good old beaten path, and hesitate to tread those by-roads, lead they ever so much to honour and renown.

GENERAL CORRESPONDENCE.

A NOTE ON SMALL-POX.

LETTER FROM DR. JOHN MACDONOGH.

[To the Editor of the Medical Times and Gazette.]

SIR,—Harriet B., aged 19 years, residing in St. Paul's-place. She and her elder sister stated that the said Harriet B. was duly vaccinated when an infant (a good cicatrix, etc.). In a few months after vaccination she was exposed to the contagion of small-pox. She took it, had it very full, and was marked by it.

On June 15 she died of confluent small-pox. Ill eleven days.

I am, &c.

JOHN MACDONOGH, M.O., and M.O.H.

Clapham, June 17.

BOOKS RECEIVED.

Clinical Researches on the Auscultation of the Head. By M. H. Roger, M.D. Translated from the French by Alfred Meadows, M.D., M.R.C.P. London: Renshaw. 1863. Pamphlet.

*** About twenty years ago, a kind of hoax was perpetrated on the Medical Profession by two American Physicians—Drs. Fisher and Whitney—who pretended that they had discovered a series of morbid sounds by auscultation of the head of children and adults, and promised that the ear should be as available for detecting disease in the brain as it is in the chest. The universal experience of Physicians soon showed that all this was fiction. Nevertheless, Dr. Henri Roger has submitted the whole question to a fresh series of experiments, and his principal results are as follows:—A bellows sound, synchronous with the systole, can be heard in some children whilst the fontanelle is open, not after. It is not characteristic of any diseased condition, inflammatory or otherwise; it may be present or absent in diseased or in healthy children alike. As for the *cerebral apoplexy* described by Dr. Whitney, it existed only in the imagination. The one practical fact which Dr. Henri Roger has sifted out is, that when the blood is so poor as to cause a *souffle* in the arteries, then sometimes that sound may be detected over the fontanelle. Hence Dr. Roger claims for it a certain diagnostic value in the early stage of rickets and anæmia. The pamphlet is well worth reading as a record of patient investigation, and cool sarcastic analysis. *Materiam superabat opus* a long way.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, June 18, 1863:—

John Brown Oliver, High Wycombe; Joseph Willes, Brighton; John Chas. Geo. Robertson, Edinburgh; George King, Lockford, Hants; Geo. Septimus Thompson, Newcastle-on-Tyne; William Johnson Smith, King's College Hospital.

The following gentlemen also on the same day passed their First Examination:—

John Hargreave Wraith, Manchester; Chas. Humphrey Weld, Middlesex Hospital; Henry Wilson, Charing-cross Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BROADBENT, WILLIAM H., M.D. Lond., has been elected Physician to the Western General Dispensary, Marylebone-road.

COLQUHOUN, ALEXANDER E., M.D. Glasg., has been appointed House-Surgeon to the Lancaster Infirmary and General Dispensary.

CODISON, WILLIAM, F.R.C.S. Eng., has been appointed Honorary Consulting Surgeon to St. Mary's Hospital.

COOPER, JOHN, F.R.C.S., Assistant-Surgeon to the London Hospital, has been elected Lecturer on Physology at the London Hospital Medical College.

HARPER, PHILIP N., F.R.C.S. Eng., has been elected Surgeon to the London Surgical Home.

HUNT, A., L.R.C.S.I., has been appointed Medical Officer for the Infirmary and Fever Hospital, Dungarvan, Co. Waterford.

JACKSON, J. HIGHLINGS, M.D., M.R.C.P., Physician to the Metropolitan Free Hospital, and Assistant-Physician to the Hospital for Epilepsy and Paralysis, has been elected Lecturer on Physiology at the London Hospital Medical College.

HAFFENDEN, H., M.B., has been elected Resident Medical Officer to the London Fever Hospital, Liverpool-road.

SHILLITOE, BUXTON, F.R.C.S. Eng., has been appointed Surgeon to the Great Northern Hospital, King's-cross.

WORTHINGTON, FRANCIS S., L.R.C.P. Lond., has been appointed Assistant-Surgeon to the Mutford and Lothingland Dispensary and Infirmary.

DEATHS.

ARTHUR, THOMAS NORWAY, L.S.A., at Prees, Shropshire, on May 22, aged 52.

BEST, DE HORNE, second years' student at the London Hospital, and son of H. W. Best, M.R.C.S., Thetford, Norfolk, in London, on June 19, aged 20.

BODDINGTON, ROBERT, M.R.C.S. Eng., at Ditchling, Sussex, aged 69.

FENTON, JOHN, L.R.C.S. Edin., at Edinburgh, on June 11, aged 43, late of Newcastle-under-Lyme.

GOLDING, BENJAMIN, M.R.C.P. Lond., at Boltons, West Brompton, on June 21, aged 69.

JOHNSTON, JOHN ARMSTRONG, L.K.Q.C.P.I., at Ballieborough, Co. Cavan, on June 7, aged 83.

MORRISON, T. COUTTS, late Surgeon-Major, Army, at Rockhampton, Queensland, on March 24, formerly of Edinburgh.

MUNCK, Dr., at Drumbo, on June 6, aged 71.

O'HERLIHY, DANIEL POWER, M.D., at Madeira, on May 20, aged 38.

OWEN, WILLIAM, M.R.C.S. Eng., at Machynlleth, Montgomeryshire, on June 16, aged 36.

THE King of the Belgians, we are happy to announce, has been considerably relieved by the attendance of our countryman, Mr. Thompson, who has now returned home, but who will probably renew his visit in a short time.

TESTIMONIAL TO MR. MASON, OF BURTON-ON-TRENT.—We have great pleasure in recording that the inhabitants of Burton have presented to Mr. W. Mason, the highly-esteemed Surgeon of that town, a valuable testimonial of their gratitude and respect in the shape of a handsome brougham, horse, set of silver-plated harness, and a silver salver. A numerously attended meeting was held in the Town-hall on Tuesday, the 16th inst., for the purpose of presenting the testimonial. J. Nunneley, Esq., occupied the chair. The salver bears the following inscription:—"This salver, with a brougham, horse, and harness, were presented to William Mason, Esq., of Burton-upon Trent, on the occasion of his sixtieth birth-day, by his patients and friends, in token of their high esteem for his Professional skill, and his unremitting kindness and attention, and especially for his self-denying services to the poor in times of sickness, through upwards of thirty years in Medical practice.—Burton-on-Trent, June, 1863."

THE gold medal of the Odontological Society of Great Britain for the best essay on the "Pathology of Dental Caries" has just been awarded to W. K. Bridgman, Esq., L.D.S., R.C.S., of Norwich.

UNIVERSITY INTELLIGENCE.—OXFORD, JUNE 18.—In a Congregation holden this morning the following degrees were conferred:—Bachelors of Medicine—Frederick Luxmore Heaton, Jesus College; Edward Leeds, Wadham College.—Cambridge, June 18.—A Congregation was held to-day at 12 o'clock, when the following degrees were conferred:—Doctor of Medicine—Reginald Thompson, Trinity. Bachelors of Medicine—Alfred G. P. Wilks, Trinity; Frederic Bagshawe, St. John's; Thomas Davies Welch, Caius.

ANTHROPOLOGICAL SOCIETY OF LONDON, JUNE 23.—Dr. James Hunt, F.S.A., President, in the chair. W. Winwood Reade, Esq., F.R.G.S., read a paper on the "Bush Tribes of Equatorial Africa." His residence at the Gaboon, and occasional journeys into the interior, enabled him to afford reliable information on the subject. The Mpongwe, who inhabit the mouth of the Gaboon, have become tolerably civilised by their contact with white men. The constitution of the tribes of the interior is that of the Veddahs of Ceylon. They live in families or clans, over which a headman or patriarch presides. This headman has influence, but no authority. He is usually the oldest man of the clan. The women, of course, do all the hard work, excepting that which is beyond their strength, as cutting down trees to clear a plantation, or which, like hunting or fishing, is beyond their skill. They worship wood spirits, lake spirits, mountain spirits, and they invoke the shades of their ancestors. Mr. W. Reade had not the slightest doubt of the existence of cannibalism amongst the Fans, or more correctly, *Befash*. Man's flesh was, like monkey's, very good; but only the old men had the privilege of eating it, the head falling to the chief or patriarch. The natives of Equatorial Africa were not aborigines, and showed traces of a bygone higher civilisation. The meeting adjourned after a vote of thanks to Mr. Reade and some discussion.

ST. THOMAS'S HOSPITAL.—A meeting of the governors of Bethlehem Hospital was held at Bridewell Hospital on Monday, June 22, to consider the letters from the Secretary of State for the Home Department and the Commissioners of Lunacy, which we have already published. The treasurer of Bethlehem read a letter in answer, which he described as "courteous, yet dignified, and uncompromising." To this he proposed to append two letters from Drs. Hood and Lawrence in opposition to that of the Commissioners. The treasurer's letter not meeting with the general approval of the meeting, the consideration of the reply to the Home Secretary was postponed, and, on the motion of Alderman Phillips, it was resolved that the president, treasurer, and five of the governors of Bethlehem and St. Thomas's Hospital should meet in the meantime for a preliminary discussion. On Tuesday, a General Court of the Governors of St. Thomas's Hospital was held at the London-bridge Railways Terminus Hotel. It was agreed, on the motion of Mr. Tite, that the General Court request a deputation of their body to meet a similar deputation from Bethlehem as soon as possible, with a view to ascertain whether it is probable that an arrangement can be made for obtaining the Bethlehem site on terms mutually advantageous; and in the event of the Grand Committee not being satisfied that such an arrangement can be made within a reasonable period, that they be authorised and requested to continue their negotiation with the Metropolitan Board of Works for the purchase of the site on the proposed south embankment of the river.

COLLEGIATE ELECTION.—A circumstance has just occurred which increases the interest taken in this election of Fellows into the Council of the College of Surgeons to an extent hitherto quite unknown in the annals of collegiate elections. On perusing the Bye-Laws it appears that Mr. Coulson, whose turn it would have been to vacate his chair next year, but who in resigning it this year, will be succeeded by that one of the three successful candidates who may obtain the least number of votes, and who consequently will have to resign the chair in July, 1864,—subject, of course to re-election. The bye-law on the subject is very distinct. It states that "when there shall be any vacancy in the Council, by the death or resignation of an elective member, the Fellow of those elected, who shall have been so elected by the smallest number of votes, shall be the substitute member of Council in

the room of such elective member; and when more than one such vacancy shall be required to be so filled up, the Fellow elected by the smallest number of votes, shall be the substitute in the room of that member whose period of office would have first terminated, and so in regard to each of such vacancies respectively." This reading of the Bye-laws is stimulating the friends of the candidates to fresh exertions to return their respective favourites at the head of the poll. The election will be by ballot, and in the following manner; papers with the names of the six candidates in chronological order, thus:—Cæsar H. Hawkins, Thomas Tatum, Samuel A. Lane, George Busk, T. Blizard Curling, Henry Hancock, will be ready for the electors, who must draw their pens through the names of those for whom they do not vote, taking care not to leave more than three names in such list, less if they like, even to plumping for any one gentleman; on another paper they will sign their names and addresses, to enable the Secretary to see that none but Fellows vote; the first paper is to be deposited in a box in front of Mr. President Luke, who, at the termination of the proceedings, will declare the numbers polled by each candidate. After which, the candidates will dine together at the Albion Tavern, when Mr. Turner, of Manchester, will occupy the chair.

THE DISCOVERERS OF THE NILE.—A crowded meeting of the Royal Geographical Society was held on Monday, June 22, at Burlington-house for the purpose of welcoming back Captains Speke and Grant. The reception of the successful explorers was, we need scarcely say, enthusiastic. Captain Speke read a paper entitled "The Nile and its Tributaries Compared." Each of the travellers was accompanied by a black boy from the most intelligent of the Equatorial tribes discovered. The little fellow accompanying Captain Speke is described as a fine boy, about 14, is an excellent specimen of the intellectual black type, his nose being as straight and his forehead as high as those of an European, although his woolly head and dark skin were thoroughly characteristic of his African blood. He seemed in no way disconcerted at his reception, and was as cool and collected as if he had attended the meetings of the Society all his life. Captain Speke gave a long and interesting account of the people of the countries through which he passed, and detailed the reception he met with from various kings and chiefs. The people of these countries—Unyoro, Uganda, and Karagwe—are most intellectual, but have a great distrust of the white men, owing to the enormities committed by the slave traders. The difficulties of travelling through these countries are almost insuperable, from numberless causes. The native kings are continually at war with each other, which causes wholesale desertion among the men forming the expeditions. The natives, however, with whom he had had amicable relations, were most friendly and honest, not only helping him themselves with presents, but sending men with him into other friendly nations as safeguards. He considers that the race is the same as the Abyssinian, and derived from a commixture of the race of Shem with that of Ham. They are mostly tall, well-made men, with straight noses and curly hair. They have no religion, and do not believe in a soul. The people of Karagwe he praises most highly. The king and princes are in every respect worthy of the epithet "gentlemen." The people are scrupulous in their dress, and shake hands when they meet. The following evening, June 23, Captain Speke delivered a lecture at the Royal Institution. H.R.H. the Prince of Wales, attended by a numerous suite, honoured the lecturer by his presence. In the course of his lecture, Captain Speke gave a number of curious particulars of the remarkable people whom he had discovered.

DEATH IN THE WORKHOUSE.—The circumstances of the following deplorable case require no comment in a Medical journal. An inquest was held at the St. James's Workhouse, on Thursday, June 18, before the Deputy-Coroner for Mr. Bedford, relative to the death of Mary Ann Walkley, aged 20, who at the time of her decease was in the employ of Madame Elise, Court dressmaker, 170, Regent-street. The case had already excited considerable attention, in consequence of a letter which appeared in the *Times* of Wednesday, 17th inst. It appeared from the evidence that the deceased, who was of a somewhat delicate constitution, and who worked in a room with nearly thirty others, was taken ill on Friday, and on Sunday night became much worse, when Medical assistance was called in. Remedies having been administered, she appeared to fall asleep, and her bed-fellow, Miss Santrey (who was examined as a witness), retired to rest with her, but on awakening in the morning was shocked to find her companion dead by her side. A post-mortem examination was made by Mr. Keys, of Warwick-street, who deposed that death resulted from apoplexy, and stated, in answer to the coroner, that long hours of work in a crowded apartment, and sleeping in a close, badly-ventilated room, would have a great tendency to produce the symptoms which he described. Mr. Clarke, Surgeon, of Gerrard-street, concurred in the evidence of Mr. Keys. He described the bedrooms, which were divided by partitions into compartments just large enough to contain two beds placed end to end. If, as had been stated, there were two young women in each bed, he considered they were decidedly unfit places for any one to sleep in, and more particularly in the state of health in which the deceased had been. Mr. Bush, who had attended the deceased during the unavoidable absence of his principal, Mr. Keys, expressed his opinion that the rooms in which the deceased died were overcrowded and badly ventilated. The jury returned the following verdict:—That the deceased died of apoplexy; but there is too much reason to fear that her death was greatly accelerated by working long hours in a crowded workroom, and sleeping in a close, badly ventilated bedroom. The husband of Madame Elise said he did all he could for the comfort and health of his young people, and if the jury would tell him what he ought to do, he should be most happy to listen to their suggestions. The coroner replied that that was a question for a surveyor. The inquiry then terminated.

ADULTERATION OF GERMAN YEAST.—At a late meeting of the City Commissioners of Sewers, Dr. Letheby directed attention to the fact that a large quantity of adulterated German yeast was being imported into London from Schiedam. The samples which he had examined contained from a third to half their weight of pipe-clay, and as this yeast is used in the preparation of fancy bread, he stated that the presence of the alumina of the pipe-clay might, from its great quantity, lead to a charge against the baker for adulterating his bread with alum. But besides that, as the pipe-clay enabled the dealers to send putrid yeast into the market, the bread was in most cases very unwholesome. He advised the Committee that as this yeast came through the custom-houses of London and Hull, the authorities should be advised of the matter. A letter was read from Mr. Blackburn, a chemist, in Old Elvet, Durham, confirming by his own experience the report of Dr. Letheby in that respect, which he had read in a newspaper. About twelve months ago he said he weighed an ounce of yeast, put it in a tumbler, and mixed it with water, and after carefully washing it at least a dozen times he was unable to dissolve any more of it. He allowed the material to dry, and again weighed it, when, to his surprise, he found exactly three drachms of pipe-clay remaining. He sincerely hoped the commission would endeavour to put a stop to such shameful adulteration.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

J. G. L.—8, Russell-place, Fitzroy-square.

M.R.C.S. Eng., late Army.—We have no official information on the subject, but there is little doubt that a Member of the College might obtain an appointment. Write to the Embassy.

Corrigendum.—Mr. A. M. Edwards' case of amputation of the thigh, which we inserted last week under the head of Hospital Reports, was inserted by mistake in that section of the journal; the case was treated in private, and not at the Royal Infirmary.

The Amenities of Colonial Journalism.—We have lately received a number of the *Yeoman and Australian Acclimatiser*, a paper the chief end of whose being seems the reproduction of scraps from the London *Field*, and the publication of long articles in abuse of two Medical periodicals—the *Australian Medical Journal* and the *Medical and Surgical Review*. Here is a specimen of its criticism on a paper published in the latter:—"It is a mere raw bush production, and has no style, no intelligence, no English, and no grammar." We'd use our Professional brethren Melbourne do not care much for this Bœotian assailant. But it seems to us that if the *Yeoman and Australian Acclimatiser* be a fair specimen of Australian periodical literature, it would well repay the colonists to start a society for the purpose of acclimatising editorial courtesy and its kindred virtues.

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Health Insurance.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Is there any "insurance office" who allow a weekly allowance in case of sickness, on the principle of "clubs;" and what is the scale of the monthly or yearly payment to insure an allowance in illness?

I am, &c. Correspondent.

The Dose of Atropine.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I think Dr. Brown-Séquard stated some few weeks since, in the *Medical Times and Gazette*, that it was dangerous to give more than one-sixtieth of a grain of atropine (except in combination) for a dose. I have given for nearly two years past, to one patient, from a fifth to a sixth of a grain of Morson and Son's sulphate of atropine daily, simply dissolved in water, and in one dose. I am, &c.

June 23. Ishmael.

The Army Medical Department

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In reply to your correspondent's question—in how many years will a man now entering the Medical Department of the Army get his promotion?—I beg to inform him, and all others, in about nineteen and a-half to twenty years; besides which, the grievances, with one exception, remain unredressed. The Duke of Cambridge is unaltered towards the department. The Horse Guards continue to snub; and, in fact, whoever enters will regret it ultimately. Let not the Irish schools be deceived.

I am, &c. Observer.

Poor-law Medical Reform.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Permit me space to inform the Poor-law Medical Officers that the Select Committee on poor relief has again been nominated, and it consists of the same members as last year. I have forwarded to the House of Commons a statement in reference to the evidence delivered by Mr. Cane last session, and I feel convinced that after its perusal the most sceptical must admit there is great need of considerable changes being made in the Medical relief of the poor. Since my last letter, nine Poor-law Medical Officers have sent subscriptions, and I hope, now that the Committee has been re-appointed, a little more life will be infused into our proceedings, and that I shall be placed in a position to call a public meeting at any moment, should it be deemed necessary; but with a debt of about £25, I do not feel justified in incurring further personal liability, and therefore the responsibility of further active measures must depend upon the liberality of the Poor-law Medical Officers themselves.

I am, &c. Richard Griffin.

12, Royal Terrace, Weymouth, June 23.

Russell's Hospital Bed Appliance and Hospital Stretcher.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your *Medical Times and Gazette* of November 8 last, I perceive a very gratifying notice of the few simple appliances shown by me in the late Exhibition. I would draw attention to two of these articles, viz., the Hospital bed appliance and improved Hospital stretcher.

In consequence of their beneficial and gratifying use wherever placed, and being introduced into Her Majesty's service, I published some pamphlets for distribution, in order, by giving them to the public, to extend their general utility, until something simpler and more effective be found out. In passing under notice of a jury of such experience and scientific attainments, the public would naturally be influenced by their expressed opinion in award. But an omission, one article only having been numbered, led to the error of that one only being mentioned in the published award. Thus my trouble and efforts were almost rendered nugatory. For the sake of these two articles I feel it a duty to mention that I have received an official communication, by direction of Lord Granville:—

"That, on reference to the jury records, the Honourable Mention awarded to you in Class 17 was intended to extend to all the articles exhibited by you in that class, enumerated in the Illustrated Catalogue, No 3579."

They are there enumerated, beginning with improved Hospital bed appliance and improved Hospital stretcher. I should feel obliged by your insertion of the fact in any way you may consider most advisable, my object being to engage the attention of Medical gentlemen and Hospital authorities, so as to give confidence in their trial. The appliance is easily fitted to any Hospital bedstead, and I shall be happy to give any assistance and information I can. I am, &c.

Shrewsbury, June 22. G. Russell.

The Examination of Assistant-Surgeons in the Army for the Rank of Surgeons.—Examination Papers.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Enclosed you have an exact copy (which you may publish if you consider them of sufficient interest) of the questions given to Assistant-Surgeons (at the last examination) qualifying for promotion to rank of Surgeons. I am, &c.

Chirurg.

EXAMINATION FOR ASSISTANT-SURGEON PREVIOUS TO PROMOTION.

First Day.—Pathology.

1. Describe the events, and their pathology, which may be expected to follow the inoculation of the syphilitic virus.

2. Enumerate the points you have been in the habit of investigating, and which it is necessary to investigate and describe in all cases of venereal ulceration.

3. Describe the pathology and the course of encephaloid or medullary malignant tumours, situated, say, in the region of the shoulder, as contrasted with an enchondroma similarly situated.

Second Day.—Military Surgery and Surgical Anatomy.

1. Name the principal varieties of dislocations to which the hip-joint is subject, state what the distinguishing signs of them are, and explain them anatomically.

2. Name the several species of iritis, and their distinguishing symptoms. Describe the treatment appropriate to each variety. Soldiers are not unfrequently unfit for service after iritis, from occlusion of the pupil or extensive synechia, what means would you adopt to prevent such consequences?

3. Enumerate anatomically the structures displaced in disqualifying flatness of the soles of the feet. What are the remote and proximate causes of this deformity? Name the external signs which distinguish "broad feet" from "flat feet."

4. Give a sketch of the regulated system adopted for discharging disabled soldiers; enumerate and explain the several prescribed documents which are ordered to be furnished in case of a disabled soldier sent home from a foreign station with a view to his being discharged from further service. Particularise the nature of the documentary evidence which is specially required by the principal Medical officer of the Invalid General Hospital to enable the Commissioner of Chelsea Hospital eventually to decide upon a disabled soldier's claims for pension.

Third Day.—Hygiene.

1. Enter fully into the question of the best means of preventing the following diseases, or of arresting their spread when present:—Typhoid Fever, Cholera, Malarious Diseases.

2. What has your experience led you to believe to be the proper arrangement of barracks for infantry and cavalry soldiers on home service? State fully your views as to the size and position of rooms and arrangement for ablutions, latrines, etc. What are the rules on the subject in the Queen's and Hospital Regulations?

Fourth Day.—Medicine.

1. Explain the action of malaria on the fluids and solids of the human body, and its influence in modifying the course and phenomena of tropical diseases.

2. Give the signs, physical and general, of cardiac dilatations, and direct physical signs of aortic obstructions.

3. What do you understand by the term "insolation?" Give the best account you can of this affection. Lay down clearly the general principle of treatment, best means of preventing on the line of march and in barracks in hot climates.

COMMUNICATIONS have been received from—

Middlesex Hospital; Dr. W. M. Turnbull; Dr John MacDonogh; Messrs. W. and A. Gilbey; Observer; Mr. Samuel Knaggs; Apothecaries' Hall; Mr. J. N. Radcliffe; Mr. Kesteven; Mr. W. K. Bridgeman; Mr. Thomas Simpson; Mr. R. Griffin; Dr. T. B. Moriarty; Mr. Burrows; Mr. R. B. Carter; An Hospital Physician; Mr. John Higginbottom; Correspondent; Captain G Russell; Dr. J. Althaus; Mr. F. Le Gros Clark; Dr. Charles Drysdale; J. G. L.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 20, 1863.

BIRTHS.

Births of Boys, 938; Girls, 941; Total, 1879.
Average of 10 corresponding weeks, 1853-62, 1694·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	619	572	1191
Average of the ten years 1853-62	540·2	499·2	1039·4
Average corrected to increased population..	..	..	1143
Deaths of people above 90	1	..	1

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-Cough.	Typhus.	Diarrhœa.
West	463,388	10	9	3	5	9	2	5
North ..	618,210	18	8	30	8	6	8	6
Central ..	378,058	6	3	10	..	2	6	2
East	571,158	17	2	19	6	6	15	8
South ..	773,175	13	10	35	9	8	18	4
Total.. ..	2,803,989	64	32	97	28	31	49	25

APPOINTMENTS FOR THE WEEK.

June 27. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 1 p.m.; King's 2 p.m.; Charing-cross, 1 p.m.; Lock Hospital, Dean-street, Soho, 1 p.m. Royal Free Hospital, 1½ p.m.

29. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital 1½ p.m.; Samaritan Hospital, 2½ p.m.

30. *Tuesday.*

Operations at Guy's, 1 p.m.; Westminster, 2 p.m.

July 1. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1 p.m.; Middlesex, 1 p.m.; London, 2 p.m.

Obstetrical Society of London, 8 p.m. Dr. Clay (Manchester), "On the Treatment of Versions, Obliquities, and Prolapsus of the Uterus." Dr. Martyn, "On a Case of Face Presentation, Sloughing of the Bladder, etc." Mr. Tomlinson, "On Tuberculosis of Uterus." Cases by Dr. Barnes.

2. *Thursday.*

Operations at St. George's, 1 p.m; Central London Ophthalmic, 1 p.m.; Great Northern, 2 p.m.; Surgical Home, 2 p.m., Royal Orthopædic Hospital, 2 p.m.; Royal Free Hospital, 1½ p.m.

3. *Friday.*

Operations, Westminster Ophthalmic, 1½ p.m.

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ERRATA.

Page 5, column 2, line 35 from bottom, *for* "Douglas and Denman thought," *read* "Denman thought."
Page 55, column 2, foot note, *for* "Sir." *read* "Mr"
Page 197, column 2, lines 2 and 35, *for* "tympanitis," *read* "tympanites."
Page 361, column 1, line 33, *for* "Cotton," *read* "Cotter."
Page 528, column 1, line 32, *for* "statements," *read* "statement."

END OF VOLUME I. 1863.

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